

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	nAPP2134345504
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>Adrian Baker</u>	Date: _____
email: _____	Telephone: _____
<b><u>OCD Only</u></b>	
Received by: _____	Date: _____

<b>Location:</b>	<b>PLU 25 Brushy Draw TB</b>	
<b>Spill Date:</b>	<b>12/7/2021</b>	
<b>Area 1</b>		
Approximate Area =	1118.00	sq. ft.
Average Saturation (or depth) of spill =	0.10	inches
Average Porosity Factor =	0.03	
<b>VOLUME OF LEAK</b>		
Total Condensate =	0.05	bbls
Total Produced Water =	0.00	bbls
<b>TOTAL VOLUME OF LEAK</b>		
<b>Total Condensate=</b>	<b>0.05</b>	<b>bbls</b>
<b>Total Produced Water =</b>	<b>0.00</b>	<b>bbls</b>
<b>TOTAL VOLUME RECOVERED</b>		
<b>Total Condensate=</b>	<b>0.00</b>	<b>bbls</b>
<b>Total Produced Water =</b>	<b>0.00</b>	<b>bbls</b>

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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> (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 <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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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 BakerTitle: Environmental CoordinatorSignature: Date: 03/07/2022Email: adrian.baker@exxonmobil.comTelephone: 432-236-3808**OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

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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

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: 03/07/2022

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

### OCD Only

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Closure Approved by: Jennifer Nobui Date: 03/10/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A



**WSP USA**

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

March 7, 2022

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

**RE: Closure Request  
Poker Lake Unit 25 Brushy Draw  
Incident Number nAPP2134345504  
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 Poker Lake Unit 25 Brushy Draw (Site) in Unit F, Section 25, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a small condensate release and flare fire at the Site. Based on the site assessment activities and laboratory analytical results from the soil sampling events, XTO is submitting this Closure Request, and requesting no further action (NFA) for Incident Number nAPP2134345504.

#### **RELEASE BACKGROUND**

On December 7, 2021, approximately 0.05 bbls of condensate released from a low-pressure flare, which resulted in a small fire. The fire extinguished itself on the ground and there were no fluids to recover. XTO reported the release via email to the New Mexico Oil Conservation Division (NMOCD) on December 8, 2021, and submitted a Release Notification Form C-141 (Form C-141) on December 9, 2021. The release was assigned Incident Number nAPP2134345504.

#### **SITE CHARACTERIZATION**

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted water well is New Mexico Office of the State Engineer (NMOSE) well C-4498, located approximately 0.2 miles south of the Site. According to the well record filed in March 2021, C-4498 has a total depth of 109 feet bgs and no groundwater was encountered during drilling of the well, indicating depth to groundwater is greater than 109 feet bgs. Ground surface elevation at the well location is 3,342 feet above mean sea level (amsl), which is approximately 9 feet higher in elevation than



the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 414 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

## **CLOSURE CRITERIA**

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

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

## **SITE ASSESSMENT AND DELINEATION ACTIVITIES**

On January 11, 2022, WSP personnel were at the Site to evaluate the release extent based on information provided on the Form C-141, visual observations, and information provided by on-site XTO personnel. Three potholes were advanced to a depth of 1-foot bgs within the release extent, to assess for the presence or absence of impacted soil. Two delineation soil samples (SS01/SS01A, SS02/SS02A, and SS03/SS03A) were collected from each pothole at depths of 0.5 feet and 1-foot bgs, respectively. Additionally, soil sample SS04 was collected south of the release extent to confirm the lateral extent of the release. The delineation soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the pothole delineation samples were logged on lithologic/soil sampling logs, which are included in Attachment 2. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation 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



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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 SS01/SS01A, SS02/SS02A, SS03/SS03A, and SS04 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 4.

### CLOSURE REQUEST

Site assessment and delineation soil sampling activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the December 7, 2021 condensate release and flare fire. Laboratory analytical results for the soil samples collected within and around the release extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. As such, XTO respectfully requests no further action for Incident Number nAPP2134345504.

If you have any questions or comments, please do not hesitate to contact Ms. Aimee Cole at (720) 384-7365.

Sincerely,

WSP USA Inc.

A handwritten signature in black ink, appearing to read 'Nihaar Katoch'.

Nihaar Katoch  
Assistant Consultant, Geologist

A handwritten signature in black ink, appearing to read 'Aimee Cole'.

Aimee Cole  
Senior Consultant, Environmental Scientist

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

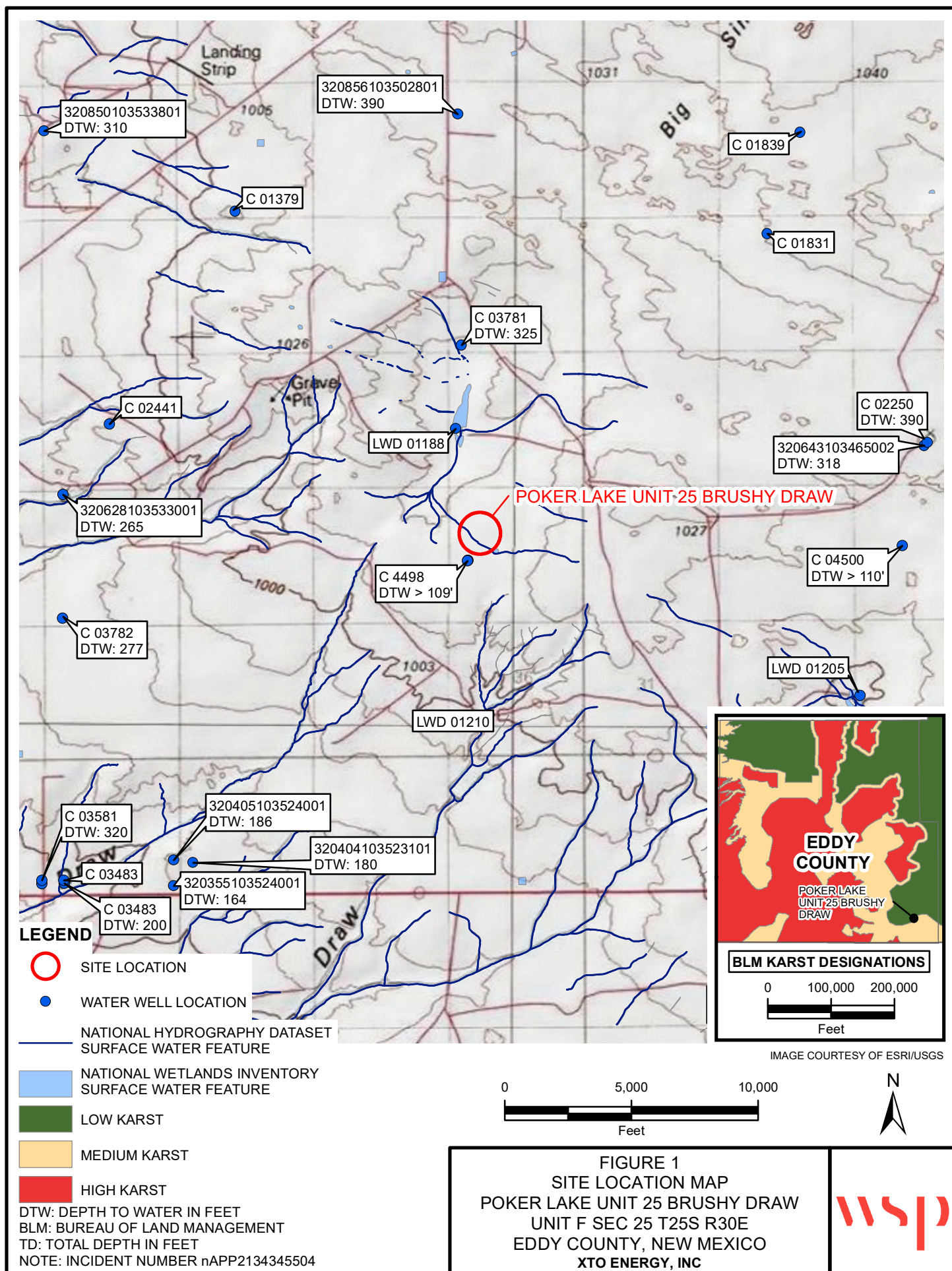


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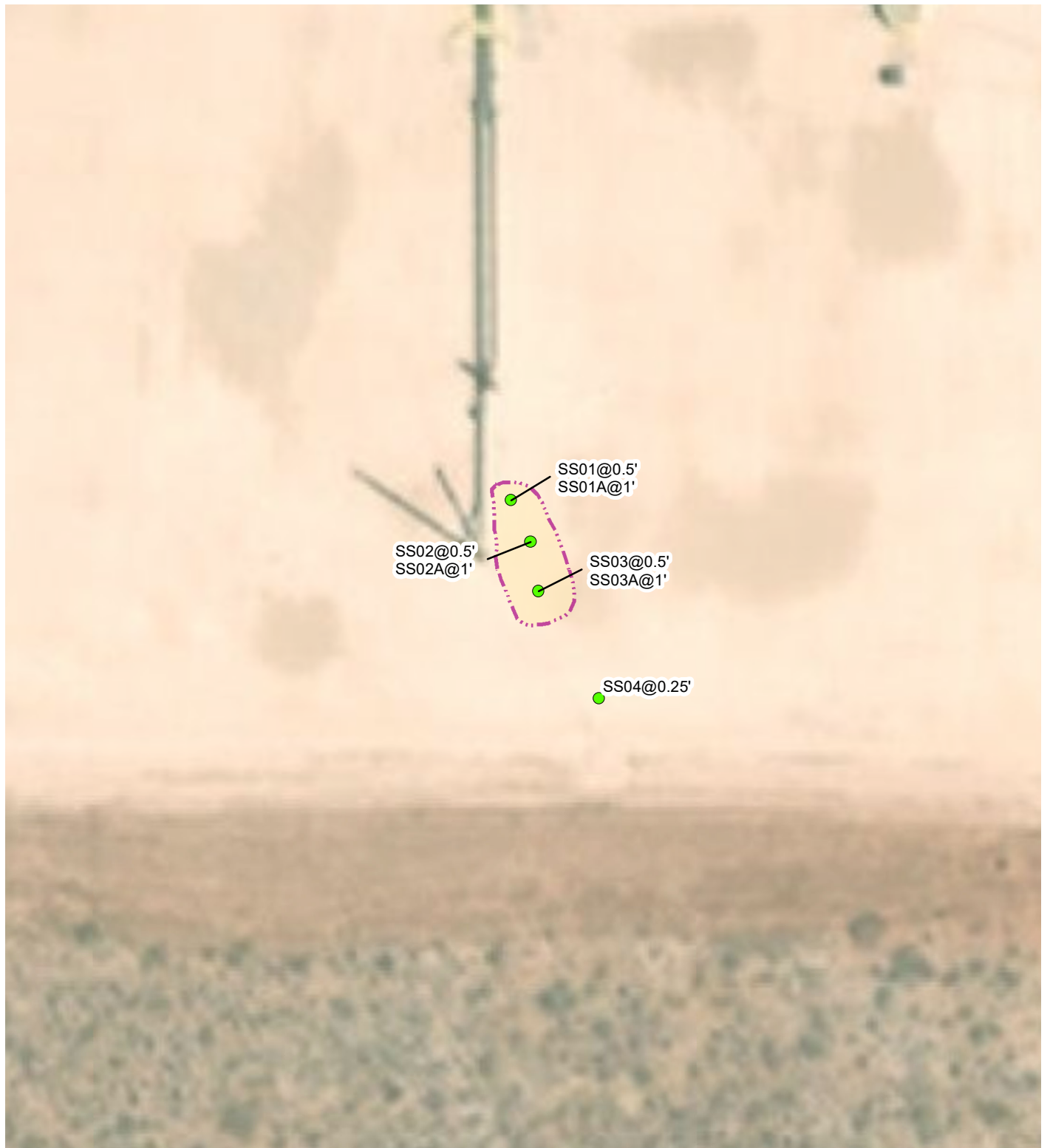
Attachments:

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

FIGURES

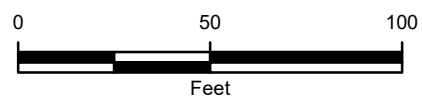


P:\XTO Energy\GIS\31403236.020.0129.17\_PLU 25 BD\MXD\31403236.020.0129.17\_FIG01\_SL\_RECEPTOR\_2021.mxd

**LEGEND**

- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- RELEASE EXTENT

IMAGE COURTESY OF ESRI



NOTE: INCIDENT NUMBER NAPP2134345504  
 SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

**FIGURE 2**  
 DELINEATION SOIL SAMPLE LOCATIONS  
 POKER LAKE UNIT 25 BRUSHY DRAW  
 UNIT F SEC 25 T25S R30E  
 EDDY COUNTY, NEW MEXICO  
**XTO ENERGY, INC.**



TABLES



Table 1

**Soil Analytical Results**  
**Poker Lake Unit 25 Brushy Draw**  
**Incident Number: NAPP2134345504**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			10	50	NE	NE	NE	1,000	2,500	20,000
<b>Delineation Soil Samples</b>										
SS01	01/11/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	63.7
SS01A	01/11/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	5.75
SS02	01/11/2022	0.5	<0.00199	<0.00398	<49.9	85.6	<49.9	85.6	85.6	30.3
SS02A	01/11/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	17.5
SS03	01/11/2022	0.5	<0.00200	<0.00399	<50.0	102	<50.0	102	102	51.7
SS03A	01/11/2022	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	6.38
SS04	02/07/2022	0.25	<0.00202	<0.00403	<50.0	93.3	<50.0	93.3	93.3	19.6

**NOTES:**

ft - feet/foot

mg/Kg - milligrams per kilogram

bgs - below ground surface

GRO - Gasoline range organics

DRO - Diesel range organics

ORO - Oil range organics

BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes

TPH - Total petroleum hydrocarbons

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

NE - Not Established

NMOCD - New Mexico Oil Conservation Division

NMAC - New Mexico Administrative Code

ATTACHMENT 1: REFERENCED WELL RECORDS





2904 W 2nd St.  
Roswell, NM 88201  
voice: 575.624.2420  
fax: 575.624.2421  
www.atkinseng.com

03/11/2021

DII-NMOSE  
1900 W 2<sup>nd</sup> Street  
Roswell, NM 88201

*Hand Delivered to the DII Office of the State Engineer*

Re: Well Record C-4498 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4498Pod1.

If you have any questions, please contact me at 575.499.9244 or [lucas@atkinseng.com](mailto:lucas@atkinseng.com).

Sincerely,

A handwritten signature in black ink that reads "Lucas Middleton". The signature is written in a cursive, flowing style.

Lucas Middleton

Enclosures: as noted above

DSE DII MAR 11 2021 PM 4:22





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

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

USE ON MAR 11 2021 PM 4:22

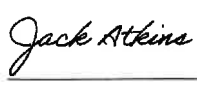
1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4498			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32°	MINUTES 6'	SECONDS 1.96" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE -103°	50'	26.19" W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW SW NE Sec. 25 T25S R30E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 02/24/2021	DRILLING ENDED 02/24/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 109	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	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) n/a		
	DRILLING FLUID: <input 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: Hollow Stem Auger							
	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	109	±6.5	Boring- HSA	--	--	--	--
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 06/30/17)

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

DSE DJT MPR 11 2021 PM 4:22

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	34	34	Caliche, tan, no odor, no stain, gravel, dry	Y ✓ N	
	34	40	6	sand/ caliche, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	40	56	16	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	56	72	16	sandstone, low consolidation, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	72	79	7	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N	
	79	109	30	sandstone, low - medium consolidation, tan, no odor, m-f grained, well sorted, m	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
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					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						
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: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between;"> <div>               SIGNATURE OF DRILLER / PRINT SIGNEE NAME           </div> <div>             Jackie D. Atkins              DATE           </div> </div>					

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/30/2017)

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



# PLUGGING RECORD



**NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC**

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4498- POD1

Well owner: XTO ENERGY (Kyle Littrell)

Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland State: Texas Zip code: 79707

## II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Jackie D. Atkins (Atkins Engineering Associates Inc.)

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/21

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Shane Eldridge

4) Date well plugging began: 03/02/2021 Date well plugging concluded: 03/02/2021

5) GPS Well Location: Latitude: 32 deg, 6 min, 1.96 sec  
Longitude: -103 deg, 50 min, 26.19 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 109 ft below ground level (bgl),  
by the following manner: weighted tape

7) Static water level measured at initiation of plugging: n/a ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 12/01/2020

9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
0-10'	Hydrated Bentonite	Approx. 16 gallons	16 gallons	Augers	
10'-109'	Drill Cuttings	Approx. 171 gallons	171 gallons	Boring	

COPY  
APPLICANT

USE DTJ MAR 11 2021 PM4:22

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

### III. SIGNATURE:

I, Jackie D. Atkins, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

*Jackie Atkins*

Signature of Well Driller

03/11/2021

Date






# 2020-03-10\_C-4498-POD1\_OSE\_Well Record and Log-forsign

Final Audit Report

2021-03-11

Created:	2021-03-11
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAq2m7g1wGV8cRoBzMugpPTk25-4ojFW8H

## "2020-03-10\_C-4498-POD1\_OSE\_Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)  
2021-03-11 - 7:17:39 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature  
2021-03-11 - 7:18:18 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)  
2021-03-11 - 7:29:33 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)  
Signature Date: 2021-03-11 - 7:31:05 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.  
2021-03-11 - 7:31:05 PM GMT

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OSE DJT MAR 11 2021 PM 4:22



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## National Water Information System: Web Interface

USGS Water Resources (Cooperator Access)

Data Category:


Site Information ▼

Geographic Area:

United States ▼

GO

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

## USGS 320628103533001 25S.30E.21.333424

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

GO

### Well Site

#### DESCRIPTION:

Latitude 32°06'28", Longitude 103°53'30" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 288 feet

Land surface altitude: 3,207 feet above NAVD88.

Well completed in "Pecos River Basin alluvial aquifer" (N100PCSRVR) national aquifer.

Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

#### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1958-08-21	1998-01-28	4
<a href="#">Revisions</a>	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](#)

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**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=320628103533001)  
[agency\\_code=USGS&site\\_no=320628103533001](https://waterdata.usgs.gov/nwis/inventory?agency_code=USGS&site_no=320628103533001)**



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

Page Last Modified: 2022-01-19 15:52:28 EST

0.24 0.24 vaww02





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## National Water Information System: Web Interface

USGS Water Resources (Cooperator Access)

Data Category:


Groundwater

Geographic Area:

United States

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Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

## Search Results -- 1 sites found

site\_no list =

- 320628103533001

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

## USGS 320628103533001 25S.30E.21.333424

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°06'28", Longitude 103°53'30" NAD27

Land-surface elevation 3,207 feet above NAVD88

The depth of the well is 288 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

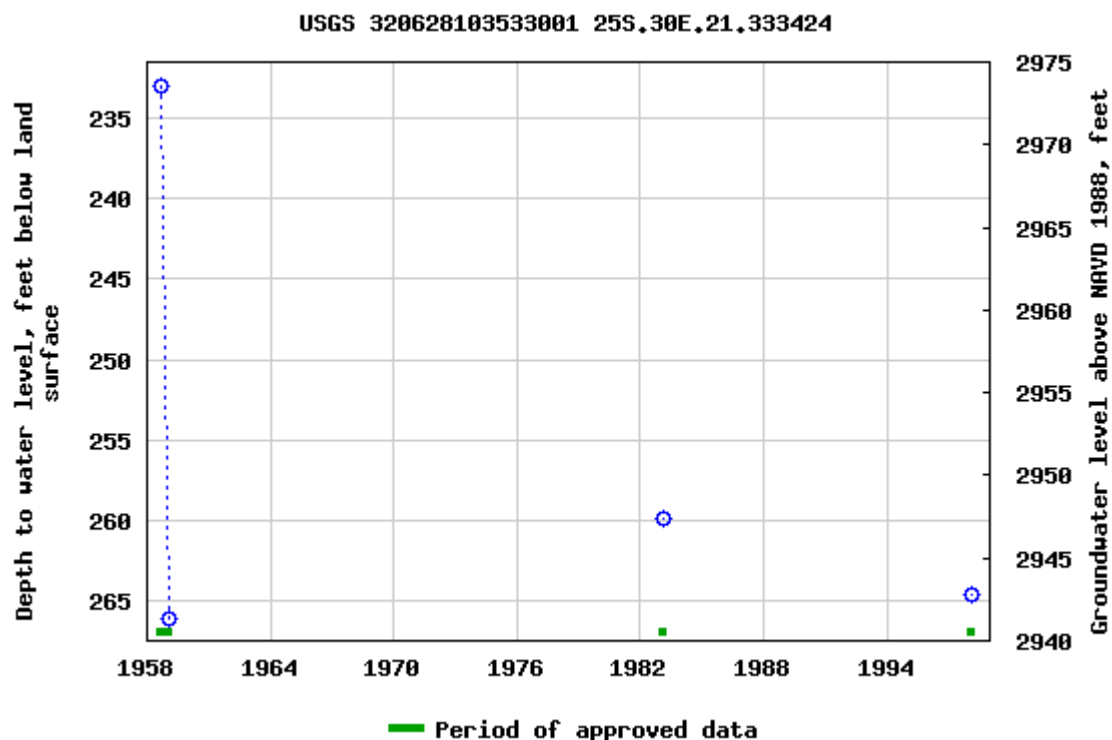
### Output formats

[Table of data](#)

[Tab-separated data](#)

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Breaks in the plot represent a gap of at least one year between field measurements.

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**Title: Groundwater for USA: Water Levels**

**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**





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


Page Last Modified: 2022-01-19 15:53:01 EST

0.57 0.5 nadww01

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOGS


 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: <b>SS 01</b>		Date: <b>01-11-2022</b>				
		Site Name: <b>Poker Lake Unit 25 Brushy Draw</b>						
		RP or Incident Number <b>NAPP2134345504</b>						
		WSP Job Number: <b>31403236.020.0129</b>						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Lat/Long: <b>32.103780, -103.838862</b>		Field Screening: Hach chloride strips, PID		Logged By: <b>MR</b>				
				Method: <b>Backhoe</b>				
		Hole Diameter:		Total Depth: <b>1 feet</b>				
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	252	0.8	N	SS01	0.5	0	SP-SM	Poorly graded sand with gravel and silt, non plastic, light brown, no staining, no odor
D	<128	0.8	N	SS01A	1	1	SP-SM	Poorly graded sand with gravel and silt, non plastic, light brown, no staining, no odor
TD @ 1 ft bgs								

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: <b>SS 02</b>		Date: <b>01-11-2022</b>				
		Site Name: <b>Poker Lake Unit 25 Brushy Draw</b>						
		RP or Incident Number <b>NAPP2134345504</b>						
		WSP Job Number: <b>31403236.020.0129</b>						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Lat/Long: <b>32.1037398, -103.8388413</b>		Field Screening: Hach chloride strips, PID		Logged By: <b>MR</b>				
				Method: <b>Backhoe</b>				
				Hole Diameter:				
				Total Depth: <b>1 feet</b>				
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<128	1.2	N	SS02	0.5	0	SP-SM	Poorly graded sand with gravel and silt, non plastic, light brown, no staining, no odor
D	<128	0.8	N	SS02A	1	1	SP-SM	Poorly graded sand with gravel and silt, non plastic, light brown, no staining, no odor
TD @ 1 ft bgs								

 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220		BH or PH Name: <b>SS 03</b>		Date: <b>01-11-2022</b>				
		Site Name: <b>Poker Lake Unit 25 Brushy Draw</b>						
		RP or Incident Number <b>NAPP2134345504</b>						
		WSP Job Number: <b>31403236.020.0129</b>						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								
Lat/Long: <b>32.1036921, -103.8388306</b>		Field Screening: Hach chloride strips, PID		Logged By: <b>MR</b>				
				Method: <b>Backhoe</b>				
		Hole Diameter:		Total Depth: <b>1 feet</b>				
Comments: All chloride field screenings include a 40% correction factor M-moist; D-dry; Y-yes; N-no								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
D	<128	1.1	N	SS03	0.5	0	SP-SM	Poorly graded sand with gravel and silt, non plastic, light brown, no staining, no odor
D	<128	0.9	N	SS03A	1	1	SP-SM	Poorly graded sand with gravel and silt, non plastic, light brown, no staining, no odor
TD @ 1 ft bgs								

ATTACHMENT 3: PHOTOGRAPHIC LOG

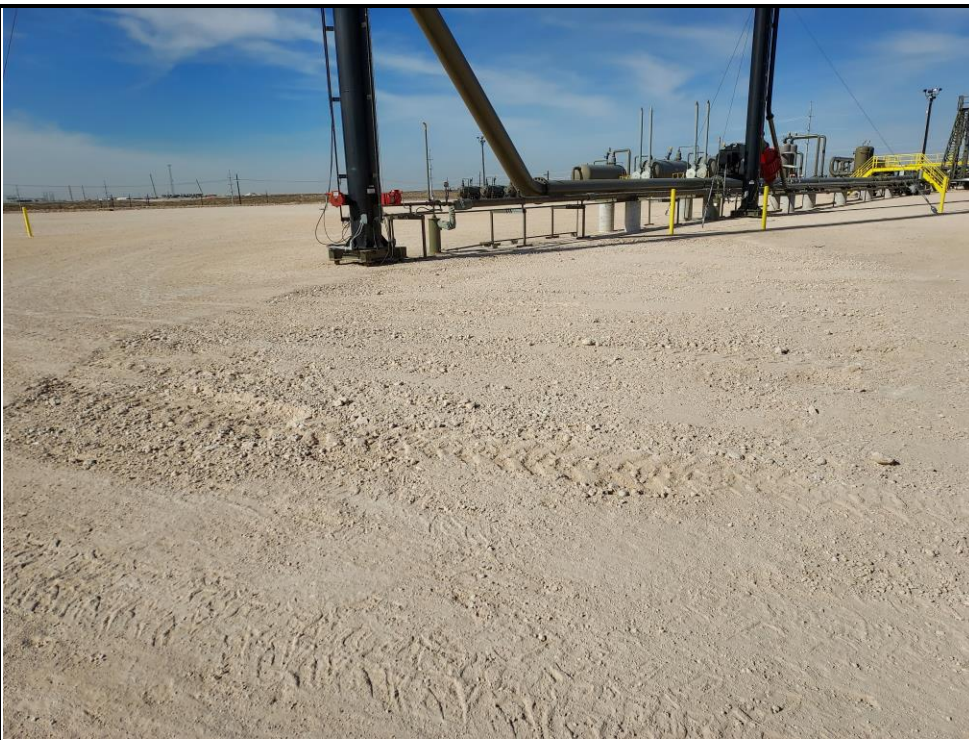
**PHOTOGRAPHIC LOG****XTO Energy, Inc.****Poker Lake Unit 25 Brushy Draw  
Eddy County, New Mexico****NAPP2134345504**


Photo No.	Date	
1	January 11, 2022	
View of the flare stack during site assessment activities.		



**PHOTOGRAPHIC LOG**

<b>XTO Energy</b>	<b>Poker Lake Unit 25 Brushy Draw Eddy County, New Mexico</b>	<b>NAPP2134345504</b>
-------------------	---	-----------------------

<b>Photo No.</b>	<b>Date</b>	
2	January 11, 2022	
View of release area and backfilled potholes after delineation activities.		

<b>Photo No.</b>	<b>Date</b>	
3	January 11, 2022	
View of release area and backfilled potholes after delineation activities.		

ATTACHMENT 4: LABORATORY ANALYTICAL REPORTS



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-1818-1

Laboratory SDG: 31403236.020.0129 task 17.02

Client Project/Site: Poker Lake Unit 25 Brushy Draw  
Revision: 2

**For:**

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

Attn: Tacoma Morrissey

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

Authorized for release by:  
1/26/2022 12:30:25 PM

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

#### LINKS

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results through

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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: Poker Lake Unit 25 Brushy Draw

Laboratory Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
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.

## GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

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

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
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: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

**Job ID: 890-1818-1**

**Laboratory: Eurofins Carlsbad**

### Narrative

#### Job Narrative 890-1818-1

### REVISION

The report being provided is a revision of the original report sent on 1/17/2022. The report (revision 2) is being revised due to Per client email, requesting depths to be updated.

#### Report revision history

The report being provided is a revision of the original report sent on 1/17/2022. The report (revision 2) is being revised due to Per client email, requesting depths to be updated.

Revision 1 - 1/24/2022 - Reason - Per client email, requesting TPH re run on SS01, SS02, and SS03.

### Receipt

The samples were received on 1/11/2022 3:42 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

### GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-16734 and analytical batch 880-16738 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

### GC Semi VOA

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: SS01A (890-1818-2), SS02 (890-1818-3), SS02A (890-1818-4), SS03 (890-1818-5), SS03A (890-1818-6), (MB 880-16794/1-A), (890-1818-A-1-E MS) and (890-1818-A-1-F MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (880-10292-A-1-C), (880-10292-A-1-D MS) and (880-10292-A-1-E MSD). Evidence of matrix interferences is not obvious.

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: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS01

Lab Sample ID: 890-1818-1

Date Collected: 01/11/22 11:50

Matrix: Solid

Date Received: 01/11/22 15:42

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		01/13/22 10:00	01/14/22 09:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:00	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		01/13/22 10:00	01/14/22 09:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	01/13/22 10:00	01/14/22 09:00	1
1,4-Difluorobenzene (Surr)	103		70 - 130	01/13/22 10:00	01/14/22 09:00	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	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		01/19/22 08:54	01/21/22 08:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 08:54	01/21/22 08:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 08:54	01/21/22 08:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	01/19/22 08:54	01/21/22 08:47	1
o-Terphenyl	77		70 - 130	01/19/22 08:54	01/21/22 08:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.7		5.00	mg/Kg			01/16/22 22:19	1

Client Sample ID: SS01A

Lab Sample ID: 890-1818-2

Date Collected: 01/11/22 11:58

Matrix: Solid

Date Received: 01/11/22 15:42

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		01/13/22 10:00	01/14/22 09:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:21	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 09:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 09:21	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 09:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	01/13/22 10:00	01/14/22 09:21	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS01A

Lab Sample ID: 890-1818-2

Date Collected: 01/11/22 11:58

Matrix: Solid

Date Received: 01/11/22 15:42

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	01/13/22 10:00	01/14/22 09:21	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 14:51	01/15/22 14:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 14:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 14:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130			01/13/22 14:51	01/15/22 14:13	1
o-Terphenyl	70		70 - 130			01/13/22 14:51	01/15/22 14:13	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.75		4.95	mg/Kg			01/16/22 22:31	1

Client Sample ID: SS02

Lab Sample ID: 890-1818-3

Date Collected: 01/11/22 12:06

Matrix: Solid

Date Received: 01/11/22 15:42

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		01/13/22 10:00	01/14/22 09:41	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 09:41	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 09:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 09:41	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 09:41	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 09:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	01/13/22 10:00	01/14/22 09:41	1
1,4-Difluorobenzene (Surr)	100		70 - 130	01/13/22 10:00	01/14/22 09:41	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/17/22 14:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	85.6		49.9	mg/Kg			01/17/22 14:06	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## Client Sample ID: SS02

## Lab Sample ID: 890-1818-3

Date Collected: 01/11/22 12:06

Matrix: Solid

Date Received: 01/11/22 15:42

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/13/22 14:51	01/21/22 09:08	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>85.6</b>		49.9	mg/Kg		01/13/22 14:51	01/21/22 09:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 14:51	01/21/22 09:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130			01/13/22 14:51	01/21/22 09:08	1
o-Terphenyl	76		70 - 130			01/13/22 14:51	01/21/22 09:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.3		5.00	mg/Kg			01/16/22 22:43	1

## Client Sample ID: SS02A

## Lab Sample ID: 890-1818-4

Date Collected: 01/11/22 12:58

Matrix: Solid

Date Received: 01/11/22 15:42

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 10:01	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 10:01	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 10:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 10:01	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/13/22 10:00	01/14/22 10:01	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/13/22 10:00	01/14/22 10:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130			01/13/22 10:00	01/14/22 10:01	1
1,4-Difluorobenzene (Surr)	99		70 - 130			01/13/22 10:00	01/14/22 10:01	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 14:51	01/15/22 14:53	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/13/22 14:51	01/15/22 14:53	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/13/22 14:51	01/15/22 14:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130			01/13/22 14:51	01/15/22 14:53	1
o-Terphenyl	69	S1-	70 - 130			01/13/22 14:51	01/15/22 14:53	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## Client Sample ID: SS02A

Date Collected: 01/11/22 12:58

Date Received: 01/11/22 15:42

Sample Depth: 1

## Lab Sample ID: 890-1818-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.5		5.04	mg/Kg			01/16/22 22:55	1

## Client Sample ID: SS03

Date Collected: 01/11/22 13:00

Date Received: 01/11/22 15:42

Sample Depth: 0.5

## Lab Sample ID: 890-1818-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 10:22	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 10:22	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 10:22	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 10:22	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 10:22	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/13/22 10:00	01/14/22 10:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			01/13/22 10:00	01/14/22 10:22	1
1,4-Difluorobenzene (Surr)	95		70 - 130			01/13/22 10:00	01/14/22 10:22	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/17/22 14:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	102		50.0	mg/Kg			01/17/22 14:06	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		01/13/22 14:51	01/15/22 15:12	1
Diesel Range Organics (Over C10-C28)	102		50.0	mg/Kg		01/13/22 14:51	01/15/22 15:12	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 15:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	67	S1-	70 - 130			01/13/22 14:51	01/15/22 15:12	1
o-Terphenyl	71		70 - 130			01/13/22 14:51	01/15/22 15:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	51.7		5.00	mg/Kg			01/16/22 23:30	1

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## Client Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS03A

Lab Sample ID: 890-1818-6

Date Collected: 01/11/22 13:02

Matrix: Solid

Date Received: 01/11/22 15:42

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 11:25	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 11:25	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 11:25	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/13/22 10:00	01/14/22 11:25	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/13/22 10:00	01/14/22 11:25	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/13/22 10:00	01/14/22 11:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	01/13/22 10:00	01/14/22 11:25	1
1,4-Difluorobenzene (Surr)	92		70 - 130	01/13/22 10:00	01/14/22 11:25	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			01/17/22 14:41	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			01/17/22 14:06	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		01/13/22 14:51	01/15/22 15:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 15:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 15:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	01/13/22 14:51	01/15/22 15:32	1
o-Terphenyl	72		70 - 130	01/13/22 14:51	01/15/22 15:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.38		4.95	mg/Kg			01/16/22 23:42	1

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## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-1818-1	SS01	112	103
890-1818-2	SS01A	108	95
890-1818-3	SS02	110	100
890-1818-4	SS02A	131 S1+	99
890-1818-5	SS03	125	95
890-1818-6	SS03A	120	92
890-1823-A-1-A MS	Matrix Spike	691 S1+	94
890-1823-A-1-B MSD	Matrix Spike Duplicate	578 S1+	35 S1-
LCS 880-16734/1-A	Lab Control Sample	107	96
LCSD 880-16734/2-A	Lab Control Sample Dup	115	105
MB 880-16730/5-A	Method Blank	118	99
MB 880-16734/5-A	Method Blank	126	116
<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)
880-10292-A-1-D MS	Matrix Spike	64 S1-	56 S1-
880-10292-A-1-E MSD	Matrix Spike Duplicate	66 S1-	59 S1-
890-1818-1	SS01	74	77
890-1818-1 MS	SS01	68 S1-	68 S1-
890-1818-1 MSD	SS01	68 S1-	68 S1-
890-1818-2	SS01A	65 S1-	70
890-1818-3	SS02	74	76
890-1818-4	SS02A	67 S1-	69 S1-
890-1818-5	SS03	67 S1-	71
890-1818-6	SS03A	65 S1-	72
LCS 880-16794/2-A	Lab Control Sample	88	90
LCS 880-17217/2-A	Lab Control Sample	99	94
LCSD 880-16794/3-A	Lab Control Sample Dup	83	84
LCSD 880-17217/3-A	Lab Control Sample Dup	102	98
MB 880-16794/1-A	Method Blank	68 S1-	76
MB 880-17217/1-A	Method Blank	74	82
<b>Surrogate Legend</b>			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: MB 880-16730/5-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16730

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 11:00	01/13/22 15:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/13/22 11:00	01/13/22 15:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	01/13/22 11:00	01/13/22 15:48	1
1,4-Difluorobenzene (Surr)	99		70 - 130	01/13/22 11:00	01/13/22 15:48	1

Lab Sample ID: MB 880-16734/5-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16734

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/13/22 10:00	01/14/22 03:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		01/13/22 10:00	01/14/22 03:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	01/13/22 10:00	01/14/22 03:25	1
1,4-Difluorobenzene (Surr)	116		70 - 130	01/13/22 10:00	01/14/22 03:25	1

Lab Sample ID: LCS 880-16734/1-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.07868		mg/Kg		79	70 - 130
Toluene	0.100	0.08474		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.09796		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1848		mg/Kg		92	70 - 130
o-Xylene	0.100	0.08974		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-16734/2-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09943		mg/Kg		99	70 - 130	23	35

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: LCSD 880-16734/2-A

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1085		mg/Kg		109	70 - 130	25	35
Ethylbenzene	0.100	0.1145		mg/Kg		114	70 - 130	16	35
m-Xylene & p-Xylene	0.200	0.2223		mg/Kg		111	70 - 130	18	35
o-Xylene	0.100	0.1087		mg/Kg		109	70 - 130	19	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-1823-A-1-A MS

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F2 F1	0.0998	0.03705	F1	mg/Kg		37	70 - 130
Toluene	<0.00199	U F2 F1	0.0998	0.3163	F1	mg/Kg		317	70 - 130
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.1822	F1	mg/Kg		183	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.3598	F1	mg/Kg		180	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0998	0.1645	F1	mg/Kg		165	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	691	S1+	70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-1823-A-1-B MSD

Matrix: Solid

Analysis Batch: 16738

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 16734

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0996	0.07644	F2	mg/Kg		77	70 - 130	69	35
Toluene	<0.00199	U F2 F1	0.0996	0.05419	F1 F2	mg/Kg		54	70 - 130	141	35
Ethylbenzene	<0.00199	U F1 F2	0.0996	0.06866	F1 F2	mg/Kg		69	70 - 130	91	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.199	0.3008	F1	mg/Kg		151	70 - 130	18	35
o-Xylene	<0.00199	U F2 F1	0.0996	0.3488	F1 F2	mg/Kg		350	70 - 130	72	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	578	S1+	70 - 130
1,4-Difluorobenzene (Surr)	35	S1-	70 - 130

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

Lab Sample ID: MB 880-16794/1-A

Matrix: Solid

Analysis Batch: 16940

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16794

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		01/13/22 14:51	01/15/22 12:09	1

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: MB 880-16794/1-A

Matrix: Solid

Analysis Batch: 16940

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 16794

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 12:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/13/22 14:51	01/15/22 12:09	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	68	S1-	70 - 130			01/13/22 14:51	01/15/22 12:09	1
o-Terphenyl	76		70 - 130			01/13/22 14:51	01/15/22 12:09	1

Lab Sample ID: LCS 880-16794/2-A

Matrix: Solid

Analysis Batch: 16940

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 16794

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	810.8		mg/Kg		81	70 - 130
Diesel Range Organics (Over C10-C28)	1000	861.4		mg/Kg		86	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	88		70 - 130				
o-Terphenyl	90		70 - 130				

Lab Sample ID: LCSD 880-16794/3-A

Matrix: Solid

Analysis Batch: 16940

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 16794

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	780.7		mg/Kg		78	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	827.4		mg/Kg		83	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	83		70 - 130						
o-Terphenyl	84		70 - 130						

Lab Sample ID: 890-1818-1 MS

Matrix: Solid

Analysis Batch: 16940

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 16794

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	1171		mg/Kg		116	70 - 130
Diesel Range Organics (Over C10-C28)	62.5		996	1032		mg/Kg		97	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	68	S1-	70 - 130						
o-Terphenyl	68	S1-	70 - 130						

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: 890-1818-1 MSD

Matrix: Solid

Analysis Batch: 16940

Client Sample ID: SS01

Prep Type: Total/NA

Prep Batch: 16794

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1097		mg/Kg		108	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	62.5		999	1054		mg/Kg		99	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	68	S1-	70 - 130								
o-Terphenyl	68	S1-	70 - 130								

Lab Sample ID: MB 880-17217/1-A

Matrix: Solid

Analysis Batch: 17328

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 17217

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		01/19/22 08:54	01/21/22 01:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/19/22 08:54	01/21/22 01:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/19/22 08:54	01/21/22 01:07	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130			01/19/22 08:54	01/21/22 01:07	1
o-Terphenyl	82		70 - 130			01/19/22 08:54	01/21/22 01:07	1

Lab Sample ID: LCS 880-17217/2-A

Matrix: Solid

Analysis Batch: 17328

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 17217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1121		mg/Kg		112	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1011		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	99		70 - 130				
o-Terphenyl	94		70 - 130				

Lab Sample ID: LCSD 880-17217/3-A

Matrix: Solid

Analysis Batch: 17328

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 17217

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1082		mg/Kg		108	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	953.4		mg/Kg		95	70 - 130	6	20

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: LCSD 880-17217/3-A

Matrix: Solid

Analysis Batch: 17328

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 17217

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 880-10292-A-1-D MS

Matrix: Solid

Analysis Batch: 17328

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 17217

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	997	<49.9	U F1	mg/Kg		0	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	997	1008		mg/Kg		99	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	64	S1-	70 - 130						
o-Terphenyl	56	S1-	70 - 130						

Lab Sample ID: 880-10292-A-1-E MSD

Matrix: Solid

Analysis Batch: 17328

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 17217

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F1	996	<49.8	U F1	mg/Kg		0	70 - 130	NC	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	1072		mg/Kg		106	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	66	S1-	70 - 130								
o-Terphenyl	59	S1-	70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-16757/1-A

Matrix: Solid

Analysis Batch: 16930

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			01/16/22 19:33	1

Lab Sample ID: LCS 880-16757/2-A

Matrix: Solid

Analysis Batch: 16930

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	250.8		mg/Kg		100	90 - 110

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## QC Sample Results

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-16757/3-A

Matrix: Solid

Analysis Batch: 16930

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	255.7		mg/Kg		102	90 - 110	2	20

Lab Sample ID: 890-1818-4 MS

Matrix: Solid

Analysis Batch: 16930

Client Sample ID: SS02A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	17.5		252	272.6		mg/Kg		101	90 - 110		

Lab Sample ID: 890-1818-4 MSD

Matrix: Solid

Analysis Batch: 16930

Client Sample ID: SS02A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	17.5		252	254.9		mg/Kg		94	90 - 110	7	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## GC VOA

## Prep Batch: 16730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-16730/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 16734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Total/NA	Solid	5035	
890-1818-2	SS01A	Total/NA	Solid	5035	
890-1818-3	SS02	Total/NA	Solid	5035	
890-1818-4	SS02A	Total/NA	Solid	5035	
890-1818-5	SS03	Total/NA	Solid	5035	
890-1818-6	SS03A	Total/NA	Solid	5035	
MB 880-16734/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-16734/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-16734/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-1823-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-1823-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 16738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Total/NA	Solid	8021B	16734
890-1818-2	SS01A	Total/NA	Solid	8021B	16734
890-1818-3	SS02	Total/NA	Solid	8021B	16734
890-1818-4	SS02A	Total/NA	Solid	8021B	16734
890-1818-5	SS03	Total/NA	Solid	8021B	16734
890-1818-6	SS03A	Total/NA	Solid	8021B	16734
MB 880-16730/5-A	Method Blank	Total/NA	Solid	8021B	16730
MB 880-16734/5-A	Method Blank	Total/NA	Solid	8021B	16734
LCS 880-16734/1-A	Lab Control Sample	Total/NA	Solid	8021B	16734
LCSD 880-16734/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	16734
890-1823-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	16734
890-1823-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	16734

## Analysis Batch: 17056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Total/NA	Solid	Total BTEX	
890-1818-2	SS01A	Total/NA	Solid	Total BTEX	
890-1818-3	SS02	Total/NA	Solid	Total BTEX	
890-1818-4	SS02A	Total/NA	Solid	Total BTEX	
890-1818-5	SS03	Total/NA	Solid	Total BTEX	
890-1818-6	SS03A	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 16794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-2	SS01A	Total/NA	Solid	8015NM Prep	
890-1818-3	SS02	Total/NA	Solid	8015NM Prep	
890-1818-4	SS02A	Total/NA	Solid	8015NM Prep	
890-1818-5	SS03	Total/NA	Solid	8015NM Prep	
890-1818-6	SS03A	Total/NA	Solid	8015NM Prep	
MB 880-16794/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-16794/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## GC Semi VOA (Continued)

## Prep Batch: 16794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-16794/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1818-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-1818-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 16940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-2	SS01A	Total/NA	Solid	8015B NM	16794
890-1818-4	SS02A	Total/NA	Solid	8015B NM	16794
890-1818-5	SS03	Total/NA	Solid	8015B NM	16794
890-1818-6	SS03A	Total/NA	Solid	8015B NM	16794
MB 880-16794/1-A	Method Blank	Total/NA	Solid	8015B NM	16794
LCS 880-16794/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	16794
LCSD 880-16794/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	16794
890-1818-1 MS	SS01	Total/NA	Solid	8015B NM	16794
890-1818-1 MSD	SS01	Total/NA	Solid	8015B NM	16794

## Analysis Batch: 17055

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Total/NA	Solid	8015 NM	
890-1818-2	SS01A	Total/NA	Solid	8015 NM	
890-1818-3	SS02	Total/NA	Solid	8015 NM	
890-1818-4	SS02A	Total/NA	Solid	8015 NM	
890-1818-5	SS03	Total/NA	Solid	8015 NM	
890-1818-6	SS03A	Total/NA	Solid	8015 NM	

## Prep Batch: 17217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-17217/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-17217/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-17217/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-10292-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-10292-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 17328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Total/NA	Solid	8015B NM	17217
890-1818-3	SS02	Total/NA	Solid	8015B NM	16794
MB 880-17217/1-A	Method Blank	Total/NA	Solid	8015B NM	17217
LCS 880-17217/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	17217
LCSD 880-17217/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	17217
880-10292-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	17217
880-10292-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	17217

## HPLC/IC

## Leach Batch: 16757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Soluble	Solid	DI Leach	
890-1818-2	SS01A	Soluble	Solid	DI Leach	
890-1818-3	SS02	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

## HPLC/IC (Continued)

## Leach Batch: 16757 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-4	SS02A	Soluble	Solid	DI Leach	
890-1818-5	SS03	Soluble	Solid	DI Leach	
890-1818-6	SS03A	Soluble	Solid	DI Leach	
MB 880-16757/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-16757/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-16757/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1818-4 MS	SS02A	Soluble	Solid	DI Leach	
890-1818-4 MSD	SS02A	Soluble	Solid	DI Leach	

## Analysis Batch: 16930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1818-1	SS01	Soluble	Solid	300.0	16757
890-1818-2	SS01A	Soluble	Solid	300.0	16757
890-1818-3	SS02	Soluble	Solid	300.0	16757
890-1818-4	SS02A	Soluble	Solid	300.0	16757
890-1818-5	SS03	Soluble	Solid	300.0	16757
890-1818-6	SS03A	Soluble	Solid	300.0	16757
MB 880-16757/1-A	Method Blank	Soluble	Solid	300.0	16757
LCS 880-16757/2-A	Lab Control Sample	Soluble	Solid	300.0	16757
LCSD 880-16757/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	16757
890-1818-4 MS	SS02A	Soluble	Solid	300.0	16757
890-1818-4 MSD	SS02A	Soluble	Solid	300.0	16757

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS01

Lab Sample ID: 890-1818-1

Date Collected: 01/11/22 11:50

Matrix: Solid

Date Received: 01/11/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 09:00	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			17217	01/19/22 08:54	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17328	01/21/22 08:47	AJ	XEN MID
Soluble	Leach	DI Leach			16757	01/13/22 11:52	SC	XEN MID
Soluble	Analysis	300.0		1	16930	01/16/22 22:19	CH	XEN MID

Client Sample ID: SS01A

Lab Sample ID: 890-1818-2

Date Collected: 01/11/22 11:58

Matrix: Solid

Date Received: 01/11/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 09:21	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16794	01/13/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16940	01/15/22 14:13	AJ	XEN MID
Soluble	Leach	DI Leach			16757	01/13/22 11:52	SC	XEN MID
Soluble	Analysis	300.0		1	16930	01/16/22 22:31	CH	XEN MID

Client Sample ID: SS02

Lab Sample ID: 890-1818-3

Date Collected: 01/11/22 12:06

Matrix: Solid

Date Received: 01/11/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 09:41	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16794	01/13/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1	17328	01/21/22 09:08	AJ	XEN MID
Soluble	Leach	DI Leach			16757	01/13/22 11:52	SC	XEN MID
Soluble	Analysis	300.0		1	16930	01/16/22 22:43	CH	XEN MID

Client Sample ID: SS02A

Lab Sample ID: 890-1818-4

Date Collected: 01/11/22 12:58

Matrix: Solid

Date Received: 01/11/22 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 10:01	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID

Eurofins Carlsbad

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS02A

Date Collected: 01/11/22 12:58

Date Received: 01/11/22 15:42

Lab Sample ID: 890-1818-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16794	01/13/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16940	01/15/22 14:53	AJ	XEN MID
Soluble	Leach	DI Leach			16757	01/13/22 11:52	SC	XEN MID
Soluble	Analysis	300.0		1	16930	01/16/22 22:55	CH	XEN MID

Client Sample ID: SS03

Date Collected: 01/11/22 13:00

Date Received: 01/11/22 15:42

Lab Sample ID: 890-1818-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 10:22	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16794	01/13/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16940	01/15/22 15:12	AJ	XEN MID
Soluble	Leach	DI Leach			16757	01/13/22 11:52	SC	XEN MID
Soluble	Analysis	300.0		1	16930	01/16/22 23:30	CH	XEN MID

Client Sample ID: SS03A

Date Collected: 01/11/22 13:02

Date Received: 01/11/22 15:42

Lab Sample ID: 890-1818-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			16734	01/13/22 10:00	MR	XEN MID
Total/NA	Analysis	8021B		1	16738	01/14/22 11:25	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	17056	01/17/22 14:41	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	17055	01/17/22 14:06	AJ	XEN MID
Total/NA	Prep	8015NM Prep			16794	01/13/22 14:51	DM	XEN MID
Total/NA	Analysis	8015B NM		1	16940	01/15/22 15:32	AJ	XEN MID
Soluble	Leach	DI Leach			16757	01/13/22 11:52	SC	XEN MID
Soluble	Analysis	300.0		1	16930	01/16/22 23:42	CH	XEN MID

## Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-21-22	06-30-22
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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



## Method Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1818-1  
SDG: 31403236.020.0129 task 17.02

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

### Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

### Laboratory References:

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

## Sample Summary

Client: WSP USA Inc.

Job ID: 890-1818-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1818-1	SS01	Solid	01/11/22 11:50	01/11/22 15:42	0.5
890-1818-2	SS01A	Solid	01/11/22 11:58	01/11/22 15:42	1
890-1818-3	SS02	Solid	01/11/22 12:06	01/11/22 15:42	0.5
890-1818-4	SS02A	Solid	01/11/22 12:58	01/11/22 15:42	1
890-1818-5	SS03	Solid	01/11/22 13:00	01/11/22 15:42	0.5
890-1818-6	SS03A	Solid	01/11/22 13:02	01/11/22 15:42	1



## 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) 794-1296  
 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:	Tacoma Morrissey	Bill to: (if different)	Adrian Baker
Company Name:	WSP USA	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	1 337-257-8307	Email:	Adrian.Baker@exxomobill.com, Ben.Hellill@wsp.com

<b>Work Order Comments</b> Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRR <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> State of Project: _____ Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> ST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/> Deliverables: EDD <input type="checkbox"/> AdAPT <input type="checkbox"/> Other: _____	
--	--

Project Name:	Poker Lake Unit 25 Brushy Draw	Turn Around	
Project Number:	31403236.020.0129 Task 17.02	Routine	<input checked="" type="checkbox"/>
P.O. Number:	NAPP2134345504	Rush:	
Sampler's Name:	Mercy Roitch.	Due Date:	

<b>SAMPLE RECEIPT</b>	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Well Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	14/1-2	Thermometer ID		
Received In tact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:		
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Total Containers:		
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	ANALYSIS REQUEST																Work Order Notes	
SS01	S	01/11/22	11:50	0.6'	1	X	X	X	X												CC:2191851001	
SS01A	S	01/11/22	11:58	1'	1	X	X	X	X												API:30-15-46232	
SS02	S	01/11/22	12:06	0.6'	1	X	X	X	X													
SS02A	S	01/11/22	12:58	1'	1	X	X	X	X													
SS03	S	01/11/22	13:00	0.6'	1	X	X	X	X													
SS03A	S	01/11/22	13:02	1'	1	X	X	X	X													

<b>Total 200.7 / 6010</b>	<b>200.8 / 6020:</b>	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 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
<i>[Signature]</i>	<i>[Signature]</i>	11/11/22 2:42			

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1818-1

SDG Number: 31403236.020.0129 task 17.02

**Login Number: 1818****List Number: 1****Creator: Clifton, Cloe****List Source: Eurofins Carlsbad**

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

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1818-1

SDG Number: 31403236.020.0129 task 17.02

**Login Number: 1818****List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 01/13/22 11:26 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	



## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-1915-1

Laboratory SDG: 31403236.020.0129 task 17.02

Client Project/Site: Poker Lake Unit 25 Brushy Draw

**For:**

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

Attn: Tacoma Morrissey

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

Authorized for release by:  
2/16/2022 3:47:09 PM

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

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

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

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Laboratory Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

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## Definitions/Glossary

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low 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.
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: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

---

**Job ID: 890-1915-1**

---

**Laboratory: Eurofins Carlsbad**

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**Narrative**

---

**Job Narrative  
890-1915-1****Receipt**

The sample was received on 2/7/2022 3:51 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 21.6°C

**GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-18887 and analytical batch 880-18897 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

**GC Semi VOA**

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (890-1915-A-1-D MSD). Evidence of matrix interferences is not obvious.

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: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS04

Lab Sample ID: 890-1915-1

Date Collected: 02/07/22 09:00

Matrix: Solid

Date Received: 02/07/22 15:51

Sample Depth: 0.25

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/09/22 08:46	02/10/22 06:16	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/09/22 08:46	02/10/22 06:16	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/09/22 08:46	02/10/22 06:16	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/09/22 08:46	02/10/22 06:16	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/09/22 08:46	02/10/22 06:16	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/09/22 08:46	02/10/22 06:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130	02/09/22 08:46	02/10/22 06:16	1
1,4-Difluorobenzene (Surr)	100		70 - 130	02/09/22 08:46	02/10/22 06:16	1

## Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			02/11/22 13:37	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	93.3		50.0	mg/Kg			02/10/22 09:32	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		02/09/22 14:52	02/09/22 21:42	1
Diesel Range Organics (Over C10-C28)	93.3		50.0	mg/Kg		02/09/22 14:52	02/09/22 21:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/09/22 14:52	02/09/22 21:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	02/09/22 14:52	02/09/22 21:42	1
o-Terphenyl	81		70 - 130	02/09/22 14:52	02/09/22 21:42	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.6		4.96	mg/Kg			02/16/22 04:35	1

Eurofins Carlsbad

## Surrogate Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-11024-A-1-I MS	Matrix Spike	50 S1-	41 S1-
880-11024-A-1-J MSD	Matrix Spike Duplicate	110	85
890-1915-1	SS04	125	100
LCS 880-18887/1-A	Lab Control Sample	126	94
LCSD 880-18887/2-A	Lab Control Sample Dup	124	94
MB 880-18884/5-A	Method Blank	120	105
MB 880-18887/5-A	Method Blank	120	96

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-1915-1	SS04	83	81
890-1915-1 MS	SS04	74	71
890-1915-1 MSD	SS04	73	68 S1-

## 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 (70-130)	OTPH2 (70-130)
LCS 880-18934/2-A	Lab Control Sample	99	95
LCSD 880-18934/3-A	Lab Control Sample Dup	100	106
MB 880-18934/1-A	Method Blank	86	87

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: MB 880-18884/5-A

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18884

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:40	02/09/22 13:18	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:40	02/09/22 13:18	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:40	02/09/22 13:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/09/22 08:40	02/09/22 13:18	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:40	02/09/22 13:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/09/22 08:40	02/09/22 13:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	02/09/22 08:40	02/09/22 13:18	1
1,4-Difluorobenzene (Surr)	105		70 - 130	02/09/22 08:40	02/09/22 13:18	1

Lab Sample ID: MB 880-18887/5-A

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18887

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:46	02/10/22 00:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:46	02/10/22 00:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:46	02/10/22 00:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		02/09/22 08:46	02/10/22 00:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/09/22 08:46	02/10/22 00:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/09/22 08:46	02/10/22 00:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	02/09/22 08:46	02/10/22 00:53	1
1,4-Difluorobenzene (Surr)	96		70 - 130	02/09/22 08:46	02/10/22 00:53	1

Lab Sample ID: LCS 880-18887/1-A

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18887

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09015		mg/Kg		90	70 - 130
Toluene	0.100	0.09559		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09884		mg/Kg		99	70 - 130
m-Xylene & p-Xylene	0.200	0.1881		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09545		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	126		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-18887/2-A

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18887

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09027		mg/Kg		90	70 - 130	0	35

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## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: LCSD 880-18887/2-A

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18887

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	0.100	0.1005		mg/Kg		101	70 - 130	5	35
Ethylbenzene	0.100	0.09927		mg/Kg		99	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1905		mg/Kg		95	70 - 130	1	35
o-Xylene	0.100	0.09450		mg/Kg		95	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	124		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-11024-A-1-I MS

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 18887

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U F2 F1	0.0990	0.03933	F1	mg/Kg		40	70 - 130
Toluene	<0.00199	U F2 F1	0.0990	0.009521	F1	mg/Kg		10	70 - 130
Ethylbenzene	<0.00199	U F2 F1	0.0990	0.04334	F1	mg/Kg		44	70 - 130
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.198	0.09630	F1	mg/Kg		49	70 - 130
o-Xylene	<0.00199	U F2 F1	0.0990	0.02899	F1	mg/Kg		29	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	50	S1-	70 - 130
1,4-Difluorobenzene (Surr)	41	S1-	70 - 130

Lab Sample ID: 880-11024-A-1-J MSD

Matrix: Solid

Analysis Batch: 18897

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 18887

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U F2 F1	0.0998	0.06677	F2 F1	mg/Kg		67	70 - 130	52	35
Toluene	<0.00199	U F2 F1	0.0998	0.07602	F2	mg/Kg		76	70 - 130	155	35
Ethylbenzene	<0.00199	U F2 F1	0.0998	0.07943	F2	mg/Kg		80	70 - 130	59	35
m-Xylene & p-Xylene	<0.00398	U F2 F1	0.200	0.1488	F2	mg/Kg		75	70 - 130	43	35
o-Xylene	<0.00199	U F2 F1	0.0998	0.08039	F2	mg/Kg		81	70 - 130	94	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

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

Lab Sample ID: MB 880-18934/1-A

Matrix: Solid

Analysis Batch: 18891

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18934

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		02/09/22 14:52	02/09/22 20:38	1

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## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: MB 880-18934/1-A

Matrix: Solid

Analysis Batch: 18891

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 18934

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/09/22 14:52	02/09/22 20:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/09/22 14:52	02/09/22 20:38	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			02/09/22 14:52	02/09/22 20:38	1
o-Terphenyl	87		70 - 130			02/09/22 14:52	02/09/22 20:38	1

Lab Sample ID: LCS 880-18934/2-A

Matrix: Solid

Analysis Batch: 18891

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 18934

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1072		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1015		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	99		70 - 130				
o-Terphenyl	95		70 - 130				

Lab Sample ID: LCSD 880-18934/3-A

Matrix: Solid

Analysis Batch: 18891

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 18934

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1054		mg/Kg		105	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1020		mg/Kg		102	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	100		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: 890-1915-1 MS

Matrix: Solid

Analysis Batch: 18891

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 18934

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	852.3		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	93.3		1000	950.0		mg/Kg		86	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	74		70 - 130						
o-Terphenyl	71		70 - 130						

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## QC Sample Results

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

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

Lab Sample ID: 890-1915-1 MSD

Matrix: Solid

Analysis Batch: 18891

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 18934

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	843.4		mg/Kg		81	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	93.3		998	933.9		mg/Kg		84	70 - 130	2	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	73		70 - 130								
o-Terphenyl	68	S1-	70 - 130								

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-19069/1-A

Matrix: Solid

Analysis Batch: 19488

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			02/16/22 02:07	1

Lab Sample ID: LCS 880-19069/2-A

Matrix: Solid

Analysis Batch: 19488

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	260.0		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-19069/3-A

Matrix: Solid

Analysis Batch: 19488

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	240.1		mg/Kg		96	90 - 110	8	20

Lab Sample ID: 890-1914-A-5-D MS

Matrix: Solid

Analysis Batch: 19488

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	90.2		250	341.3		mg/Kg		101	90 - 110

Lab Sample ID: 890-1914-A-5-E MSD

Matrix: Solid

Analysis Batch: 19488

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	90.2		250	348.6		mg/Kg		104	90 - 110	2	20

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## QC Association Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

## GC VOA

## Prep Batch: 18884

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-18884/5-A	Method Blank	Total/NA	Solid	5035	

## Prep Batch: 18887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Total/NA	Solid	5035	
MB 880-18887/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-18887/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-18887/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-11024-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-11024-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 18897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Total/NA	Solid	8021B	18887
MB 880-18884/5-A	Method Blank	Total/NA	Solid	8021B	18884
MB 880-18887/5-A	Method Blank	Total/NA	Solid	8021B	18887
LCS 880-18887/1-A	Lab Control Sample	Total/NA	Solid	8021B	18887
LCSD 880-18887/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	18887
880-11024-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	18887
880-11024-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	18887

## Analysis Batch: 19173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 18891

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Total/NA	Solid	8015B NM	18934
MB 880-18934/1-A	Method Blank	Total/NA	Solid	8015B NM	18934
LCS 880-18934/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	18934
LCSD 880-18934/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	18934
890-1915-1 MS	SS04	Total/NA	Solid	8015B NM	18934
890-1915-1 MSD	SS04	Total/NA	Solid	8015B NM	18934

## Prep Batch: 18934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-18934/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-18934/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-18934/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-1915-1 MS	SS04	Total/NA	Solid	8015NM Prep	
890-1915-1 MSD	SS04	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 19008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Total/NA	Solid	8015 NM	

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## QC Association Summary

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

## HPLC/IC

## Leach Batch: 19069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Soluble	Solid	DI Leach	
MB 880-19069/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 19488

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-1915-1	SS04	Soluble	Solid	300.0	19069
MB 880-19069/1-A	Method Blank	Soluble	Solid	300.0	19069
LCS 880-19069/2-A	Lab Control Sample	Soluble	Solid	300.0	19069
LCSD 880-19069/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	19069
890-1914-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	19069
890-1914-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	19069

Lab Chronicle

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

Client Sample ID: SS04      Lab Sample ID: 890-1915-1  
Date Collected: 02/07/22 09:00      Matrix: Solid  
Date Received: 02/07/22 15:51

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			18887	02/09/22 08:46	KL	XEN MID
Total/NA	Analysis	8021B		1	18897	02/10/22 06:16	KL	XEN MID
Total/NA	Analysis	Total BTEX		1	19173	02/11/22 13:37	AJ	XEN MID
Total/NA	Analysis	8015 NM		1	19008	02/10/22 09:32	AJ	XEN MID
Total/NA	Prep	8015NM Prep			18934	02/09/22 14:52	DM	XEN MID
Total/NA	Analysis	8015B NM		1	18891	02/09/22 21:42	AJ	XEN MID
Soluble	Leach	DI Leach			19069	02/10/22 15:46	CH	XEN MID
Soluble	Analysis	300.0		1	19488	02/16/22 04:35	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

Laboratory: Eurofins Midland

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

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

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

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

## Method Summary

Client: WSP USA Inc.

Job ID: 890-1915-1

Project/Site: Poker Lake Unit 25 Brushy Draw

SDG: 31403236.020.0129 task 17.02

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

## Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

## Laboratory References:

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

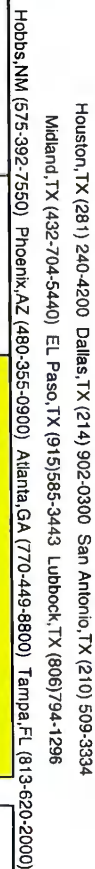
Sample Summary

Client: WSP USA Inc.  
Project/Site: Poker Lake Unit 25 Brushy Draw

Job ID: 890-1915-1  
SDG: 31403236.020.0129 task 17.02

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-1915-1	SS04	Solid	02/07/22 09:00	02/07/22 15:51	0.25

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



## Chain of Custody

**Work Order No:**

Project Manager:		Tacoma Morrissey		Bill to: (if different)		Adrian Baker	
Company Name:		WSP USA		Company Name:		XTO Energy, INC.	
Address:		3300 North A Street Building 1, unit 222		Address:		3401 E Green St	
City, State ZIP:		Midland, Texas 79705		City, State ZIP:		Carlsbad, NM 88220	
Phone:		337-257-8307		Email:		tacoma.morrissey@wsp.com	

<div> <div>Work Order Comments</div> <div> <div> <div>Program: UST/PST</div> <div> <input type="checkbox"/> RP           <input type="checkbox"/> Growfields           <input type="checkbox"/> RC           <input type="checkbox"/> Superfund         </div> </div> <div> <div>State of Project:</div> <div> <div>Reporting Level II</div> <div> <input type="checkbox"/> Level III           <input type="checkbox"/> T/U/UST           <input type="checkbox"/> RP           <input type="checkbox"/> Level IV         </div> </div> <div> <div>Deliverables: EDD</div> <div> <input type="checkbox"/> ADaPT           <input type="checkbox"/> Other:         </div> </div> </div> </div> </div>							
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[illegible][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 Tl Sn U V Zn
TCLP / SPLP 6010: 8RCRA			Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U
			1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to XenoCo, its affiliates and subcontractors. It assigns standard terms and conditions of service. XenoCo 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 XenoCo. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to XenoCo, but not analyzed. These terms will be enforced unless previously negotiated.

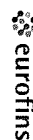
Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	07.22.14 61			

Revised Date 05/14/18 Row 2018

Rank	Team	Points
1	Eintracht Frankfurt	57
2	Bayern München	55
3	Borussia Dortmund	49
4	FC Bayern München	46
5	FC Bayern München	45
6	FC Bayern München	44
7	FC Bayern München	43
8	FC Bayern München	42
9	FC Bayern München	41
10	FC Bayern München	40
11	FC Bayern München	39
12	FC Bayern München	38
13	FC Bayern München	37
14	FC Bayern München	36

1089 N Canal St.  
Carlsbad NM 88220  
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: 890-1915-1

SDG Number: 31403236.020.0129 task 17.02

Login Number: 1915

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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



## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-1915-1

SDG Number: 31403236.020.0129 task 17.02

Login Number: 1915

List Source: Eurofins Midland

List Number: 2

List Creation: 02/09/22 11:55 AM

Creator: Kramer, Jessica

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").	N/A	

**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 87182

**CONDITIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 87182
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Please apply 19.15.29.13 NMAC when P&A.	3/10/2022