

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	NAPP2132240471
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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2132240471
District RP	
Facility ID	
Application ID	

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>Adrian Bafes</u> Date: _____ email: _____ Telephone: _____
<u>OCD Only</u> Received by: <u>Ramona Marcus</u> Date: <u>11/18/2021</u>

NAPP2132240471

Location:	Corral Canyon Expansion Tank Battery	
Spill Date:	11/7/2021	
Area 1		
Approximate Area =	58.90	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	10.50	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	10.50	bbls
TOTAL VOLUME RECOVERED		
Total Crude Oil =	0.00	bbls
Total Produced Water =	10.50	bbls

District I
 1625 N. French Dr., Hobbs, NM 88240
 Phone:(575) 393-6161 Fax:(575) 393-0720

District II
 811 S. First St., Artesia, NM 88210
 Phone:(575) 748-1283 Fax:(575) 748-9720

District III
 1000 Rio Brazos Rd., Aztec, NM 87410
 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
 1220 S. St Francis Dr., Santa Fe, NM 87505
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS
 Action 62500

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 62500
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
marcus	When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141	11/18/2021

Incident ID	NAPP2132240471
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?	50-100 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-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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Incident ID	NAPP2132240471
District RP	
Facility ID	
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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____ Adrian Baker _____ Title: _____ Environmental Coordinator _____



Signature: _____ Date: _____ 02/05/2022 _____

Email: _____ adrian.baker@exxonmobil.com _____ Telephone: _____ 432-236-3808 _____

OCD Only

Received by: _____ Date: _____

Incident ID	NAPP2132240471
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

Printed Name: _____ Adrian Baker _____ Title: _____ Environmental Coordinator _____

Signature: Adrian Baker _____ Date: _____ 02/05/2022 _____

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

OCD Only

Received by: _____ Ramona Marcus _____ Date: _____ 2/9/2022 _____

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

Closure Approved by: _____ Jennifer Nobui _____ Date: _____ 03/09/2022 _____

Printed Name: _____ Jennifer Nobui _____ Title: _____ Environmental Specialist A _____



WSP USA

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

February 05, 2022

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

**Re: Closure Request
Corral Canyon Expansion
Incident Number NAPP2132240471
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 Corral Canyon Expansion (Site) located in Unit P, Section 5, Township 25 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following the release of produced water within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NAPP2132240471.

RELEASE BACKGROUND

On November 7, 2021, corrosion on a water line weld resulted in the release of approximately 10.5 barrels (bbls) of produced water into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover freestanding fluids; all fluid was recovered from within the lined containment. A 48-hour advance notice of a liner inspection was provided via email to New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO submitted a Release Notification Form C-141 (Form C-141) on November 18, 2021. The release was assigned Incident Number NAPP2132240471.

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 between 50-100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater wells with depth to groundwater data are New Mexico Office of the State Engineer (NMOSE)



wells C-04324, six monitoring wells, located approximately 0.09 miles southeast of the Site. The groundwater wells have reported depths to groundwater ranging from 60 feet bgs to 65 feet bgs and a maximum total depth of 69 feet bgs. NMOSE records indicate the wells were plugged and abandoned in February 2021. All wells used for depth to groundwater determination are depicted on Figure 1 and referenced well records are provided in Attachment 1.

The closest continuously flowing water or significant watercourse to the Site is an intermittent dry wash, located approximately 851 feet southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On December 30, 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. Two soil samples were collected from borehole BH01 at depths of 0.5 feet and 1-foot bgs. Soil from the borehole was field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photo-ionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations from the borehole were documented on a lithologic/soil sampling log which is included as Attachment 2. The borehole was backfilled with the soil removed and XTO repaired the tear in the liner. The borehole delineation soil sample location is depicted on Figure 2. Photographic documentation was conducted during the Site visit. The photographic log is included in Attachment 3.



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

SOIL ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples BH01 and BH01A, collected at depths of 0.5 feet and 1-foot 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 November 07, 2021 produced water release within lined containment. Two delineation soil samples were collected from borehole BH01 at depths of approximately 0.5 feet and 1-foot bgs. Laboratory analytical results indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. Additionally, field screening of soil from the borehole indicated no elevated volatile aromatic hydrocarbons or chloride concentrations beneath the tear in the liner. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria directly below the tear in the liner, XTO respectfully requests NFA for Incident Number NAPP2132240471.



District II
Page 4

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

Sincerely,

WSP USA Inc.

A handwritten signature in black ink that reads "Nihaar Katoch".

Nihaar Katoch
Assistant Consultant, Geologist

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

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

cc: Shelby Pennington, XTO
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 Log
- Attachment 3 Photographic Log
- Attachment 4 Laboratory Analytical Reports

FIGURES

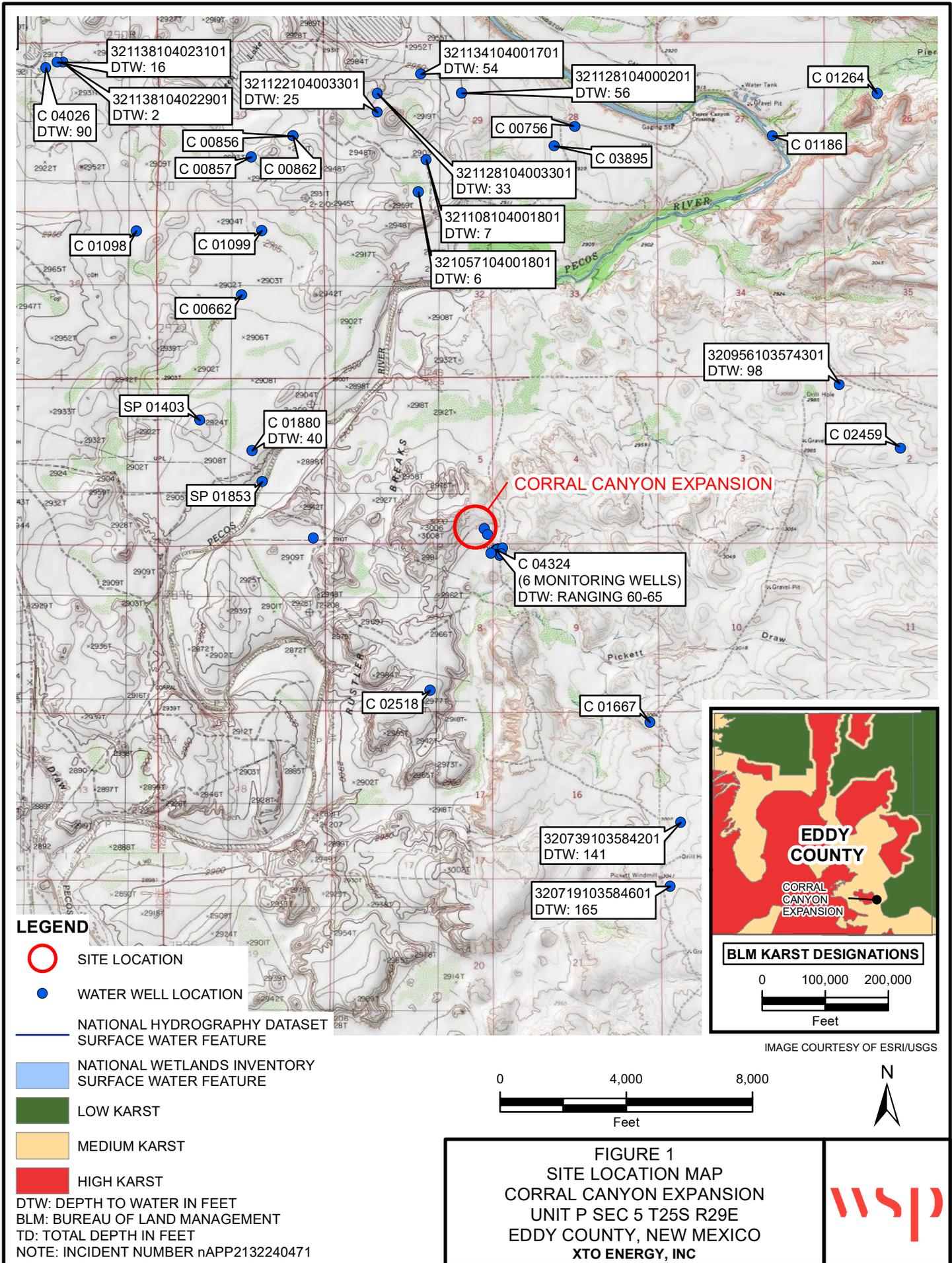
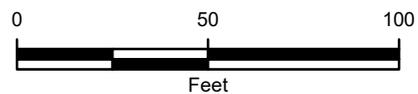




IMAGE COURTESY OF ESRI

LEGEND

- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- CONTAINMENT



NOTE: INCIDENT NUMBER NAPP2132240471
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

FIGURE 2
 DELINEATION SOIL SAMPLE LOCATIONS
 CORRAL CANYON EXPANSION
 UNIT P SEC 5 T25S R29E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



TABLES

Table 1

Soil Analytical Results
Corral Canyon Expansion
Incident number: nAPP2132240471
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	10,000
Delineation Samples										
BH01	12/30/2021	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	547
BH01A	12/30/2021	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	88.1

Notes:

BGS - Below ground surface

GRO - Gasoline range organics

DRO - Diesel range organics

ORO - Oil range organics

BTEX - Benzene, toluene, ethylbenzene, and total xylenes

mg/Kg - milligrams per kilogram

TPH - Total Petroleum Hydrocarbons

NE - Not established

<- Indicated result is below laboratory reporting limits

ATTACHMENT 1: REFERENCED WELL RECORDS



New Mexico Office of the State Engineer

Water Right Summary



[get image list](#)

WR File Number: C 04324 **Subbasin:** CUB **Cross Reference:** -
Primary Purpose: MON MONITORING WELL
Primary Status: PMT PERMIT
Total Acres: **Subfile:** - **Header:** -
Total Diversion: 0 **Cause/Case:** -
Agent: LT ENVIRONMENTAL INC
Contact: DUSTIN HELD

Documents on File

Trn #	Doc	File/Act	Status		Transaction Desc.	From/	Acres	Diversion	Consumptive
			1	2		To			
654446	EXPL	2019-07-12	PMT	LOG	C 04324 POD6-12	T	0	0	
648753	EXPL	2019-05-07	PMT	APR	C 04324 POD1-5	T	0	0	

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q			Tws	Rng	X	Y	Other Location Desc	
			64	16	Q4						Sec
C 04324 POD1	NA		1	1	1	09	25S	29E	594539	3557658	BH01
C 04324 POD10	NA	Shallow	1	1	1	09	25S	29E	594563	3557603	BH05(D)
C 04324 POD11	NA	Shallow	1	1	1	09	25S	29E	594576	3557619	BH05(E)
C 04324 POD12	NA	Shallow	2	2	2	08	25S	29E	594476	3557627	BH06(F)
C 04324 POD2	NA		1	1	1	09	25S	29E	594524	3557660	BH02
C 04324 POD3	NA		1	1	1	09	25S	29E	594548	3557656	BH03
C 04324 POD4	NA		1	1	1	09	25S	29E	594540	3557668	BH04
C 04324 POD5	NA		1	1	1	09	25S	29E	594532	3557644	BH05
C 04324 POD6	NA	Shallow	1	1	1	09	25S	29E	594538	3557657	BH01(A)
C 04324 POD7	NA		4	4	4	05	25S	29E	594410	3557863	BH02(B)
C 04324 POD8	NA	Shallow	4	4	4	05	25S	29E	594442	3557807	BH02(B)'
C 04324 POD9	NA	Shallow	1	1	1	09	25S	29E	594590	3557676	BH04(C)

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.

12/16/21 1:01 PM

WATER RIGHT SUMMARY



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	Tws	Rng	X	Y
NA	C 04324 POD8	4	4	4	05	25S	29E	594442	3557807

Driller License: 1664	Driller Company: CASCADE DRILLING, LP	
Driller Name: CAIN, SHAWN N.NJR.L.NER		
Drill Start Date: 07/21/2019	Drill Finish Date: 07/21/2019	Plug Date:
Log File Date: 08/28/2019	PCW Rev Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size: 2.06	Depth Well: 69 feet	Depth Water: 65 feet

Water Bearing Stratifications:	Top	Bottom	Description
	60	69	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	49	69

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.

12/16/21 1:01 PM

POINT OF DIVERSION SUMMARY



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

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- [Full News](#)

USGS 320739103584201 25S.29E.15.31134

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°07'39", Longitude 103°58'42" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 192 feet
Land surface altitude: 3,017 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	1983-02-01	1998-01-29	4
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](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)

Title: NWIS Site Information for USA: Site Inventory

URL: [https://waterdata.usgs.gov/nwis/inventory?](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320739103584201)

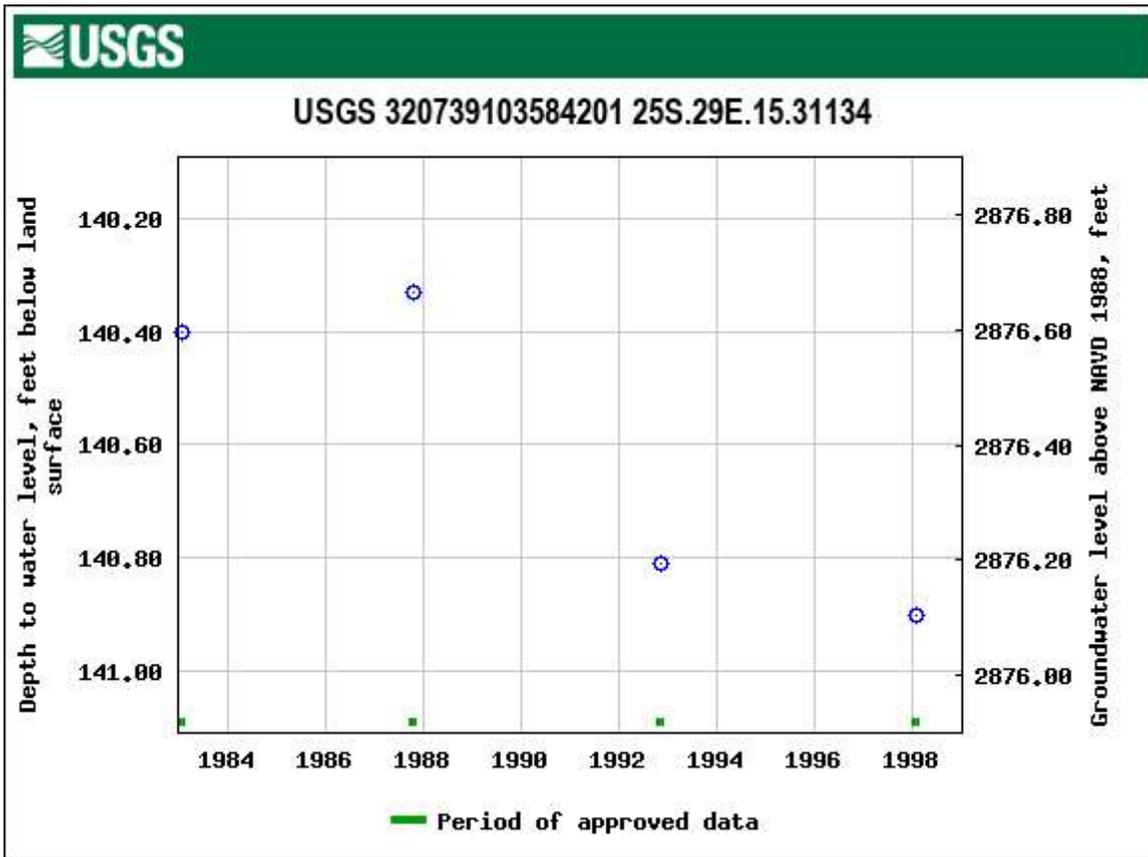
[agency_code=USGS&site_no=320739103584201](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320739103584201)



Page Contact Information: [New Mexico Water Data Support Team](#)

Page Last Modified: 2021-12-16 15:04:39 EST

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ATTACHMENT 2: LITHOLOGIC/SOIL SAMPLING LOG

 <p style="text-align: center;">WSP USA 508 West Stevens Street Carlsbad, New Mexico 88220</p>					BH or PH Name: BH01		Date: 12-30-2021			
					Site Name: Corral Canyon Expansion					
					RP or Incident Number: NAPP2132240471					
					WSP Job Number: 31403236.020.0129					
LITHOLOGIC / SOIL SAMPLING LOG										
Lat/Long: 32.15357, -103.99961				Field Screening: Hach chloride strips, PID		Logged By: GM		Method: Hand Auger		
						Hole Diameter: 4"		Total Depth: 1 feet		
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no; SAA-same as above										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks		
M	694	8	N	BH01	0.5	0.5	SM	Silty sand, fine grains, poorly graded, tan/brown		
M	162	4	N	BH01A	1	1	SM	Fine to medium grained sand with silt, well graded, tan		
TD @ 1 ft bgs										

ATTACHMENT 3: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG		
XTO Energy	Corral Canyon Expansion Eddy County, New Mexico	NAPP2132240471

Photo No.	Date	
1	November 11, 2021	
Northeast view of the release and damaged liner		



PHOTOGRAPHIC LOG		
XTO Energy	Corral Canyon Expansion Eddy County, New Mexico	NAPP2132240471

Photo No.	Date	
2	December 30, 2021	
View of the liner after delineation and backfilling		

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS



Environment Testing
America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-1787-1
Laboratory Sample Delivery Group: 31403236.020.0129
Client Project/Site: Corral Canyon Expansion Tank Battery

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

Attn: Tacoma Morrissey

Authorized for release by:
1/6/2022 2:22:22 PM

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



LINKS

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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.

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- 13
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Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Laboratory Job ID: 890-1787-1
SDG: 31403236.020.0129

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Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

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.
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: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

Job ID: 890-1787-1

Laboratory: Eurofins Xenco

Narrative

Job Narrative
890-1787-1

Receipt

The samples were received on 1/3/2022 8:47 AM. 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 0.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-15881 and analytical batch 880-15940 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

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

HPLC/IC

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

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Client Sample Results

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

Client Sample ID: BH01

Lab Sample ID: 890-1787-1

Date Collected: 12/30/21 10:50

Matrix: Solid

Date Received: 01/03/22 08:47

Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/04/22 10:19	01/04/22 18:14	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/04/22 10:19	01/04/22 18:14	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/04/22 10:19	01/04/22 18:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/04/22 10:19	01/04/22 18:14	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/04/22 10:19	01/04/22 18:14	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/04/22 10:19	01/04/22 18:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	01/04/22 10:19	01/04/22 18:14	1
1,4-Difluorobenzene (Surr)	109		70 - 130	01/04/22 10:19	01/04/22 18:14	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			01/06/22 15:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/06/22 15:12	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		01/04/22 08:34	01/04/22 16:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/04/22 08:34	01/04/22 16:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/04/22 08:34	01/04/22 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	01/04/22 08:34	01/04/22 16:49	1
o-Terphenyl	125		70 - 130	01/04/22 08:34	01/04/22 16:49	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	547		4.99	mg/Kg			01/05/22 12:31	1

Client Sample ID: BH01A

Lab Sample ID: 890-1787-2

Date Collected: 12/30/21 10:55

Matrix: Solid

Date Received: 01/03/22 08:47

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		01/04/22 10:19	01/04/22 18:34	1
Toluene	<0.00202	U	0.00202	mg/Kg		01/04/22 10:19	01/04/22 18:34	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		01/04/22 10:19	01/04/22 18:34	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		01/04/22 10:19	01/04/22 18:34	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		01/04/22 10:19	01/04/22 18:34	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		01/04/22 10:19	01/04/22 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	01/04/22 10:19	01/04/22 18:34	1

Eurofins Xenco

Client Sample Results

Client: WSP USA Inc.
 Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
 SDG: 31403236.020.0129

Client Sample ID: BH01A

Lab Sample ID: 890-1787-2

Date Collected: 12/30/21 10:55

Matrix: Solid

Date Received: 01/03/22 08:47

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	01/04/22 10:19	01/04/22 18:34	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			01/06/22 15:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/06/22 15:12	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		01/04/22 08:34	01/04/22 17:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/04/22 08:34	01/04/22 17:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/04/22 08:34	01/04/22 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130	01/04/22 08:34	01/04/22 17:10	1
o-Terphenyl	115		70 - 130	01/04/22 08:34	01/04/22 17:10	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	88.1		4.95	mg/Kg			01/05/22 12:56	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-9776-A-1-B MS	Matrix Spike	117	112
880-9776-A-1-C MSD	Matrix Spike Duplicate	112	102
890-1787-1	BH01	126	109
890-1787-2	BH01A	115	95
LCS 880-15881/1-A	Lab Control Sample	113	105
LCSD 880-15881/2-A	Lab Control Sample Dup	114	104
MB 880-15881/5-A	Method Blank	123	104

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	OTPH1
		(70-130)	(70-130)
880-9776-A-1-F MS	Matrix Spike	108	107
880-9776-A-1-G MSD	Matrix Spike Duplicate	104	108
890-1787-1	BH01	124	125
890-1787-2	BH01A	116	115

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO2	OTPH2
		(70-130)	(70-130)
LCS 880-15946/2-A	Lab Control Sample	94	93
LCSD 880-15946/3-A	Lab Control Sample Dup	98	92
MB 880-15946/1-A	Method Blank	110	118

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
 Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
 SDG: 31403236.020.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-15881/5-A
 Matrix: Solid
 Analysis Batch: 15940

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 15881

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/03/22 16:00	01/04/22 12:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/03/22 16:00	01/04/22 12:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	01/03/22 16:00	01/04/22 12:52	1
1,4-Difluorobenzene (Surr)	104		70 - 130	01/03/22 16:00	01/04/22 12:52	1

Lab Sample ID: LCS 880-15881/1-A
 Matrix: Solid
 Analysis Batch: 15940

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 15881

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07225		mg/Kg		72	70 - 130
Toluene	0.100	0.07317		mg/Kg		73	70 - 130
Ethylbenzene	0.100	0.08304		mg/Kg		83	70 - 130
m-Xylene & p-Xylene	0.200	0.1620		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08231		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-15881/2-A
 Matrix: Solid
 Analysis Batch: 15940

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 15881

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.100	0.07039		mg/Kg		70	70 - 130	3	35
Toluene	0.100	0.07719		mg/Kg		77	70 - 130	5	35
Ethylbenzene	0.100	0.08395		mg/Kg		84	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.1671		mg/Kg		84	70 - 130	3	35
o-Xylene	0.100	0.08181		mg/Kg		82	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 880-9776-A-1-B MS
 Matrix: Solid
 Analysis Batch: 15940

Client Sample ID: Matrix Spike
 Prep Type: Total/NA
 Prep Batch: 15881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00201	U F1	0.101	0.06410	F1	mg/Kg		63	70 - 130
Toluene	<0.00201	U F1	0.101	0.07526		mg/Kg		75	70 - 130

Eurofins Xenco

QC Sample Results

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

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

Lab Sample ID: 880-9776-A-1-B MS
Matrix: Solid
Analysis Batch: 15940

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15881

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00201	U	0.101	0.07811		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1524		mg/Kg		75	70 - 130
o-Xylene	<0.00201	U	0.101	0.07818		mg/Kg		77	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 880-9776-A-1-C MSD
Matrix: Solid
Analysis Batch: 15940

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 15881

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.101	0.05875	F1	mg/Kg		58	70 - 130	9	35
Toluene	<0.00201	U F1	0.101	0.06520	F1	mg/Kg		65	70 - 130	14	35
Ethylbenzene	<0.00201	U	0.101	0.07257		mg/Kg		72	70 - 130	7	35
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1434		mg/Kg		71	70 - 130	6	35
o-Xylene	<0.00201	U	0.101	0.07200		mg/Kg		72	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-15946/1-A
Matrix: Solid
Analysis Batch: 15965

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 15946

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		01/04/22 08:34	01/04/22 10:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/04/22 08:34	01/04/22 10:57	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/04/22 08:34	01/04/22 10:57	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130	01/04/22 08:34	01/04/22 10:57	1
o-Terphenyl	118		70 - 130	01/04/22 08:34	01/04/22 10:57	1

Lab Sample ID: LCS 880-15946/2-A
Matrix: Solid
Analysis Batch: 15965

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15946

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	884.9		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	1000	902.4		mg/Kg		90	70 - 130

Eurofins Xenco

QC Sample Results

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

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

Lab Sample ID: LCS 880-15946/2-A
Matrix: Solid
Analysis Batch: 15965

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 15946

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	94		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-15946/3-A
Matrix: Solid
Analysis Batch: 15965

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 15946

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	893.6		mg/Kg		89	70 - 130	1	20	
Diesel Range Organics (Over C10-C28)	1000	858.4		mg/Kg		86	70 - 130	5	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	98		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 880-9776-A-1-F MS
Matrix: Solid
Analysis Batch: 15965

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 15946

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	987.8		mg/Kg		97	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	998.3		mg/Kg		100	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	108		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 880-9776-A-1-G MSD
Matrix: Solid
Analysis Batch: 15965

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 15946

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	984.4		mg/Kg		97	70 - 130	0	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1018		mg/Kg		102	70 - 130	2	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	104		70 - 130
o-Terphenyl	108		70 - 130

QC Sample Results

Client: WSP USA Inc.
 Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
 SDG: 31403236.020.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-15970/1-A
 Matrix: Solid
 Analysis Batch: 16092

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			01/05/22 12:06	1

Lab Sample ID: LCS 880-15970/2-A
 Matrix: Solid
 Analysis Batch: 16092

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	239.9		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-15970/3-A
 Matrix: Solid
 Analysis Batch: 16092

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	249.5		mg/Kg		100	90 - 110	4	20

Lab Sample ID: 890-1787-1 MS
 Matrix: Solid
 Analysis Batch: 16092

Client Sample ID: BH01
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	547		250	771.7		mg/Kg		90	90 - 110

Lab Sample ID: 890-1787-1 MSD
 Matrix: Solid
 Analysis Batch: 16092

Client Sample ID: BH01
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	547		250	778.6		mg/Kg		93	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

GC VOA

Prep Batch: 15881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Total/NA	Solid	5035	
890-1787-2	BH01A	Total/NA	Solid	5035	
MB 880-15881/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-15881/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-15881/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-9776-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-9776-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 15940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Total/NA	Solid	8021B	15881
890-1787-2	BH01A	Total/NA	Solid	8021B	15881
MB 880-15881/5-A	Method Blank	Total/NA	Solid	8021B	15881
LCS 880-15881/1-A	Lab Control Sample	Total/NA	Solid	8021B	15881
LCSD 880-15881/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	15881
880-9776-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	15881
880-9776-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	15881

Analysis Batch: 16173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Total/NA	Solid	Total BTEX	
890-1787-2	BH01A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 15946

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Total/NA	Solid	8015NM Prep	
890-1787-2	BH01A	Total/NA	Solid	8015NM Prep	
MB 880-15946/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-15946/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-15946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-9776-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-9776-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 15965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Total/NA	Solid	8015B NM	15946
890-1787-2	BH01A	Total/NA	Solid	8015B NM	15946
MB 880-15946/1-A	Method Blank	Total/NA	Solid	8015B NM	15946
LCS 880-15946/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	15946
LCSD 880-15946/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	15946
880-9776-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	15946
880-9776-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	15946

Analysis Batch: 16174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Total/NA	Solid	8015 NM	
890-1787-2	BH01A	Total/NA	Solid	8015 NM	

Eurofins Xenco

QC Association Summary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

HPLC/IC

Leach Batch: 15970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Soluble	Solid	DI Leach	
890-1787-2	BH01A	Soluble	Solid	DI Leach	
MB 880-15970/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-15970/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-15970/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1787-1 MS	BH01	Soluble	Solid	DI Leach	
890-1787-1 MSD	BH01	Soluble	Solid	DI Leach	

Analysis Batch: 16092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1787-1	BH01	Soluble	Solid	300.0	15970
890-1787-2	BH01A	Soluble	Solid	300.0	15970
MB 880-15970/1-A	Method Blank	Soluble	Solid	300.0	15970
LCS 880-15970/2-A	Lab Control Sample	Soluble	Solid	300.0	15970
LCSD 880-15970/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	15970
890-1787-1 MS	BH01	Soluble	Solid	300.0	15970
890-1787-1 MSD	BH01	Soluble	Solid	300.0	15970

Lab Chronicle

Client: WSP USA Inc.
 Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
 SDG: 31403236.020.0129

Client Sample ID: BH01

Lab Sample ID: 890-1787-1

Date Collected: 12/30/21 10:50

Matrix: Solid

Date Received: 01/03/22 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15881	01/04/22 10:19	KL	XEN MID
Total/NA	Analysis	8021B		1	15940	01/04/22 18:14	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16173	01/06/22 15:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16174	01/06/22 15:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15946	01/04/22 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15965	01/04/22 16:49	AJ	XEN MID
Soluble	Leach	DI Leach			15970	01/04/22 11:46	CA	XEN MID
Soluble	Analysis	300.0		1	16092	01/05/22 12:31	CH	XEN MID

Client Sample ID: BH01A

Lab Sample ID: 890-1787-2

Date Collected: 12/30/21 10:55

Matrix: Solid

Date Received: 01/03/22 08:47

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			15881	01/04/22 10:19	KL	XEN MID
Total/NA	Analysis	8021B		1	15940	01/04/22 18:34	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	16173	01/06/22 15:01	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	16174	01/06/22 15:12	AJ	XEN MID
Total/NA	Prep	8015NM Prep			15946	01/04/22 08:34	DM	XEN MID
Total/NA	Analysis	8015B NM		1	15965	01/04/22 17:10	AJ	XEN MID
Soluble	Leach	DI Leach			15970	01/04/22 11:46	CA	XEN MID
Soluble	Analysis	300.0		1	16092	01/05/22 12:56	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

Laboratory: Eurofins Xenco

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

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Corral Canyon Expansion Tank Battery

Job ID: 890-1787-1
SDG: 31403236.020.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1787-1	BH01	Solid	12/30/21 10:50	01/03/22 08:47	0.5
890-1787-2	BH01A	Solid	12/30/21 10:55	01/03/22 08:47	1

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1787-1
SDG Number: 31403236.020.0129

Login Number: 1787
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco

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.	False	
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	

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Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1787-1
SDG Number: 31403236.020.0129

Login Number: 1787
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Xenco
List Creation: 01/04/22 11:06 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	

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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
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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 76915

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 76915
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Going forward, please submit with Closure Report photos of intact liner.	3/9/2022