

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	nAPP2115327353
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # (assigned by OCD)
Contact mailing address	

### Location of Release Source

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# (if applicable)

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

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

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

### Initial Response

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

<input type="checkbox"/> The source of the release has been stopped.	
<input type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
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: _____	Title: _____
Signature: <u>Kyle Littrell</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: <u>Ramona Marcus</u>	Date: <u>8/3/2021</u>

NAPP2115327353

<b>Location:</b>	<b>JRU DI 8 CTB</b>	
<b>Spill Date:</b>	<b>5/20/2021</b>	
<b>Area 1</b>		
Approximate Area =	28.07	cu.ft
<b>VOLUME OF LEAK</b>		
Total Crude Oil =	5.00	bbls
Total Produced Water =	0.00	bbls
<b>TOTAL VOLUME OF LEAK</b>		
Total Crude Oil =	5.00	bbls
Total Produced Water =	0.00	bbls
<b>TOTAL VOLUME RECOVERED</b>		
Total Crude Oil =	5.00	bbls
Total Produced Water =	0.00	bbls

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## Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico  
Oil Conservation Division

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Printed Name: Adrian Baker Title: SSHE CoordinatorSignature: Adrian Baker Date: 07/21/2021email: Adrian.Baker@exxonmobil.com Telephone: (432)236-3808**OCD Only**Received by: Ramona Marcus Date: 8/3/2021

Incident ID	nAPP2115327353
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## Closure

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

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

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

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Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 07/21/2021

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

### OCD Only

Received by: Ramona Marcus Date: 8/3/2021

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

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Printed Name: Adrian Baker Title: SSHE Coordinator

Signature: Adrian Baker Date: 07/21/2021

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

### OCD Only

Received by: Ramona Marcus Date: 8/3/2021

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

Closure Approved by: Robert Hamlet Date: 11/9/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced



WSP USA

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

July 21, 2021

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

**Re: Closure Request  
James Ranch Unit DI 8 Battery  
Incident Number nAPP2115327353  
Eddy County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the James Ranch Unit (JRU) DI 8 Battery (Site) located in Unit E, Section 36, 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 the release of crude oil within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number nAPP2115327353.

## **RELEASE BACKGROUND**

On May 20, 2021, loose bolts on a manway cover caused oil to leak, resulting in the release of approximately 5 barrels (bbls) of crude oil into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; all 5 bbls of the released crude oil were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to the New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO submitted a Release Notification Form C-141 (Form C-141) on June 2, 2021. The release was assigned Incident Number nAPP2115327353.

## **SITE CHARACTERIZATION**

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During January 2020, WSP installed a soil boring (C-04387) within 0.5 miles of the Site utilizing a truck-





mounted hollow-stem auger rig. Soil boring C-04387 was drilled to a depth of 110 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The Well Record and Log is included in Attachment 1. The location of the borehole is approximately 0.37 miles southeast of the Site and is depicted on Figure 1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 100 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips.

The closest continuously flowing water or significant watercourse to the Site is an arroyo, located approximately 1.23 miles west of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

## **CLOSURE CRITERIA**

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

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

## **SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS**

On June 15, 2021, WSP personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel advanced one borehole (BH01) via hand-auger at the location of the tear in the liner identified during the liner integrity inspection. Three soil samples (BH01, BH01A and BH01B) were collected from borehole BH01 at depths of approximately 0.5 feet, 1-foot and 6.5 feet bgs before encountering auger refusal. Soil from the borehole was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the borehole were documented on a lithologic/soil sampling log which is included as Attachment 2. The borehole was backfilled with the soil removed and XTO repaired the tear in the liner. The borehole soil sample location is



depicted on Figure 2. Photographic documentation was conducted during the Site visit. The photographic log is included in Attachment 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-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 borehole soil samples BH01, BH01A and BH01B collected at depths of approximately 0.5 feet, 1-foot and 6.5 feet bgs, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Attachment 4.

### **CLOSURE REQUEST**

Following the failed liner integrity inspection at the Site, WSP personnel advanced one borehole (BH01) at the location of the tear in the liner to assess for the presence or absence of soil impacts resulting from the May 20, 2021 crude oil release within lined containment. Three delineation soil samples were collected from borehole BH01 at depths of approximately 0.5 feet, 1-foot and 6.5 feet bgs. Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Additionally, final borehole sample BH01B was compliant with the most stringent Table 1 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 initial response efforts, confirmed depth to groundwater greater than 110 feet bgs, and soil sample laboratory analytical results compliant with the Closure Criteria directly below the tear in the liner, XTO respectfully requests NFA for Incident Number nAPP2115327353.

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

Sincerely,

WSP USA Inc.



District II  
Page 4

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

Kalei Jennings  
Associate Consultant

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

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

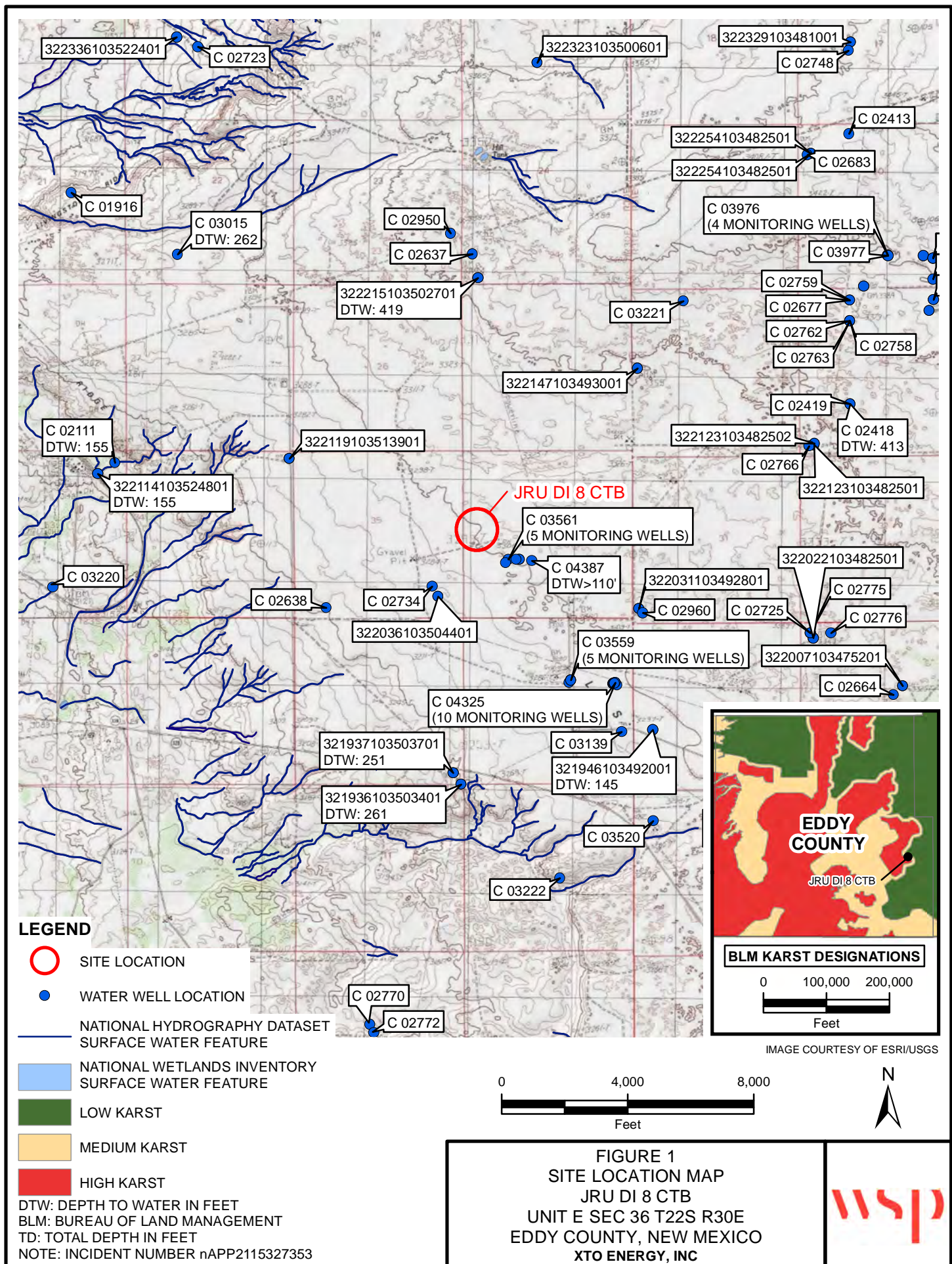
cc: Adrian Baker, XTO  
Ryan Mann, New Mexico State Land Office

Attachments:

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

FIGURES





P:\XTO Energy\GIS\MXD\31403236.012.0129\_JRU DI 8 CTB\31403236.012.0129\_FIG01\_SL\_RECEPTOR\_2021.mxd





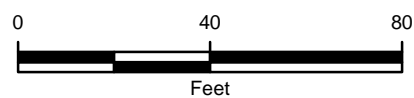
IMAGE COURTESY OF ESRI

**LEGEND**

RELEASE LOCATION

SOIL SAMPLE IN COMPLIANCE  
WITH APPLICABLE CLOSURE CRITERIA

TANK BATTERY LINER EXTENT



NOTE: INCIDENT NUMBER nAPP2115327353  
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

**FIGURE 2**  
**SOIL SAMPLE LOCATIONS**  
JRU DI 8 CTB  
UNIT E SEC 36 T22S R30E  
EDDY COUNTY, NEW MEXICO  
**XTO ENERGY, INC.**



P:\XTO Energy\GIS\MXD\31403236.012.0129\_JRU DI 8 CTB\31403236.012.0129\_FIG02\_SS\_LOC\_2021.mxd

TABLES

Table 1

Soil Analytical Results  
 JRU DI 8 CTB  
 Incident Number NAPP2115327353  
 Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Soil Samples										
BH01	06/15/2021	0.5	<0.00199	<0.00398	131	54.5	<50	186	186	9.8
BH01A	06/15/2021	1	<0.002	<0.00401	166	<50	100	166	266	12.4
BH01B	06/15/2021	6.5	<0.002	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	16.8

ft - feet/foot

mg/kg - milligrams per kilograms

BTEX - benzene, toluene, ethylbenzene, and total xylenes

TPH - total petroleum hydrocarbons

DRO - diesel range organics

GRO - gasoline range organics

ORO - motor oil range organics

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

&lt; - indicates result is less than the stated laboratory method practical quantitation limit

NE - Not Established

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



ATTACHMENT 1: REFERENCED WELL RECORDS



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1		WELL TAG ID NO. NA		OSE FILE NO(S). C-04387			
	WELL OWNER NAME(S) XTO Energy, Inc.				PHONE (OPTIONAL) 432-221-7331			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Road				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 20	SECONDS 46.6	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	50	9.29	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NESW Section 36, Township 22 South, Range 30 East, Eddy County, New Mexico								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1664		NAME OF LICENSED DRILLER			NAME OF WELL DRILLING COMPANY Cascade Drilling		
	DRILLING STARTED 1/18/2020		DRILLING ENDED 01/21/2020		DEPTH OF COMPLETED WELL (FT) NA	BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) NA	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) NA		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES – SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER – SPECIFY: Sonic							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	110	6.5	Soil Boring	NA	NA	NA	NA
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

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

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	0.5	0.5	CALICHE, tan-off white, fill	Y    ✓ N	
	0.5	5	4.5	SAND, reddish brown, poorly graded, fine-very fine, dry	Y    ✓ N	
	5	12.5	7.5	CALICHE, tan-off white, few subangular gravel, dry, trace fine sand	Y    ✓ N	
	12.5	23	10.5	SAND, w/ silt, reddish-brown, dry, poorly graded, fine grain, few tan-off white s	Y    ✓ N	
	23	58	35	SILTSTONE, moderately consolidated, reddish brown, 2mm caliche inclusions,	Y    ✓ N	
	58	102	44	CLAYSTONE, dry, reddish brown low plasticity, cohesive, well consolidated, sc	Y    ✓ N	
	102	110	8	SILTSTONE, moist, reddish brown, no plasticity, non cohesive, poorly consolida	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER – SPECIFY: NA					TOTAL ESTIMATED WELL YIELD (gpm):    0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Soil boring backfilled with cuttings and hydrated bentonite chips. Log adapted from LTE on-site geologist.	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE

FOR OSE INTERNAL USE


WR-20 WELL RECORD &amp; LOG (Version 04/30/2019)

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



## New Mexico Office of the State Engineer

# Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
		Q64	Q16	Q4	Sec	TwS	Rng	X	Y
NA	C 04387 POD1	4	2	3	36	22S	30E	609542	3579414 

x

**Driller License:****Driller Company:****Driller Name:****Drill Start Date:****Drill Finish Date:****Plug Date:****Log File Date:****PCW Rcv Date:****Source:****Pump Type:****Pipe Discharge Size:****Estimated Yield:****Casing Size:****Depth Well:****Depth Water:**


x

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

6/28/21 3:00 PM

POINT OF DIVERSION SUMMARY

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

 <div style="text-align: center;"> <b>WSP USA</b>          508 West Stevens Street          Carlsbad, New Mexico 88220       </div>								BH or PH Name:		Date:	
								BH01		6/15/2021	
								Site Name:		JRU DI 8 CTB	
								RP or Incident Number:		NAPP2115327353	
LITHOLOGIC / SOIL SAMPLING LOG								LTE Job Number:		31403236.012.0129	
Lat/Long: 32.349187, -103.841315				Field Screening: Chloride, PID				Logged By Travis Casey		Method: Hand Auger	
Hole Diameter: 3"				Total Depth: 6.5 feet bgs							
Comments: 40% correction factor included in chloride concentrations.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
D	<156	19	N	BH01	0.5	0	GW	0-0.5': Caliche, medium consolidation, gravel, well graded with sand, tan/brown, no stain, light odor.			
D	<156	15.5	N	BH01A	1'	1	GWSP	0.5-2': Sand, medium grain, well graded, some claiche, medium consolidation, reddish brown, no stain, no odor.			
M	<156	10.8	N		2'	2	SP	2-6.5': Sand, medium grain, well graded, reddish brown, no stain, no odor.			
M	<156	8.9	N		3'	3					
M	<156	2.7	N		4'	4					
					5						
					6						
D	<156	0.4	N	BH01B	6.5'	7	GPSP	6.5': Caliche, medium consolidation, sand, light brown, no stain, no odor.			
						8		Total Depth @ 6.5 ft. bgs			
						9					
						10					
						11					
						12					

ATTACHMENT 3: PHOTOGRAPHIC LOG



## PHOTOGRAPHIC LOG

XTO Energy, Inc.	JRU DI 8 CTB Eddy County, New Mexico	31403236.012.0129
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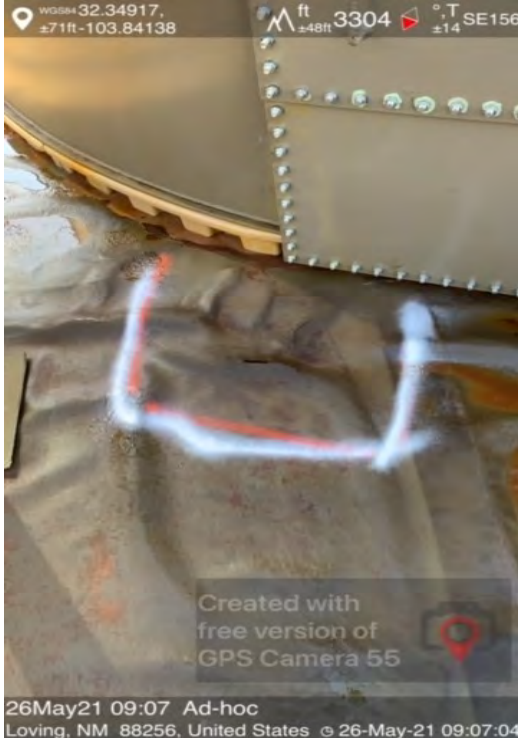
Photo No.	Date	
1	June 15, 2021	
Primary view of liner breach.		

Photo No.	Date	
2	June 15, 2021	
View of liner breach and soil during delineation.		



ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-814-1

Laboratory Sample Delivery Group: 31403236.012.0129

Client Project/Site: JRU DI 8

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
6/21/2021 2:44:09 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

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

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

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

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Laboratory Job ID: 890-814-1  
SDG: 31403236.012.0129

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## 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.
α	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 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

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**Job ID: 890-814-1**

---

**Laboratory: Eurofins Xenco, Carlsbad**

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**Narrative**

---

**Job Narrative**  
**890-814-1**

**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**

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 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

Client Sample ID: BH01

Lab Sample ID: 890-814-1

Date Collected: 06/15/21 10:03

Matrix: Solid

Date Received: 06/15/21 16:10

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		06/17/21 11:00	06/17/21 14:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		06/17/21 11:00	06/17/21 14:31	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		06/17/21 11:00	06/17/21 14:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/17/21 11:00	06/17/21 14:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		06/17/21 11:00	06/17/21 14:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/17/21 11:00	06/17/21 14:31	1
Total BTEX	<0.00398	U	0.00398	mg/Kg		06/17/21 11:00	06/17/21 14:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	06/17/21 11:00	06/17/21 14:31	1
1,4-Difluorobenzene (Surr)	92		70 - 130	06/17/21 11:00	06/17/21 14:31	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	54.5		50.0	mg/Kg		06/17/21 15:28	06/19/21 01:07	1
Diesel Range Organics (Over C10-C28)	131		50.0	mg/Kg		06/17/21 15:28	06/19/21 01:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/17/21 15:28	06/19/21 01:07	1
Total TPH	186		50.0	mg/Kg		06/17/21 15:28	06/19/21 01:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130	06/17/21 15:28	06/19/21 01:07	1
o-Terphenyl	120		70 - 130	06/17/21 15:28	06/19/21 01:07	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.80		4.99	mg/Kg			06/18/21 17:37	1

Client Sample ID: BH01A

Lab Sample ID: 890-814-2

Date Collected: 06/15/21 10:05

Matrix: Solid

Date Received: 06/15/21 16:10

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		06/17/21 11:00	06/17/21 14:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/17/21 11:00	06/17/21 14:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/17/21 11:00	06/17/21 14:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		06/17/21 11:00	06/17/21 14:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/17/21 11:00	06/17/21 14:51	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		06/17/21 11:00	06/17/21 14:51	1
Total BTEX	<0.00401	U	0.00401	mg/Kg		06/17/21 11:00	06/17/21 14:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	06/17/21 11:00	06/17/21 14:51	1
1,4-Difluorobenzene (Surr)	98		70 - 130	06/17/21 11:00	06/17/21 14:51	1

Eurofins Xenco, Carlsbad

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

Client Sample ID: BH01A

Lab Sample ID: 890-814-2

Date Collected: 06/15/21 10:05

Matrix: Solid

Date Received: 06/15/21 16:10

Sample Depth: - 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/17/21 15:28	06/19/21 01:20	1
Diesel Range Organics (Over C10-C28)	166		50.0	mg/Kg		06/17/21 15:28	06/19/21 01:20	1
Oil Range Organics (Over C28-C36)	100		50.0	mg/Kg		06/17/21 15:28	06/19/21 01:20	1
Total TPH	266		50.0	mg/Kg		06/17/21 15:28	06/19/21 01:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	26	S1-	70 - 130	06/17/21 15:28	06/19/21 01:20	1
1-Chlorooctane	102		70 - 130	06/17/21 15:28	06/19/21 08:38	1
o-Terphenyl	25	S1-	70 - 130	06/17/21 15:28	06/19/21 01:20	1
o-Terphenyl	102		70 - 130	06/17/21 15:28	06/19/21 08:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.4		4.96	mg/Kg			06/18/21 12:23	1

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## 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)
890-814-1	BH01	135 S1+	92
890-814-2	BH01A	135 S1+	98
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
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-814-1	BH01	131 S1+	120
890-814-2	BH01A	26 S1-	25 S1-
890-814-2	BH01A	102	102
LCS 880-4254/2-A	Lab Control Sample	102	106
LCSD 880-4254/3-A	Lab Control Sample Dup	100	104
MB 880-4254/1-A	Method Blank	108	107
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			



## QC Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## 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

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## 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

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## 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						

## 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	RPD	RPD Limit
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	RPD	RPD Limit
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

Eurofins Xenco, Carlsbad

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## 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
890-814-1	BH01	Total/NA	Solid	8021B	4197
890-814-2	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
890-814-1	BH01	Total/NA	Solid	5035	
890-814-2	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
890-814-1	BH01	Total/NA	Solid	8015NM Prep	
890-814-2	BH01A	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
890-814-1	BH01	Total/NA	Solid	8015B NM	4254
890-814-2	BH01A	Total/NA	Solid	8015B NM	4254
890-814-2	BH01A	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

## HPLC/IC

## Leach Batch: 4185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-814-1	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
890-814-2	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	

Eurofins Xenco, Carlsbad

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

## HPLC/IC (Continued)

## Leach Batch: 4243 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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
890-814-2	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
890-814-1	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 DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

Client Sample ID: BH01

Lab Sample ID: 890-814-1

Date Collected: 06/15/21 10:03

Matrix: Solid

Date Received: 06/15/21 16:10

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 14:31	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 01:07	AJ	XEN MID
Soluble	Leach	DI Leach			4185	06/16/21 12:10	CH	XEN MID
Soluble	Analysis	300.0		1	4300	06/18/21 17:37	CH	XEN MID

Client Sample ID: BH01A

Lab Sample ID: 890-814-2

Date Collected: 06/15/21 10:05

Matrix: Solid

Date Received: 06/15/21 16:10

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 14:51	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 01:20	AJ	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 08:38	AJ	XEN MID
Soluble	Leach	DI Leach			4243	06/17/21 13:12	CH	XEN MID
Soluble	Analysis	300.0		1	4273	06/18/21 12:23	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 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

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 8

Job ID: 890-814-1  
SDG: 31403236.012.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-814-1	BH01	Solid	06/15/21 10:03	06/15/21 16:10	- 0.5
890-814-2	BH01A	Solid	06/15/21 10:05	06/15/21 16:10	- 1

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



## Chain of Custody

**Work Order No:**

Page 1 of 1

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:	Garlsbad, NM
Phone:	(432) 704-5178	Email:	travis.casey@wsp.com, kalei.jennings@wsp.com, dan.moir@m

<b>Work Order Comments</b>			
Program: UST/ST	<input type="checkbox"/> PRP	<input type="checkbox"/> growntfields	<input type="checkbox"/> RC <input type="checkbox"/> upertund <input type="checkbox"/>
State of Project:	NM		
Reporting Level II	<input type="checkbox"/> Level III	<input type="checkbox"/> ST/UST	<input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables: EDD	<input type="checkbox"/>	Adapt <input type="checkbox"/>	Other: <input type="checkbox"/>

<b>Project Name:</b>	JRU DI 8	<b>Turn Around</b>	<b>ANALYSIS REQUEST</b>						<b>Work Order Notes</b>
<b>Project Number:</b>	31403236.012.0129	Routine X							IN: nAPP2115327353
<b>P.O. Number:</b>		Rush:							CC:2109421001
<b>Sampler's Name:</b>	Travis Casey	Due Date:							

SAMPLE RECEIPT		Temp Blank:	Wet Ice:
Temperature (°C):	-1.8 / 4.6	Yes No	Yes No
Received Intact:	Yes No	Thermometer ID	
Cooler Custody Seals:	Yes No	Correction Factor:	
Sample Custody Seals:	Yes No	Total Containers:	

Number of Containers

PA 8015)

EPA 8021)

e (EPA 300.0)



890-814 Chain of Custody

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

[illegible]

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

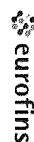
**Notice: Signature of the client or the client's authorized representative on samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xenco will be liable only for the cost of samples and shall not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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		6/15/21 16:10			

Eurofins Xenco, Carlsbad

1089 N Canal St  
Carlsbad NM 86220  
Phone 575-988-3199 Fax: 575-988-3199

## Chain of Custody Record



Environment Testing  
America

[illegible]

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-814-1

SDG Number: 31403236.012.0129

Login Number: 814

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: 890-814-1

SDG Number: 31403236.012.0129

Login Number: 814

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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-811-1

Laboratory Sample Delivery Group: 31403236.012.0129

Client Project/Site: JRU DI 8

**For:**

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

Attn: Kalei Jennings

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

Authorized for release by:  
6/25/2021 4:04:02 PM

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

#### LINKS

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results through  
**TotalAccess**

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

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

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

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Laboratory Job ID: 890-811-1  
SDG: 31403236.012.0129

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

## Qualifiers

## GC VOA

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

## GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

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



# Case Narrative

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

**Job ID: 890-811-1**

**Laboratory: Eurofins Xenco, Carlsbad**

Narrative

Job Narrative  
890-811-1

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

**Receipt Exceptions**  
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: BH01B (890-811-1).

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

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

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

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

Client Sample ID: BH01B

Lab Sample ID: 890-811-1

Date Collected: 06/15/21 10:50

Matrix: Solid

Date Received: 06/15/21 16:10

Sample Depth: - 6.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:46	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		06/23/21 09:59	06/23/21 15:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:46	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/23/21 09:59	06/23/21 15:46	1
Total BTEX	<0.00399	U	0.00399	mg/Kg		06/23/21 09:59	06/23/21 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	06/23/21 09:59	06/23/21 15:46	1
1,4-Difluorobenzene (Surr)	99		70 - 130	06/23/21 09:59	06/23/21 15:46	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		06/23/21 14:00	06/23/21 23:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/23/21 14:00	06/23/21 23:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/23/21 14:00	06/23/21 23:23	1
Total TPH	<49.9	U	49.9	mg/Kg		06/23/21 14:00	06/23/21 23:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	06/23/21 14:00	06/23/21 23:23	1
o-Terphenyl	126		70 - 130	06/23/21 14:00	06/23/21 23:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.8		4.96	mg/Kg			06/24/21 16:39	1

Eurofins Xenco, Carlsbad

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

## 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)
890-811-1	BH01B	110	99
890-811-1 MS	BH01B	104	98
890-811-1 MSD	BH01B	106	97
LCS 880-4500/1-A	Lab Control Sample	109	95
LCSD 880-4500/2-A	Lab Control Sample Dup	109	91
MB 880-4500/5-A	Method Blank	110	94
<b>Surrogate Legend</b>			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-811-1	BH01B	103	126
LCS 880-4520/2-A	Lab Control Sample	120	121
LCSD 880-4520/3-A	Lab Control Sample Dup	140 S1+	141 S1+
MB 880-4520/1-A	Method Blank	114	124
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

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

Lab Sample ID: MB 880-4500/5-A

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4500

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/23/21 09:59	06/23/21 15:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/23/21 09:59	06/23/21 15:17	1
Total BTEX	<0.00400	U	0.00400	mg/Kg		06/23/21 09:59	06/23/21 15:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	06/23/21 09:59	06/23/21 15:17	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/23/21 09:59	06/23/21 15:17	1

Lab Sample ID: LCS 880-4500/1-A

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4500

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.1014		mg/Kg		101	70 - 130
Toluene	0.100	0.1179		mg/Kg		118	70 - 130
Ethylbenzene	0.100	0.1207		mg/Kg		121	70 - 130
m-Xylene & p-Xylene	0.200	0.2524		mg/Kg		126	70 - 130
o-Xylene	0.100	0.1235		mg/Kg		123	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: LCSD 880-4500/2-A

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4500

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09466		mg/Kg		95	70 - 130	7	35
Toluene	0.100	0.1147		mg/Kg		115	70 - 130	3	35
Ethylbenzene	0.100	0.1194		mg/Kg		119	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2526		mg/Kg		126	70 - 130	0	35
o-Xylene	0.100	0.1247		mg/Kg		125	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: 890-811-1 MS

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: BH01B

Prep Type: Total/NA

Prep Batch: 4500

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00200	U	0.0998	0.09982		mg/Kg		100	70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

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

Lab Sample ID: 890-811-1 MS

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: BH01B

Prep Type: Total/NA

Prep Batch: 4500

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U	0.0998	0.1080		mg/Kg		108	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.1088		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2243		mg/Kg		112	70 - 130
o-Xylene	<0.00200	U	0.0998	0.1099		mg/Kg		110	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	104		70 - 130						
1,4-Difluorobenzene (Surr)	98		70 - 130						

Lab Sample ID: 890-811-1 MSD

Matrix: Solid

Analysis Batch: 4515

Client Sample ID: BH01B

Prep Type: Total/NA

Prep Batch: 4500

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1003		mg/Kg		100	70 - 130	0	35
Toluene	<0.00200	U	0.100	0.1098		mg/Kg		109	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.1098		mg/Kg		109	70 - 130	1	35
m-Xylene & p-Xylene	<0.00399	U	0.201	0.2256		mg/Kg		112	70 - 130	1	35
o-Xylene	<0.00200	U	0.100	0.1112		mg/Kg		111	70 - 130	1	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	106		70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								

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

Lab Sample ID: MB 880-4520/1-A

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 4520

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		06/23/21 14:00	06/23/21 20:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Total TPH	<50.0	U	50.0	mg/Kg		06/23/21 14:00	06/23/21 20:35	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			06/23/21 14:00	06/23/21 20:35	1
o-Terphenyl	124		70 - 130			06/23/21 14:00	06/23/21 20:35	1

Lab Sample ID: LCS 880-4520/2-A

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	850.3		mg/Kg		85	70 - 130

Eurofins Xenco, Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

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

Lab Sample ID: LCS 880-4520/2-A

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 4520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (Over C10-C28)	1000	989.8		mg/Kg		99	70 - 130

	LCS %Recovery	LCS Qualifier	Limits
Surrogate			
1-Chlorooctane	120		70 - 130
o-Terphenyl	121		70 - 130

Lab Sample ID: LCSD 880-4520/3-A

Matrix: Solid

Analysis Batch: 4496

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 4520

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1064	*1	mg/Kg		106	70 - 130	22	20
Diesel Range Organics (Over C10-C28)	1000	1162		mg/Kg		116	70 - 130	16	20

	LCSD %Recovery	LCSD Qualifier	Limits
Surrogate			
1-Chlorooctane	140	S1+	70 - 130
o-Terphenyl	141	S1+	70 - 130

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4512/1-A

Matrix: Solid

Analysis Batch: 4595

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			06/24/21 15:56	1

Lab Sample ID: LCS 880-4512/2-A

Matrix: Solid

Analysis Batch: 4595

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	249.9		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-4512/3-A

Matrix: Solid

Analysis Batch: 4595

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	249.9		mg/Kg		100	90 - 110	0	20

Eurofins Xenco, Carlsbad

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

## GC VOA

## Prep Batch: 4500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-811-1	BH01B	Total/NA	Solid	5035	
MB 880-4500/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4500/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4500/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-811-1 MS	BH01B	Total/NA	Solid	5035	
890-811-1 MSD	BH01B	Total/NA	Solid	5035	

## Analysis Batch: 4515

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-811-1	BH01B	Total/NA	Solid	8021B	4500
MB 880-4500/5-A	Method Blank	Total/NA	Solid	8021B	4500
LCS 880-4500/1-A	Lab Control Sample	Total/NA	Solid	8021B	4500
LCSD 880-4500/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4500
890-811-1 MS	BH01B	Total/NA	Solid	8021B	4500
890-811-1 MSD	BH01B	Total/NA	Solid	8021B	4500

## GC Semi VOA

## Analysis Batch: 4494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-811-1	BH01B	Total/NA	Solid	8015B NM	4520

## Analysis Batch: 4496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-4520/1-A	Method Blank	Total/NA	Solid	8015B NM	4520
LCS 880-4520/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4520
LCSD 880-4520/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4520

## Prep Batch: 4520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-811-1	BH01B	Total/NA	Solid	8015NM Prep	
MB 880-4520/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4520/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4520/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## HPLC/IC

## Leach Batch: 4512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-811-1	BH01B	Soluble	Solid	DI Leach	
MB 880-4512/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4512/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4512/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

## Analysis Batch: 4595

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-811-1	BH01B	Soluble	Solid	300.0	4512
MB 880-4512/1-A	Method Blank	Soluble	Solid	300.0	4512
LCS 880-4512/2-A	Lab Control Sample	Soluble	Solid	300.0	4512
LCSD 880-4512/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4512

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

Client Sample ID: BH01B      Lab Sample ID: 890-811-1  
Date Collected: 06/15/21 10:50      Matrix: Solid  
Date Received: 06/15/21 16:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4500	06/23/21 09:59	MR	XEN MID
Total/NA	Analysis	8021B		1	4515	06/23/21 15:46	MR	XEN MID
Total/NA	Prep	8015NM Prep			4520	06/23/21 14:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 23:23	AJ	XEN MID
Soluble	Leach	DI Leach			4512	06/23/21 12:35	CH	XEN MID
Soluble	Analysis	300.0		1	4595	06/24/21 16:39	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 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: JRU DI 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

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 8

Job ID: 890-811-1  
SDG: 31403236.012.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-811-1	BH01B	Solid	06/15/21 10:50	06/15/21 16:10	- 6.5

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



## Chain of Custody

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

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334  
 Midland, TX (432) 704-5440 EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1295  
 Hobbs, NM (575) 392-7550 Phoenix, AZ (480) 355-0900 Atlanta, GA (770) 449-8800 Tampa, FL (813) 620-2000

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Project Manager:	Kalei Jennings	Bill to: (if different)	Kyle Littlell
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@wsp.com

<b>Program:</b> <input checked="" type="checkbox"/> UST/PST <input type="checkbox"/> RP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> DeepTund <input type="checkbox"/> <b>State of Project:</b> NM <b>Reporting Level:</b> <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RP <input type="checkbox"/> Level IV <input type="checkbox"/> <b>Deliverables:</b> EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other: _____		<b>Work Order Comments</b>
--	--	----------------------------

Project Name:	JRU DI 8	Turn Around	
Project Number:	31403236.012.0129	Routine	X
P.O. Number:		Rush:	
Sampler's Name:	Travis Casey	Due Date:	

<b>SAMPLE RECEIPT</b>		Temp Blank:	<input checked="" type="radio"/> Yes <input type="radio"/> No	Wet Ice:	<input checked="" type="radio"/> Yes <input type="radio"/> No
Temperature (°C):	4.8/4.6	Thermometer ID	T-NM-002		
Received In tact:	Yes No	Correction Factor:	-0.2		
Cooler Custody Seals:	Yes No	Total Containers:	1		
Sample Custody Seals:	Yes No				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	ANALYSIS REQUEST										Work Order Notes
BH01B	S	6/15/2021	1050	6.5'	1	✓	✓	✓											IN: nAPP2115327353 CC:2109421001
TAT starts the day received by the lab, if received by 4:30pm									Sample Comments										
Hold																			

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

**Notice:** Signature on 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	1	6/15/21 / 16:10	2	2	
3	3		4	4	
5	5		6	6	

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-811-1

SDG Number: 31403236.012.0129

Login Number: 811

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: 890-811-1

SDG Number: 31403236.012.0129

Login Number: 811

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Xenco, Midland

List Creation: 06/23/21 12:22 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	

**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 39632

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  39632
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2115327353 JAMES RANCH UNIT DI 8 BATTERY, thank you. This closure is approved.	11/9/2021