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	NAPP2111853419
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.01937 Longitude -103.94214
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Ross Draw 25	Site Type Battery
Date Release Discovered 4-17-2021	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
D	25	26S	29E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 8.48	Volume Recovered (bbls) 6.00
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release LO discovered a pump seal failure which caused fluid to be released into containment and onto soil. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2111853419
District RP	
Facility ID	
Application ID	

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

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
N/A

Initial Response

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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:
NA

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Adrian Baker
Title: SSHE Coordinator
Signature: Adrian Baker
Date: 4/28/21
email: adrian.baker@exxonmobil.com
Telephone: 432-221-7331

OCD Only

Received by:
Date:

Location:	Ross Draw 25 Battery	
Spill Date:	4/17/2021	

Area 1		
Approximate Area =	5.61	cu.ft.
VOLUME OF LEAK		
Total Produced Water =	1.00	bbls

Area 2		
Approximate Area =	1393.90	sq. ft.
Average Saturation (or depth) of spill =	4.00	inches

Average Porosity Factor =	0.03	

VOLUME OF LEAK		
Total Produced Water =	7.48	bbls

TOTAL VOLUME OF LEAK		
Total Produced Water =	**8.48**	**bbls**
TOTAL VOLUME RECOVERED		
Total Produced Water =	**6.00**	**bbls**

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2111853419
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2111853419
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: _____Adrian Baker_____ Title: __Environmental Coordinator_____

Signature:____Adrian Baker_____ Date: __10/14/2021_____

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

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2111853419
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Adrian Baker Title: Environmental Coordinator

Signature: Adrian Baker Date: 10/14/2021

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

OCD Only

Received by: Chad Hensley Date: 11/17/2021

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

Closure Approved by: Chad Hensley Date: 11/17/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

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

October 14, 2021

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

RE: Closure Request
Ross Draw 25
Incident Number NAPP2111853419
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, soil sampling, and excavation activities at the Ross Draw 25 Battery (Site) in Unit D, Section 25, Township 26 South, Range 29 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment, soil sampling, and excavation activities was to address impacts to soil following a release of produced water at the Site. Based on the excavation activities and soil sample laboratory analytical results, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NAPP2111853419.

RELEASE BACKGROUND

On April 17, 2021, a pump seal on a saltwater pump failed, resulting in the release of 8.48 barrels (bbls) of produced water onto the surface of the pad, south of the saltwater pumps. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 6 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 on April 28, 2021. The release was assigned Incident Number NAPP2111853419.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During July 2021, a borehole (BH01) was advanced to a depth of 105 feet bgs via a hollow stem auger drill rig. The borehole was located approximately 471 feet north of the Site. The location of borehole BH01 is provided on Figure 1. A WSP geologist logged and described soils continuously. The borehole lithologic/soil sampling log is included in Attachment 1. The borehole was left open

for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned using hydrated bentonite chips.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine, located approximately 1,092 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On May 15, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected three preliminary assessment soil samples (SS01 through SS03) within the release extent from a depth of approximately 0.5 feet bgs to assess the lateral extent of the impacted soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary 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 2.

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

DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 and SS02 indicated that chloride concentrations exceeded the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for the preliminary soil samples, delineation and excavation activities were warranted.

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

On June 3, 2021 and June 4, 2021, WSP personnel returned to the Site to oversee delineation and excavation activities. Potholes were advanced via backhoe at two locations within the release extent to assess the vertical extent of impacted soil. Potholes PH01 and PH02 were advanced to a depth of 4 feet bgs at the SS01 and SS02 preliminary soil sample locations. Delineation soil samples were collected from each pothole from depths ranging from 1 foot to 4 feet bgs. Soil from the potholes was field screened for volatile aromatic hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 3. The delineation samples were collected, handled, and analyzed following the same procedures as described above at Eurofins in Carlsbad, New Mexico. The delineation soil sample locations are depicted on Figure 2.

Impacted soil was excavated from the release area as indicated by visible staining, laboratory analytical results for the preliminary soil samples, and field screening results for the delineation soil samples. Excavation activities were performed using a backhoe and transport vehicle. The excavation occurred on pad near the production equipment and salt-water pumps. To direct excavation activities, WSP personnel screened soil for volatile aromatic hydrocarbons and chloride utilizing a PID and Hach® chloride QuanTab® test strips, respectively. The excavation was completed to depths ranging from 1 foot to 2 feet bgs.

Following removal of impacted soil, WSP collected 5-point composite soil samples at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples SW01 and SW02 were collected from the sidewalls of the deeper eastern portion of the excavation from depths ranging from the ground surface to 2 feet bgs. Composite soil samples FS01 through FS09 were collected from the floor of the excavation at depths ranging from 1 foot to 2 feet bgs. In areas where the depth of the excavation did not exceed 1-foot bgs, aliquots from the sidewalls were included in the nearest floor sample. The excavation soil samples were collected and handled following the same procedures as described above and analyzed at Eurofins in Carlsbad, New Mexico. The excavation extent and excavation soil sample locations are presented on Figure 3.

The excavation area measured approximately 1,972 square feet. A total of approximately 110 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples collected from potholes PH01 and PH02 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria.

Laboratory analytical results for excavation sidewall samples SW01 and SW02 and excavation floor samples FS01 through FS09, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical reports are included in Attachment 4 and summarized in Table 1.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the April 17, 2021 release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation 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 further remediation was required. The excavation was backfilled with locally procured backfill material and contoured to match pre-existing Site conditions.

Initial response efforts which included removal of freestanding fluids via hydrovac and excavation of impacted soil have mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. WSP and XTO believe these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests no further action for Incident Number NAPP2111853419.

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

Sincerely,

WSP USA Inc.

Elliot Lee
Assoc. Consultant, Environmental Scientist

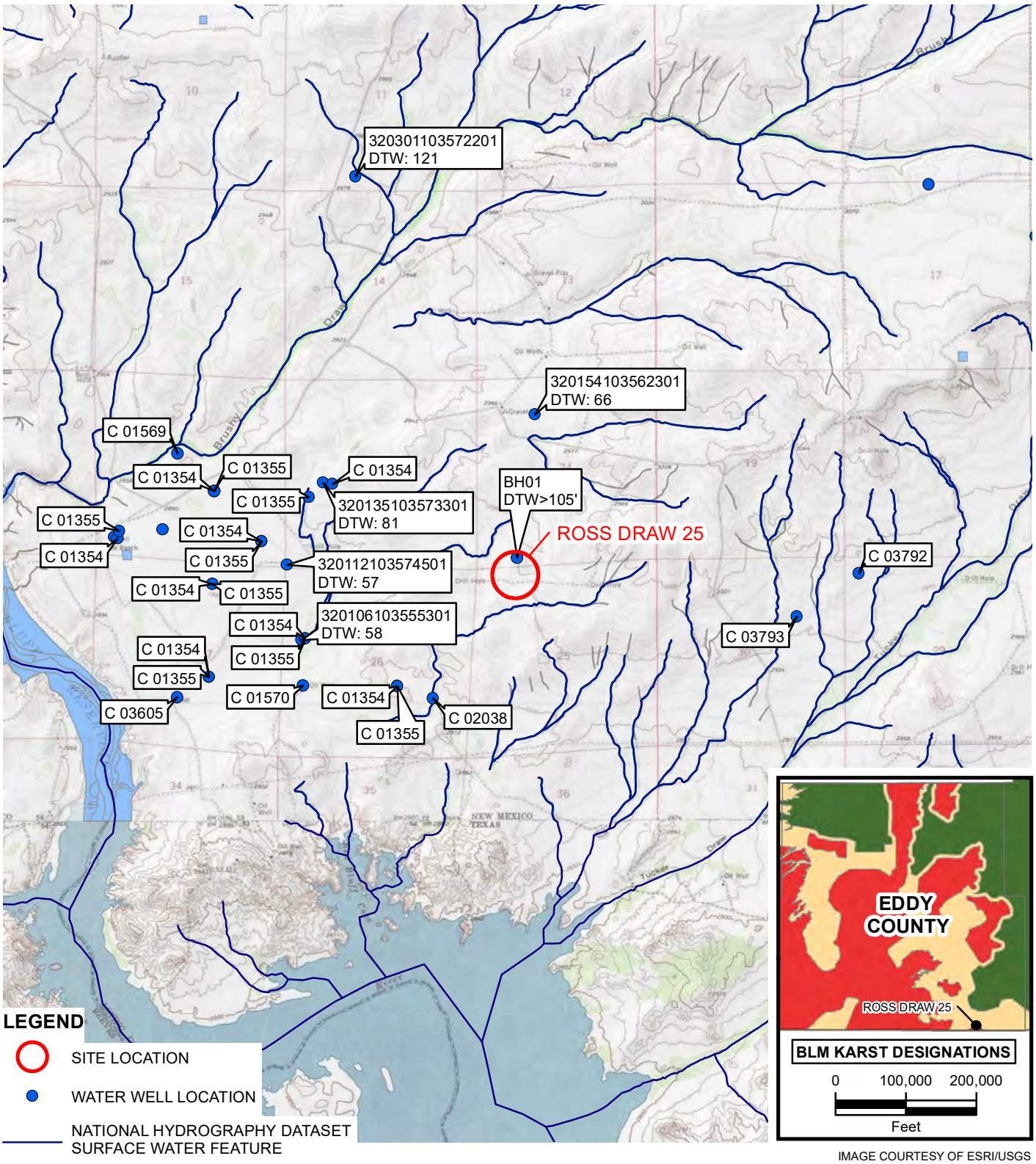
Ashley L. Ager, P.G.
Managing Director, Geologist

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

Attachments:

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

FIGURES



DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NAPP2111853419

FIGURE 1
SITE LOCATION MAP
ROSS DRAW 25
UNIT D SEC 25 T26S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\314032236.003.0129_ROSS DRAW 25\31403236.003_FIG01_SL_RECEPTOR_2021.mxd

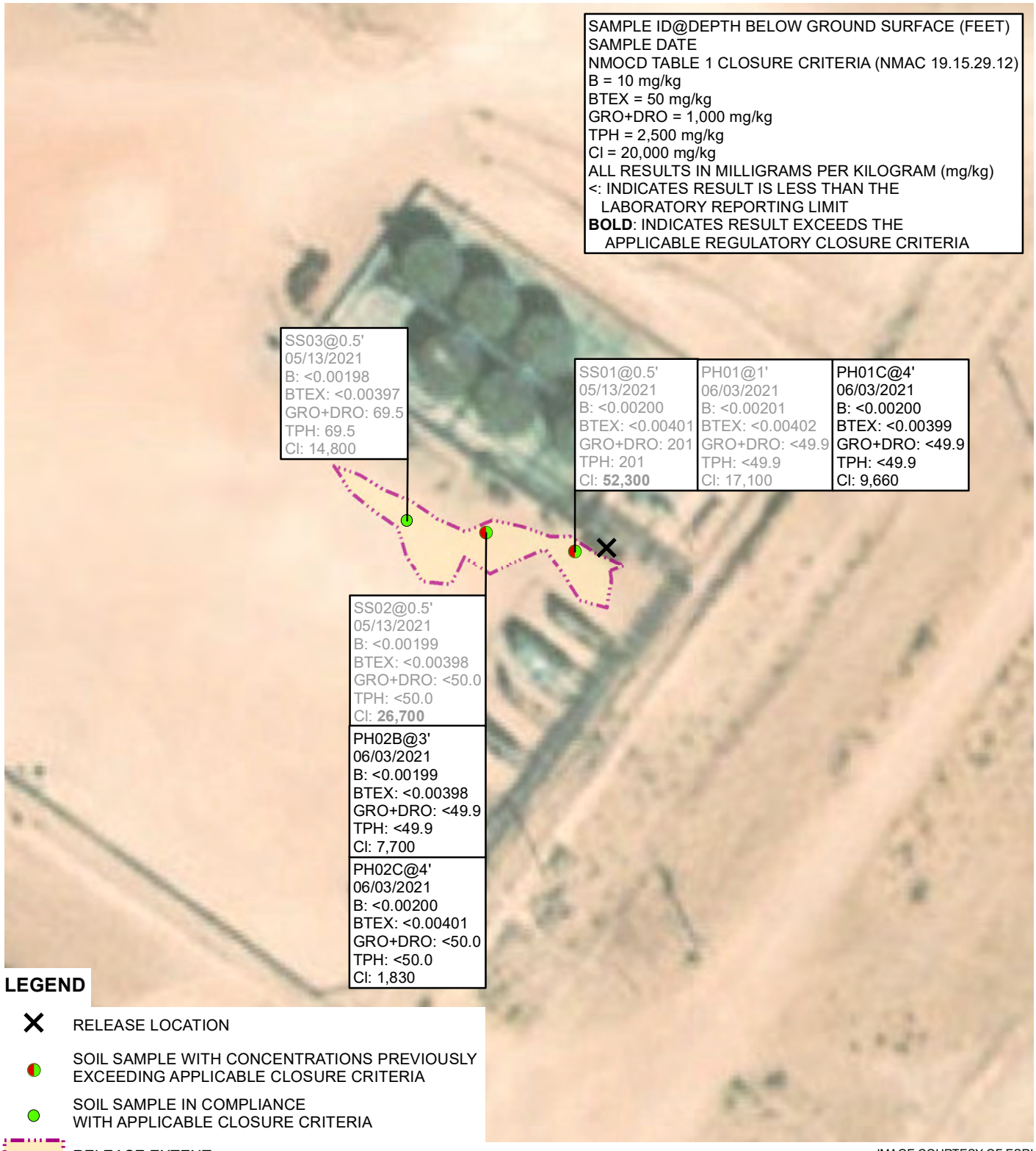
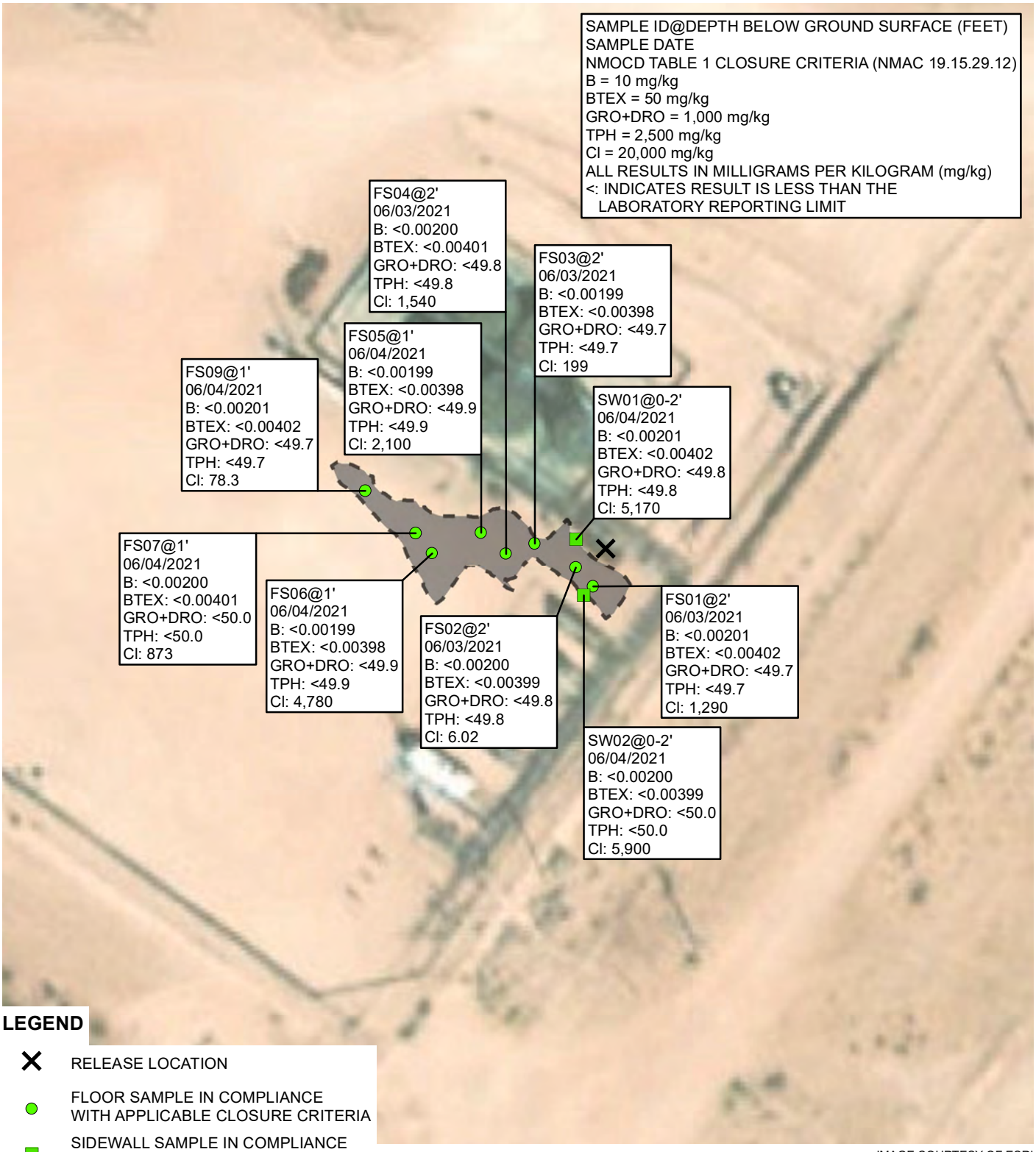


FIGURE 2
DELINEATION SOIL SAMPLE LOCATIONS
ROSS DRAW 25
UNIT D SEC 25 T26S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\31403236.020.0129.01_ROSS DRAW 25 BATTERY\MXD\31403236.020.0129.01_FIG02_DELINEATION_2021.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NAPP2111853419

FIGURE 3
EXCAVATION SOIL SAMPLE LOCATIONS
ROSS DRAW 25
UNIT D SEC 25 T26S R29E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\314032236.003.0129_ROSS DRAW 25\31403236.003_FIG03_EXCAVATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
Ross Draw 25
Incident Number : NAPP2111853419
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Surface Samples										
SS01	05/15/2021	0.5	<0.00200	<0.00401	201	<50.0	<50.0	201	201	**52,300**
SS02	05/15/2021	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**26,700**
SS03	05/15/2021	0.5	<0.00198	<0.00397	69.5	<49.9	<49.9	69.5	69.5	14,800
Delineation Samples										
PH01	06/03/2021	1	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	17,100
PH01C	06/03/2021	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	9,660
PH02B	06/03/2021	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	7,700
PH02C	06/03/2021	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	1,830
Excavation Floor Samples										
FS01	06/03/2021	2	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	1,290
FS02	06/03/2021	2	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	6.02
FS03	06/03/2021	2	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	199
FS04	06/03/2021	2	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	1,540
FS05	06/04/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,100
FS06	06/04/2021	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,780
FS07	06/04/2021	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	873
FS08	06/04/2021	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	529
FS09	06/04/2021	1	<0.00201	<0.00402	<49.7	<49.7	<49.7	<49.7	<49.7	78.3
Excavation Sidewall Samples										
SW01	06/04/2021	0-2	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	5,170

Table 1

Soil Analytical Results
Ross Draw 25
Incident Number : NAPP2111853419
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-DRO (mg/kg)	TPH-GRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
SW02	06/04/2021	0-2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	5,900

Notes:
ft - feet/foot
mg/kg - milligrams per kilograms
BTEX - benzene, toluene, ethylbenzene, and total xylenes
TPH - total petroleum hydrocarbons
DRO - diesel range organics
GRO - gasoline range organics
ORO - oil range organics
NMOCD - New Mexico Oil Conservation Division
NMAC - New Mexico Administrative Code
< - indicates result is less than the stated laboratory method practical quantitation limit
NE - Not Established
BOLD - indicates results exceed the higher of the background sample result or applicable regulatory standard
Greyed data represents samples that were excavated

ATTACHMENT 1: REFERENCED WELL RECORDS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01
Date: 07/28/21
Site Name: Ross Draw 25 Battery
RP or Incident Number:
LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS, AC
Method: Hollow stem auger
Lat/Long: 32.020605, -103.941899
Field Screening: ~~Chloride, PID~~ FS
Hole Diameter: 4 inches
Total Depth:
Comments: No field screenings, lithology only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
					0.5'	1	CCHE SP	CALICHE, dry, off white-tan, poor-moderate consolidation, no stain, no odor
						2		
						3		
						4		
					5'	5	~~SP~~ SP FS	SAND, dry, reddish brown, poorly graded, fine grain, abundant caliche gravel, moderately consolidated, no stain, no odor
						6		
						7		
						8		
						9		
					10'	10		
						11	SC	~~SANDY~~ FS CLAYEY SAND, dry reddish brown, poorly graded, fine grain, no plasticity, cohesive, no stain, no odor
						12		
						13		
						14		
						15	SC	some gypsum crystals (flakes), trace caliche gravel, some silt
						16		
						17		
						18		
						19		
						20	SC	gypsum flakes no longer visible, some silt
						21		
						22		
						23		
						24		
						25	SM ~~SC~~	abundant silt

FS

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01
Date: 07/28/21
Site Name: Boss Draw 25 Battery
RP or Incident Number:
LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS, AC
Method: Hollow stem auger
Lat/Long: 32.020605, -103.941899
Field Screening: ~~Chloride, PID~~ FS
Hole Diameter: 4 inches
Total Depth:
Comments: No field screenings, Lithology only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						26	SM	SILTY SAND, dry, reddish brown, poorly graded, fine-very fine grain, abundant silt, no stain, no odor
						27		
						28		
						29		trace gravel ~~sandy~~ silty composition abundant gypsum xls <0.5mm
						30		
						31	ML	GRAVELLY SILT, dry, reddish brown, no plasticity, cohesive, abundant gravel ~~sandy~~ silty composition some gypsum xls (1 mm)
						32		
						33		
						34		
						35	ML	
						36		
						37		
						38		
						39		
						40	ML	gypsum xl viens trace
						41		
						42		
						43		
						44		
						45	ML-S	SILTSTONE, dry, reddish brown, no ~~platest~~ FS plasticity, cohesive, no stain, no odor, poorly cemented
						46		
						47		
						48		
						49		
						50	ML-S	

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01	Date: 07/28/21
Site Name: Ross Draw 25 Battery	
RP or Incident Number:	
LTE Job Number:	
Logged By FS, AC	Method: Hollow stem auger
Lat/Long: 32.020605, -103.941800	Field Screening: ~~Chloride, PID~~ FS
Hole Diameter:	Total Depth: 105 feet bgs

LITHOLOGIC / SOIL SAMPLING LOG

Comments: No field screenings, lithology only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						51	ML-S	SILTSTONE, dry, reddish brown, no plasticity, cohesive, well cemented, no stain, no odor
						52		
						53		
						54		
						55	ML-S	poor cementation
						56		
						57		
						58		
						59		
						60	ML-S	gradual transition to claystone (low plasticity)
						61		
						62		
						63		
						64		
						65	CL-S	CLAYSTONE, moist, reddish brown - brown, low plasticity, cohesive, no stain, no odor some gypsum xls (<0.5mm)
						66		
						67		
						68		
						69		
						70	CL-S	trace gypsum xl's
						71		
						72		
						73		
						74		
						75		

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01	Date: 07/28/21
Site Name: Boss Draw 25 Battery	
RP or Incident Number:	
LTE Job Number:	
Logged By: FS, AC	Method: Hollow stem auger
Lat/Long: 32.020005, -103.941899	Field Screening: ~~Chloride, PID~~ FS
Hole Diameter: 4 inches	Total Depth: 105 feet bgs

LITHOLOGIC / SOIL SAMPLING LOG

Comments: No field screenings, lithology remarks only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						76		
						77		
						78		
					79'	79	SH-S	CLAYSTONE, moist, ~~dark~~ Light FS brown, cohesive, high plasticity, some crystalline gypsum, no stain or odor
						80		
						81		
						82		
						83		
					84'	84		trace crystalline gypsum
						85		
						86		
						87		
						88		
						89		
					90'	90		slight odor musty (stagnant water)
						91		
						92		
						93		
						94		
					95'	95		FS color change dark brown, ~~very moist almost~~ saturated
						96		
						97		
						98		
						99		
					100'	100		

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: BH01
Date: 07/28/21
Site Name: Ross Draw 25 Battery
RP or Incident Number:
LTE Job Number:

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: FS, AC
Method: Hollow stem auger
Lat/Long: 32.020605, -103.941899
Field Screening: ~~Chloride, PID~~ FS
Hole Diameter: 4 inches
Total Depth: 105 feet bgs
Comments: No field screenings, Lithology only

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						101	CH-S	CLAYSTONE, moist, dark brown, cohesive, high plasticity, no stain or odor.
						102		
						103		
						104		
					105'	105		
						106		
						107		dry hole
						108		
						109		
						110		
						111		
						112		
						113		
						114		
						115		
						116		
						117		
						118		
						119		
						120		
						121		
						122		
						123		
						124		
						125		

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	C 01360	4	3	3	05	26S	30E	602997	3548152

Driller License: 95 **Driller Company:** FOLK DRILLING CO.

Driller Name:

Drill Start Date: 04/26/1952 **Drill Finish Date:** 05/15/1952 **Plug Date:**

Log File Date: 11/17/1953 **PCW Rcv Date:** **Source:** Shallow

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

Casing Size: 12.75 **Depth Well:** 770 feet **Depth Water:** 173 feet

Water Bearing Stratifications:	Top	Bottom	Description
	210	220	Sandstone/Gravel/Conglomerate
	580	585	Sandstone/Gravel/Conglomerate
	665	710	Sandstone/Gravel/Conglomerate
	725	770	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	180	289
	538	770

Meter Number: 16557 **Meter Make:** SIEMENS

Meter Serial Number: L1254823 **Meter Multiplier:** 100.0000

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

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

Usage Multiplier: **Reading Frequency:** Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
07/01/2014	2014	234997	A	RPT		0	
09/30/2014	2014	354169	A	RPT		36.573	
11/20/2014	2014	7281000	A	RPT		0	
12/31/2014	2014	11430100	A	RPT		12.733	
04/01/2015	2015	22535200	A	RPT		34.080	
07/01/2015	2015	35821800	A	RPT		40.775	
10/05/2015	2015	46631200	A	RPT		33.173	
12/31/2015	2015	55653200	A	RPT		27.688	
01/31/2016	2016	58047600	A	RPT		7.348	
02/29/2016	2016	61081100	A	RPT		9.309	
03/31/2016	2016	62593100	A	RPT		4.640	
06/30/2016	2016	71642600	A	RPT		27.772	
10/03/2016	2016	81998399	A	RPT		31.781	
12/31/2016	2016	90558600	A	RPT		26.270	
04/04/2019	2019	164290087	A	RPT		226.274	

10/02/2019	2019	790380	A	RPT	METER CHANGE OUT 07/2019	0	
01/02/2020	2020	1733720	A	RPT		289.500	
04/07/2021	2021	36814117	A	WEB		10765.779	X
07/27/2021	2021	36836238	A	WEB		6.789	X

**YTD Meter Amounts:	Year	Amount
	2014	49.306
	2015	135.716
	2016	107.120
	2019	226.274
	2020	289.500
	2021	10772.568

Meter Number: 16558 **Meter Make:** MASTERMETER
Meter Serial Number: 32530403 **Meter Multiplier:** 100.0000
Number of Dials: 6 **Meter Type:** Diversion
Unit of Measure: Gallons **Return Flow Percent:**
Usage Multiplier: **Reading Frequency:**

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
10/01/2014	2014	354169	A	RPT		0	
11/20/2014	2014	415555	A	RPT		18.839	
11/21/2014	2014	72810	A	RPT		0	
12/31/2014	2014	112178	A	RPT		12.082	
02/01/2015	2015	147039	A	RPT		10.698	
03/02/2015	2015	188133	A	RPT		12.611	
04/01/2015	2015	224102	A	RPT		11.038	
04/30/2015	2015	270723	A	RPT		14.307	
05/31/2015	2015	315628	A	tw		13.781	
07/01/2015	2015	369075	A	tw		16.402	
08/01/2015	2015	395528	A	tw		8.118	
08/31/2015	2015	455361	A	tw		18.362	
10/01/2015	2015	466312	A	RPT		3.361	

**YTD Meter Amounts:	Year	Amount
	2014	30.921
	2015	108.678

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Ross Draw 25 Eddy County, New Mexico	NAPP2111853419

Photo No.	Date
1	May 13, 2021

Release extent facing east.

Photo No.	Date
2	May 13, 2021

Release extent facing west

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Ross Draw 25 Eddy County, New Mexico	NAPP2111853419

Photo No.	Date
3	June 3, 2021

Northwest facing view of pothole (PH01)

Photo No.	Date
4	June 3, 2021

Northwest facing view of pothole (PH02)

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Ross Draw 25 Eddy County, New Mexico	NAPP2111853419

Photo No.	Date
5	June 3, 2021

Excavation extent facing east

Photo No.	Date
6	June 4, 2021

Final excavation extent facing east

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	Ross Draw 25 Eddy County, New Mexico	NAPP2111853419

Photo No.	Date
7	June 4, 2021

Final excavation extent facing west

Photo No.	Date
8	July 2, 2021

Backfilled excavation facing east.

ATTACHMENT 3: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH01	Date: 06/03/2021
Site Name: Ross Draw 25	
RP or Incident Number: NAPP2111853419	
WSP Job Number: 3140326.003.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: EL	Method: Backhoe		
Lat/Long: 32.01942, -103.94191	Field Screening: Hach chloride strips, PID	Hole Diameter: N/A	Total Depth: 4 feet bgs

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
M	16,925	45.3	Y	PH01	1	1	SM	SAND, silty, reddish-brown, well graded, medium-fine grain, caliche gravel 0.1-3 cm, slight odor
M	2,189	64.6	N		2	2	SM	SAND, silty, reddish-brown, well graded, medium-fine grain, caliche gravel 0.1-3 cm, slight odor
M	8,271	58.3	N		3	3	SM	SAND, silty, reddish-brown, well graded, medium-fine grain, caliche gravel 0.1-3 cm, slight odor
D	8,271	51	N	PH01C	4	4	SM	SAND, silty, reddish-brown, well graded, fine grain, caliche gravel 0.1-3 cm, slight odor

TD @ 4 ft bgs

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH01	Date: 06/03/2021
Site Name: Ross Draw 25	
RP or Incident Number: NAPP2111853419	
WSP Job Number: 3140326.003.0129	

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: EL	Method: Backhoe		
Lat/Long: 32.01942, -103.94191	Field Screening: Hach chloride strips, PID	Hole Diameter: N/A	Total Depth: 4 feet bgs

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
M	8,271	17.4	N		1	1	SM	SAND, silty, reddish-brown, well graded, medium-fine grain, caliche gravel 0.1-3 cm
M	4,715	29.2	N		2	2	SM	SAND, silty, reddish-brown, well graded, medium-fine grain, caliche gravel 0.1-3 cm
M	8,271	29.2	N	PH02B	3	3	SM	SAND, silty, reddish-brown, well graded, medium-fine grain, caliche gravel 0.1-3 cm
M	2,189	30.7	N	PH02C	4	4	SM	SAND, silty, reddish-brown, well graded, fine grain, caliche gravel 0.1-3 cm

TD @ 4 ft bgs

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-674-1
Laboratory Sample Delivery Group: 31403236.003.0129
Client Project/Site: Ross Draw 25

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

Attn: Dan Moir

JKramer

Authorized for release by:
5/19/2021 9:17:08 AM

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

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

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

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Laboratory Job ID: 890-674-1
SDG: 31403236.003.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-674-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Job ID: 890-674-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-674-1

Receipt
The samples were received on 5/14/2021 9:57 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.8°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SS01 (890-674-1), SS02 (890-674-2) and SS03 (890-674-3).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-3160 and analytical batch 880-3161 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Client Sample ID: SS01

Date Collected: 05/13/21 14:02
Date Received: 05/14/21 09:57
Sample Depth: 0.5'

Lab Sample ID: 890-674-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:46	1
Toluene	<0.00200	U F1	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:46	1
Ethylbenzene	<0.00200	U F1	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:46	1
m-Xylene & p-Xylene	<0.00401	U F1	0.00401		mg/Kg		05/17/21 09:05	05/17/21 14:46	1
o-Xylene	<0.00200	U F1	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:46	1
Xylenes, Total	<0.00401	U F1	0.00401		mg/Kg		05/17/21 09:05	05/17/21 14:46	1
Total BTEX	<0.00401	U F1	0.00401		mg/Kg		05/17/21 09:05	05/17/21 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*05/17/21 09:05*	*05/17/21 14:46*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*05/17/21 09:05*	*05/17/21 14:46*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/14/21 15:47	05/15/21 04:16	1
Diesel Range Organics (Over C10-C28)	**201**		50.0		mg/Kg		05/14/21 15:47	05/15/21 04:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/14/21 15:47	05/15/21 04:16	1
Total TPH	**201**		50.0		mg/Kg		05/14/21 15:47	05/15/21 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*05/14/21 15:47*	*05/15/21 04:16*	*1*
o-Terphenyl	*116*		*70 - 130*	*05/14/21 15:47*	*05/15/21 04:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52300**		249		mg/Kg			05/18/21 12:57	50

Client Sample ID: SS02

Date Collected: 05/13/21 14:10
Date Received: 05/14/21 09:57
Sample Depth: 0.5'

Lab Sample ID: 890-674-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/17/21 09:05	05/17/21 17:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/17/21 09:05	05/17/21 17:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/17/21 09:05	05/17/21 17:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		05/17/21 09:05	05/17/21 17:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/17/21 09:05	05/17/21 17:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/17/21 09:05	05/17/21 17:47	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		05/17/21 09:05	05/17/21 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*05/17/21 09:05*	*05/17/21 17:47*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/17/21 09:05*	*05/17/21 17:47*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Client Sample ID: SS02

Date Collected: 05/13/21 14:10
Date Received: 05/14/21 09:57
Sample Depth: 0.5'

Lab Sample ID: 890-674-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/14/21 15:47	05/15/21 04:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/14/21 15:47	05/15/21 04:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/14/21 15:47	05/15/21 04:36	1
Total TPH	<50.0	U	50.0		mg/Kg		05/14/21 15:47	05/15/21 04:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*05/14/21 15:47*	*05/15/21 04:36*	*1*
o-Terphenyl	*105*		*70 - 130*	*05/14/21 15:47*	*05/15/21 04:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26700**		248		mg/Kg			05/18/21 13:02	50

Client Sample ID: SS03

Date Collected: 05/13/21 14:20
Date Received: 05/14/21 09:57
Sample Depth: 0.5'

Lab Sample ID: 890-674-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/17/21 09:05	05/17/21 18:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/17/21 09:05	05/17/21 18:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/17/21 09:05	05/17/21 18:13	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		05/17/21 09:05	05/17/21 18:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/17/21 09:05	05/17/21 18:13	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/17/21 09:05	05/17/21 18:13	1
Total BTEX	<0.00397	U	0.00397		mg/Kg		05/17/21 09:05	05/17/21 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/17/21 09:05*	*05/17/21 18:13*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*05/17/21 09:05*	*05/17/21 18:13*	*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		05/14/21 15:47	05/15/21 04:57	1
Diesel Range Organics (Over C10-C28)	**69.5**		49.9		mg/Kg		05/14/21 15:47	05/15/21 04:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/14/21 15:47	05/15/21 04:57	1
Total TPH	**69.5**		49.9		mg/Kg		05/14/21 15:47	05/15/21 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*05/14/21 15:47*	*05/15/21 04:57*	*1*
o-Terphenyl	*110*		*70 - 130*	*05/14/21 15:47*	*05/15/21 04:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14800**		99.4		mg/Kg			05/18/21 13:07	20

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-674-1	SS01	120	86
890-674-1 MS	SS01	93	92
890-674-1 MSD	SS01	89	109
890-674-2	SS02	93	99
890-674-3	SS03	95	102
LCS 880-3160/1-A	Lab Control Sample	93	104
LCSD 880-3160/2-A	Lab Control Sample Dup	90	87
MB 880-3160/5-A	Method Blank	74	83

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-674-1	SS01	117	116
890-674-2	SS02	102	105
890-674-3	SS03	109	110
LCS 880-3136/2-A	Lab Control Sample	104	97
LCSD 880-3136/3-A	Lab Control Sample Dup	103	98
MB 880-3136/1-A	Method Blank	128	133 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3160/5-A
Matrix: Solid
Analysis Batch: 3161

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3160

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/17/21 09:05	05/17/21 14:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/17/21 09:05	05/17/21 14:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/17/21 09:05	05/17/21 14:20	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		05/17/21 09:05	05/17/21 14:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*05/17/21 09:05*	*05/17/21 14:20*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*05/17/21 09:05*	*05/17/21 14:20*	*1*

Lab Sample ID: LCS 880-3160/1-A
Matrix: Solid
Analysis Batch: 3161

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3160

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1095		mg/Kg		109	70 - 130		
Toluene			0.100	0.09243		mg/Kg		92	70 - 130		
Ethylbenzene			0.100	0.09811		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1901		mg/Kg		95	70 - 130		
o-Xylene			0.100	0.09135		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-3160/2-A
Matrix: Solid
Analysis Batch: 3161

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3160

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09192		mg/Kg		92	70 - 130	17	35
Toluene			0.100	0.09101		mg/Kg		91	70 - 130	2	35
Ethylbenzene			0.100	0.09557		mg/Kg		96	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1853		mg/Kg		93	70 - 130	3	35
o-Xylene			0.100	0.08857		mg/Kg		89	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 890-674-1 MS
Matrix: Solid
Analysis Batch: 3161

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 3160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene	<0.00200	U	0.101	0.08210		mg/Kg		81	70 - 130		

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

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

Lab Sample ID: 890-674-1 MS
Matrix: Solid
Analysis Batch: 3161

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 3160

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Toluene	<0.00200	U F1	0.101	0.07531		mg/Kg		75	70 - 130
Ethylbenzene	<0.00200	U F1	0.101	0.06468	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.202	0.1222	F1	mg/Kg		61	70 - 130
o-Xylene	<0.00200	U F1	0.101	0.05667	F1	mg/Kg		56	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: 890-674-1 MSD
Matrix: Solid
Analysis Batch: 3161

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 3160

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0996	0.08778		mg/Kg		88	70 - 130	7	35
Toluene	<0.00200	U F1	0.0996	0.06074	F1	mg/Kg		61	70 - 130	21	35
Ethylbenzene	<0.00200	U F1	0.0996	0.04778	F1	mg/Kg		48	70 - 130	30	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.08966	F1	mg/Kg		45	70 - 130	31	35
o-Xylene	<0.00200	U F1	0.0996	0.04233	F1	mg/Kg		42	70 - 130	29	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

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

Lab Sample ID: MB 880-3136/1-A
Matrix: Solid
Analysis Batch: 3108

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3136

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		05/14/21 15:47	05/15/21 00:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		05/14/21 15:47	05/15/21 00:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		05/14/21 15:47	05/15/21 00:26	1
Total TPH	<50.0	U	50.0	mg/Kg		05/14/21 15:47	05/15/21 00:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*05/14/21 15:47*	*05/15/21 00:26*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*05/14/21 15:47*	*05/15/21 00:26*	*1*

Lab Sample ID: LCS 880-3136/2-A
Matrix: Solid
Analysis Batch: 3108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3136

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO)-C6-C10	1000	898.1		mg/Kg		90	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

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

Lab Sample ID: LCS 880-3136/2-A
Matrix: Solid
Analysis Batch: 3108

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3136

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	1059		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: LCSD 880-3136/3-A
Matrix: Solid
Analysis Batch: 3108

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3136

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	889.0		mg/Kg		89	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130	0	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3181/1-A
Matrix: Solid
Analysis Batch: 3182

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			05/18/21 12:26	1

Lab Sample ID: LCS 880-3181/2-A
Matrix: Solid
Analysis Batch: 3182

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	252.8		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-3181/3-A
Matrix: Solid
Analysis Batch: 3182

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	249.8		mg/Kg		100	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

GC VOA

Prep Batch: 3160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-674-1	SS01	Total/NA	Solid	5035	
890-674-2	SS02	Total/NA	Solid	5035	
890-674-3	SS03	Total/NA	Solid	5035	
MB 880-3160/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3160/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3160/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-674-1 MS	SS01	Total/NA	Solid	5035	
890-674-1 MSD	SS01	Total/NA	Solid	5035	

Analysis Batch: 3161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-674-1	SS01	Total/NA	Solid	8021B	3160
890-674-2	SS02	Total/NA	Solid	8021B	3160
890-674-3	SS03	Total/NA	Solid	8021B	3160
MB 880-3160/5-A	Method Blank	Total/NA	Solid	8021B	3160
LCS 880-3160/1-A	Lab Control Sample	Total/NA	Solid	8021B	3160
LCSD 880-3160/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3160
890-674-1 MS	SS01	Total/NA	Solid	8021B	3160
890-674-1 MSD	SS01	Total/NA	Solid	8021B	3160

GC Semi VOA

Analysis Batch: 3108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-674-1	SS01	Total/NA	Solid	8015B NM	3136
890-674-2	SS02	Total/NA	Solid	8015B NM	3136
890-674-3	SS03	Total/NA	Solid	8015B NM	3136
MB 880-3136/1-A	Method Blank	Total/NA	Solid	8015B NM	3136
LCS 880-3136/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3136
LCSD 880-3136/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3136

Prep Batch: 3136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-674-1	SS01	Total/NA	Solid	8015NM Prep	
890-674-2	SS02	Total/NA	Solid	8015NM Prep	
890-674-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-3136/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3136/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3136/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 3181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-674-1	SS01	Soluble	Solid	DI Leach	
890-674-2	SS02	Soluble	Solid	DI Leach	
890-674-3	SS03	Soluble	Solid	DI Leach	
MB 880-3181/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3181/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3181/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

HPLC/IC

Analysis Batch: 3182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-674-1	SS01	Soluble	Solid	300.0	3181
890-674-2	SS02	Soluble	Solid	300.0	3181
890-674-3	SS03	Soluble	Solid	300.0	3181
MB 880-3181/1-A	Method Blank	Soluble	Solid	300.0	3181
LCS 880-3181/2-A	Lab Control Sample	Soluble	Solid	300.0	3181
LCSD 880-3181/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3181

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Client Sample ID: SS01
Date Collected: 05/13/21 14:02
Date Received: 05/14/21 09:57

Lab Sample ID: 890-674-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3160	05/17/21 09:05	MR	XEN MID
Total/NA	Analysis	8021B		1	3161	05/17/21 14:46	MR	XEN MID
Total/NA	Prep	8015NM Prep			3136	05/14/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3108	05/15/21 04:16	AJ	XEN MID
Soluble	Leach	DI Leach			3181	05/17/21 15:21	CH	XEN MID
Soluble	Analysis	300.0		50	3182	05/18/21 12:57	CH	XEN MID

Client Sample ID: SS02
Date Collected: 05/13/21 14:10
Date Received: 05/14/21 09:57

Lab Sample ID: 890-674-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3160	05/17/21 09:05	MR	XEN MID
Total/NA	Analysis	8021B		1	3161	05/17/21 17:47	MR	XEN MID
Total/NA	Prep	8015NM Prep			3136	05/14/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3108	05/15/21 04:36	AJ	XEN MID
Soluble	Leach	DI Leach			3181	05/17/21 15:21	CH	XEN MID
Soluble	Analysis	300.0		50	3182	05/18/21 13:02	CH	XEN MID

Client Sample ID: SS03
Date Collected: 05/13/21 14:20
Date Received: 05/14/21 09:57

Lab Sample ID: 890-674-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3160	05/17/21 09:05	MR	XEN MID
Total/NA	Analysis	8021B		1	3161	05/17/21 18:13	MR	XEN MID
Total/NA	Prep	8015NM Prep			3136	05/14/21 15:47	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3108	05/15/21 04:57	AJ	XEN MID
Soluble	Leach	DI Leach			3181	05/17/21 15:21	CH	XEN MID
Soluble	Analysis	300.0		20	3182	05/18/21 13:07	CH	XEN MID

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-674-1
SDG: 31403236.003.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-674-1	SS01	Solid	05/13/21 14:02	05/14/21 09:57	0.5'
890-674-2	SS02	Solid	05/13/21 14:10	05/14/21 09:57	0.5'
890-674-3	SS03	Solid	05/13/21 14:20	05/14/21 09:57	0.5'

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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

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5/19/2021

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 e Green Street
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849	Email:	Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com

Work Order Comments

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

Project Name:	Ross Draw 25	Turn Around	
Project Number:	31403236.003.0129	Routine	☑
P.O. Number:		Rush:	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	20 / 1.8	Thermometer ID	
Received Intact:	(Yes) No	IR-8 #007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	5/13/2021	14:02	0.5	1	X	X	X
SS02	S	5/13/2021	14:10	0.5	1	X	X	X
SS03	S	5/13/2021	14:20	0.5	1	X	X	X

890-674 Chain of Custody

Work Order Notes

Cost Center 1056651001
Incident # NAPP2111853419

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

Sample Comments
Discrete
Discrete
Discrete

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		5-14-21 0957			
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-674-1
SDG Number: 31403236.003.0129

Login Number: 674
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-674-1
SDG Number: 31403236.003.0129

Login Number: 674
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 05/14/21 04:07 PM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-781-1
Laboratory Sample Delivery Group: 31403236.003.0129
Client Project/Site: Ross Draw 25

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

Attn: Dan Moir

Authorized for release by:
6/9/2021 8:37:27 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Laboratory Job ID: 890-781-1
SDG: 31403236.003.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low biased.
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: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Job ID: 890-781-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-781-1

Receipt
The samples were received on 6/4/2021 1:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH01 (890-781-1), PH01C (890-781-2), PH02B (890-781-3), PH02C (890-781-4), FS01 (890-781-5), FS02 (890-781-6), FS03 (890-781-7) and FS04 (890-781-8).

GC VOA
Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: PH01C (890-781-2), PH02C (890-781-4) and FS04 (890-781-8). The sample(s) shows evidence of matrix interference.

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Client Sample ID: PH01

Lab Sample ID: 890-781-1
Matrix: Solid
Date Collected: 06/03/21 09:50
Date Received: 06/04/21 13:23
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		06/07/21 08:42	06/07/21 14:36	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 14:36	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 14:36	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/07/21 08:42	06/07/21 14:36	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 14:36	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/07/21 08:42	06/07/21 14:36	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/07/21 08:42	06/07/21 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/07/21 08:42*	*06/07/21 14:36*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*06/07/21 08:42*	*06/07/21 14:36*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:26	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*06/07/21 09:23*	*06/07/21 16:26*	*1*
o-Terphenyl	*73*		*70 - 130*	*06/07/21 09:23*	*06/07/21 16:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17100**		251		mg/Kg			06/08/21 22:05	50

Client Sample ID: PH01C

Lab Sample ID: 890-781-2
Matrix: Solid
Date Collected: 06/03/21 10:05
Date Received: 06/04/21 13:23
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 14:56	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 14:56	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 14:56	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/07/21 08:42	06/07/21 14:56	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 14:56	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/07/21 08:42	06/07/21 14:56	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/07/21 08:42	06/07/21 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*06/07/21 08:42*	*06/07/21 14:56*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/07/21 08:42*	*06/07/21 14:56*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: PH01C
Lab Sample ID: 890-781-2
Date Collected: 06/03/21 10:05
Matrix: Solid
Date Received: 06/04/21 13:23
Sample Depth: - 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:47	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 16:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*06/07/21 09:23*	*06/07/21 16:47*	*1*
o-Terphenyl	*71*		*70 - 130*	*06/07/21 09:23*	*06/07/21 16:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**9660**		50.3		mg/Kg			06/08/21 22:10	10

Client Sample ID: PH02B
Lab Sample ID: 890-781-3
Date Collected: 06/03/21 11:00
Matrix: Solid
Date Received: 06/04/21 13:23
Sample Depth: - 3

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 15:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 15:17	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 15:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/07/21 08:42	06/07/21 15:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 15:17	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/07/21 08:42	06/07/21 15:17	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/07/21 08:42	06/07/21 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*06/07/21 08:42*	*06/07/21 15:17*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/07/21 08:42*	*06/07/21 15:17*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 17:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 17:08	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 17:08	1
Total TPH	<49.9	U	49.9		mg/Kg		06/07/21 09:23	06/07/21 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*06/07/21 09:23*	*06/07/21 17:08*	*1*
o-Terphenyl	*70*		*70 - 130*	*06/07/21 09:23*	*06/07/21 17:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7700**		50.5		mg/Kg			06/08/21 22:16	10

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Client Sample ID: PH02C

Lab Sample ID: 890-781-4
Matrix: Solid
Date Collected: 06/03/21 11:05
Date Received: 06/04/21 13:23
Sample Depth: - 4

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 15:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 15:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 15:37	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/07/21 08:42	06/07/21 15:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 15:37	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/07/21 08:42	06/07/21 15:37	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/07/21 08:42	06/07/21 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*06/07/21 08:42*	*06/07/21 15:37*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/07/21 08:42*	*06/07/21 15:37*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 17:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 17:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 17:50	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*06/07/21 09:23*	*06/07/21 17:50*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*06/07/21 09:23*	*06/07/21 17:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1830**		24.8		mg/Kg			06/08/21 22:32	5

Client Sample ID: FS01

Lab Sample ID: 890-781-5
Matrix: Solid
Date Collected: 06/03/21 12:45
Date Received: 06/04/21 13:23
Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 15:57	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 15:57	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 15:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/07/21 08:42	06/07/21 15:57	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/07/21 08:42	06/07/21 15:57	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/07/21 08:42	06/07/21 15:57	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/07/21 08:42	06/07/21 15:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*06/07/21 08:42*	*06/07/21 15:57*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/07/21 08:42*	*06/07/21 15:57*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: FS01 Lab Sample ID: 890-781-5

Date Collected: 06/03/21 12:45 **Matrix: Solid**
Date Received: 06/04/21 13:23
Sample Depth: - 2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:10	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:10	1
Total TPH	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*06/07/21 09:23*	*06/07/21 18:10*	*1*
o-Terphenyl	*70*		*70 - 130*	*06/07/21 09:23*	*06/07/21 18:10*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1290**		24.8		mg/Kg			06/08/21 22:38	5

Client Sample ID: FS02 Lab Sample ID: 890-781-6

Date Collected: 06/03/21 13:57 **Matrix: Solid**
Date Received: 06/04/21 13:23
Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 17:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 17:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 17:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/07/21 08:42	06/07/21 17:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 17:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/07/21 08:42	06/07/21 17:49	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/07/21 08:42	06/07/21 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*06/07/21 08:42*	*06/07/21 17:49*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/07/21 08:42*	*06/07/21 17:49*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 18:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 18:31	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 18:31	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*06/07/21 09:23*	*06/07/21 18:31*	*1*
o-Terphenyl	*67*	*S1-*	*70 - 130*	*06/07/21 09:23*	*06/07/21 18:31*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.02**		5.00		mg/Kg			06/08/21 19:57	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Client Sample ID: FS03

Lab Sample ID: 890-781-7
Matrix: Solid
Date Collected: 06/03/21 14:46
Date Received: 06/04/21 13:23
Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 18:09	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 18:09	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 18:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/07/21 08:42	06/07/21 18:09	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/07/21 08:42	06/07/21 18:09	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/07/21 08:42	06/07/21 18:09	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/07/21 08:42	06/07/21 18:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*06/07/21 08:42*	*06/07/21 18:09*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/07/21 08:42*	*06/07/21 18:09*	*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	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:52	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:52	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:52	1
Total TPH	<49.7	U	49.7		mg/Kg		06/07/21 09:23	06/07/21 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*06/07/21 09:23*	*06/07/21 18:52*	*1*
o-Terphenyl	*73*		*70 - 130*	*06/07/21 09:23*	*06/07/21 18:52*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**199**		5.00		mg/Kg			06/08/21 20:02	1

Client Sample ID: FS04

Lab Sample ID: 890-781-8
Matrix: Solid
Date Collected: 06/03/21 15:16
Date Received: 06/04/21 13:23
Sample Depth: - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 18:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 18:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 18:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/07/21 08:42	06/07/21 18:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 18:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/07/21 08:42	06/07/21 18:29	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/07/21 08:42	06/07/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*06/07/21 08:42*	*06/07/21 18:29*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*06/07/21 08:42*	*06/07/21 18:29*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Client Sample ID: FS04

Date Collected: 06/03/21 15:16
Date Received: 06/04/21 13:23
Sample Depth: - 2

Lab Sample ID: 890-781-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 19:13	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 19:13	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 19:13	1
Total TPH	<49.8	U	49.8		mg/Kg		06/07/21 09:23	06/07/21 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*06/07/21 09:23*	*06/07/21 19:13*	*1*
o-Terphenyl	*69*	*S1-*	*70 - 130*	*06/07/21 09:23*	*06/07/21 19:13*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1540**		24.8		mg/Kg			06/08/21 20:07	5

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-781-1	PH01	117	103
890-781-2	PH01C	123	98
890-781-3	PH02B	120	101
890-781-4	PH02C	125	97
890-781-5	FS01	116	101
890-781-6	FS02	114	99
890-781-7	FS03	113	101
890-781-8	FS04	140 S1+	88
LCS 880-3823/1-A	Lab Control Sample	108	95
LCS 880-3849/1-A	Lab Control Sample	106	97
LCSD 880-3823/2-A	Lab Control Sample Dup	107	94
LCSD 880-3849/2-A	Lab Control Sample Dup	105	97
MB 880-3823/5-A	Method Blank	109	92

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)
890-781-1	PH01	88	73
890-781-2	PH01C	87	71
890-781-3	PH02B	85	70
890-781-4	PH02C	84	69 S1-
890-781-5	FS01	86	70
890-781-6	FS02	82	67 S1-
890-781-7	FS03	88	73
890-781-8	FS04	86	69 S1-
LCS 880-3830/2-A	Lab Control Sample	93	72
LCSD 880-3830/3-A	Lab Control Sample Dup	94	74
MB 880-3830/1-A	Method Blank	89	74

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3823/5-A
Matrix: Solid
Analysis Batch: 3829

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3823

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 12:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 12:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 12:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/07/21 08:42	06/07/21 12:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/07/21 08:42	06/07/21 12:25	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/07/21 08:42	06/07/21 12:25	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/07/21 08:42	06/07/21 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*06/07/21 08:42*	*06/07/21 12:25*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*06/07/21 08:42*	*06/07/21 12:25*	*1*

Lab Sample ID: LCS 880-3823/1-A
Matrix: Solid
Analysis Batch: 3829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3823

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.07985		mg/Kg		80	70 - 130		
Toluene			0.100	0.09903		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.1032		mg/Kg		103	70 - 130		
m-Xylene & p-Xylene			0.200	0.2134		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.1065		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-3823/2-A
Matrix: Solid
Analysis Batch: 3829

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3823

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08619		mg/Kg		86	70 - 130	8	35
Toluene			0.100	0.1035		mg/Kg		104	70 - 130	4	35
Ethylbenzene			0.100	0.1091		mg/Kg		109	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2254		mg/Kg		113	70 - 130	5	35
o-Xylene			0.100	0.1132		mg/Kg		113	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCS 880-3849/1-A
Matrix: Solid
Analysis Batch: 3829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3849

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08550		mg/Kg		86	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

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

Lab Sample ID: LCS 880-3849/1-A
Matrix: Solid
Analysis Batch: 3829

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3849

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Toluene			0.100	0.09552		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09967		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.2043		mg/Kg		102	70 - 130		
o-Xylene			0.100	0.1050		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-3849/2-A
Matrix: Solid
Analysis Batch: 3829

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3849

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08437		mg/Kg		84	70 - 130	1	35
Toluene			0.100	0.09781		mg/Kg		98	70 - 130	2	35
Ethylbenzene			0.100	0.1024		mg/Kg		102	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.2101		mg/Kg		105	70 - 130	3	35
o-Xylene			0.100	0.1070		mg/Kg		107	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

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

Lab Sample ID: MB 880-3830/1-A
Matrix: Solid
Analysis Batch: 3835

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3830

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 12:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 12:16	1
Total TPH	<50.0	U	50.0		mg/Kg		06/07/21 09:23	06/07/21 12:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*06/07/21 09:23*	*06/07/21 12:16*	*1*
o-Terphenyl	*74*		*70 - 130*	*06/07/21 09:23*	*06/07/21 12:16*	*1*

Lab Sample ID: LCS 880-3830/2-A
Matrix: Solid
Analysis Batch: 3835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3830

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	793.2		mg/Kg		79	70 - 130		

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

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

Lab Sample ID: LCS 880-3830/2-A
Matrix: Solid
Analysis Batch: 3835

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3830

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (Over C10-C28)			1000	840.4		mg/Kg		84	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*72*		*70 - 130*

Lab Sample ID: LCSD 880-3830/3-A
Matrix: Solid
Analysis Batch: 3835

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3830

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	792.7		mg/Kg		79	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	859.9		mg/Kg		86	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*94*		*70 - 130*
o-Terphenyl	*74*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3839/1-A
Matrix: Solid
Analysis Batch: 3888

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/08/21 17:41	1

Lab Sample ID: LCS 880-3839/2-A
Matrix: Solid
Analysis Batch: 3888

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	254.9		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-3839/3-A
Matrix: Solid
Analysis Batch: 3888

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	254.9		mg/Kg		102	90 - 110	0	20

Lab Sample ID: MB 880-3838/1-A
Matrix: Solid
Analysis Batch: 3904

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/08/21 20:43	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-3838/2-A
Matrix: Solid
Analysis Batch: 3904

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	251.2		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-3838/3-A
Matrix: Solid
Analysis Batch: 3904

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride			250	254.5		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 890-781-3 MS
Matrix: Solid
Analysis Batch: 3904

Client Sample ID: PH02B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	7700		2530	10130		mg/Kg		96	90 - 110		

Lab Sample ID: 890-781-3 MSD
Matrix: Solid
Analysis Batch: 3904

Client Sample ID: PH02B
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7700		2530	10310		mg/Kg		103	90 - 110	2	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

GC VOA

Prep Batch: 3823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-1	PH01	Total/NA	Solid	5035	
890-781-2	PH01C	Total/NA	Solid	5035	
890-781-3	PH02B	Total/NA	Solid	5035	
890-781-4	PH02C	Total/NA	Solid	5035	
890-781-5	FS01	Total/NA	Solid	5035	
890-781-6	FS02	Total/NA	Solid	5035	
890-781-7	FS03	Total/NA	Solid	5035	
890-781-8	FS04	Total/NA	Solid	5035	
MB 880-3823/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3823/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3823/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 3829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-1	PH01	Total/NA	Solid	8021B	3823
890-781-2	PH01C	Total/NA	Solid	8021B	3823
890-781-3	PH02B	Total/NA	Solid	8021B	3823
890-781-4	PH02C	Total/NA	Solid	8021B	3823
890-781-5	FS01	Total/NA	Solid	8021B	3823
890-781-6	FS02	Total/NA	Solid	8021B	3823
890-781-7	FS03	Total/NA	Solid	8021B	3823
890-781-8	FS04	Total/NA	Solid	8021B	3823
MB 880-3823/5-A	Method Blank	Total/NA	Solid	8021B	3823
LCS 880-3823/1-A	Lab Control Sample	Total/NA	Solid	8021B	3823
LCS 880-3849/1-A	Lab Control Sample	Total/NA	Solid	8021B	3849
LCSD 880-3823/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3823
LCSD 880-3849/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3849

Prep Batch: 3849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-3849/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3849/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 3830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-1	PH01	Total/NA	Solid	8015NM Prep	
890-781-2	PH01C	Total/NA	Solid	8015NM Prep	
890-781-3	PH02B	Total/NA	Solid	8015NM Prep	
890-781-4	PH02C	Total/NA	Solid	8015NM Prep	
890-781-5	FS01	Total/NA	Solid	8015NM Prep	
890-781-6	FS02	Total/NA	Solid	8015NM Prep	
890-781-7	FS03	Total/NA	Solid	8015NM Prep	
890-781-8	FS04	Total/NA	Solid	8015NM Prep	
MB 880-3830/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3830/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3830/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

GC Semi VOA

Analysis Batch: 3835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-1	PH01	Total/NA	Solid	8015B NM	3830
890-781-2	PH01C	Total/NA	Solid	8015B NM	3830
890-781-3	PH02B	Total/NA	Solid	8015B NM	3830
890-781-4	PH02C	Total/NA	Solid	8015B NM	3830
890-781-5	FS01	Total/NA	Solid	8015B NM	3830
890-781-6	FS02	Total/NA	Solid	8015B NM	3830
890-781-7	FS03	Total/NA	Solid	8015B NM	3830
890-781-8	FS04	Total/NA	Solid	8015B NM	3830
MB 880-3830/1-A	Method Blank	Total/NA	Solid	8015B NM	3830
LCS 880-3830/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3830
LCSD 880-3830/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3830

HPLC/IC

Leach Batch: 3838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-1	PH01	Soluble	Solid	DI Leach	
890-781-2	PH01C	Soluble	Solid	DI Leach	
890-781-3	PH02B	Soluble	Solid	DI Leach	
890-781-4	PH02C	Soluble	Solid	DI Leach	
890-781-5	FS01	Soluble	Solid	DI Leach	
MB 880-3838/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3838/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3838/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-781-3 MS	PH02B	Soluble	Solid	DI Leach	
890-781-3 MSD	PH02B	Soluble	Solid	DI Leach	

Leach Batch: 3839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-6	FS02	Soluble	Solid	DI Leach	
890-781-7	FS03	Soluble	Solid	DI Leach	
890-781-8	FS04	Soluble	Solid	DI Leach	
MB 880-3839/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3839/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3839/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-6	FS02	Soluble	Solid	300.0	3839
890-781-7	FS03	Soluble	Solid	300.0	3839
890-781-8	FS04	Soluble	Solid	300.0	3839
MB 880-3839/1-A	Method Blank	Soluble	Solid	300.0	3839
LCS 880-3839/2-A	Lab Control Sample	Soluble	Solid	300.0	3839
LCSD 880-3839/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3839

Analysis Batch: 3904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-1	PH01	Soluble	Solid	300.0	3838
890-781-2	PH01C	Soluble	Solid	300.0	3838
890-781-3	PH02B	Soluble	Solid	300.0	3838
890-781-4	PH02C	Soluble	Solid	300.0	3838

QC Association Summary

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

HPLC/IC (Continued)

Analysis Batch: 3904 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-781-5	FS01	Soluble	Solid	300.0	3838
MB 880-3838/1-A	Method Blank	Soluble	Solid	300.0	3838
LCS 880-3838/2-A	Lab Control Sample	Soluble	Solid	300.0	3838
LCSD 880-3838/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3838
890-781-3 MS	PH02B	Soluble	Solid	300.0	3838
890-781-3 MSD	PH02B	Soluble	Solid	300.0	3838

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: PH01 Lab Sample ID: 890-781-1

Date Collected: 06/03/21 09:50 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 14:36	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 16:26	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		50	3904	06/08/21 22:05	CH	XEN MID

Client Sample ID: PH01C Lab Sample ID: 890-781-2

Date Collected: 06/03/21 10:05 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 14:56	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 16:47	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		10	3904	06/08/21 22:10	CH	XEN MID

Client Sample ID: PH02B Lab Sample ID: 890-781-3

Date Collected: 06/03/21 11:00 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 15:17	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 17:08	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		10	3904	06/08/21 22:16	CH	XEN MID

Client Sample ID: PH02C Lab Sample ID: 890-781-4

Date Collected: 06/03/21 11:05 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 15:37	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 17:50	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		5	3904	06/08/21 22:32	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: FS01 Lab Sample ID: 890-781-5

Date Collected: 06/03/21 12:45 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 15:57	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 18:10	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		5	3904	06/08/21 22:38	CH	XEN MID

Client Sample ID: FS02 Lab Sample ID: 890-781-6

Date Collected: 06/03/21 13:57 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 17:49	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 18:31	AJ	XEN MID
Soluble	Leach	DI Leach			3839	06/07/21 10:20	CH	XEN MID
Soluble	Analysis	300.0		1	3888	06/08/21 19:57	CH	XEN MID

Client Sample ID: FS03 Lab Sample ID: 890-781-7

Date Collected: 06/03/21 14:46 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 18:09	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 18:52	AJ	XEN MID
Soluble	Leach	DI Leach			3839	06/07/21 10:20	CH	XEN MID
Soluble	Analysis	300.0		1	3888	06/08/21 20:02	CH	XEN MID

Client Sample ID: FS04 Lab Sample ID: 890-781-8

Date Collected: 06/03/21 15:16 **Matrix: Solid**
Date Received: 06/04/21 13:23

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3823	06/07/21 08:42	MR	XEN MID
Total/NA	Analysis	8021B		1	3829	06/07/21 18:29	MR	XEN MID
Total/NA	Prep	8015NM Prep			3830	06/07/21 09:23	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3835	06/07/21 19:13	AJ	XEN MID
Soluble	Leach	DI Leach			3839	06/07/21 10:20	CH	XEN MID
Soluble	Analysis	300.0		5	3888	06/08/21 20:07	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-781-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-781-1
SDG: 31403236.003.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-781-1	PH01	Solid	06/03/21 09:50	06/04/21 13:23	- 1
890-781-2	PH01C	Solid	06/03/21 10:05	06/04/21 13:23	- 4
890-781-3	PH02B	Solid	06/03/21 11:00	06/04/21 13:23	- 3
890-781-4	PH02C	Solid	06/03/21 11:05	06/04/21 13:23	- 4
890-781-5	FS01	Solid	06/03/21 12:45	06/04/21 13:23	- 2
890-781-6	FS02	Solid	06/03/21 13:57	06/04/21 13:23	- 2
890-781-7	FS03	Solid	06/03/21 14:46	06/04/21 13:23	- 2
890-781-8	FS04	Solid	06/03/21 15:16	06/04/21 13:23	- 2

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 e Green Street
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849	Email:	Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com

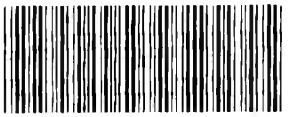
Work Order Comments

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

Project Name:	Ross Draw 25	Turn Around	
Project Number:	31403236.003.0129	Routine ☐	
P.O. Number:		Rush: 48 H	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	5.0 / 4.6	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.7
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST



Work Order Notes

Cost Center 1056651001
Incident # NAPP2111853419

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
PH01	S	6/3/2021	9:50	1'	1	X	X	X	Discrete
PH01C	S	6/3/2021	10:05	4'	1	X	X	X	Discrete
PH02B	S	6/3/2021	11:00	3'	1	X	X	X	Discrete
PH02C	S	6/3/2021	11:05	4'	1	X	X	X	Discrete
FS01	S	6/3/2021	12:45	2'	1	X	X	X	Composite
FS02	S	6/3/2021	13:57	2'	1	X	X	X	Composite
FS03	S	6/3/2021	14:46	2'	1	X	X	X	Composite
FS04	S	6/3/2021	15:16	2'	1	X	X	X	Composite

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

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			6/4/21 13:27	2		6/4/21 13:34
3				4		
5				6		

Revised Date 051418 Rev 2018 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-781-1
SDG Number: 31403236.003.0129

Login Number: 781
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-781-1
SDG Number: 31403236.003.0129

Login Number: 781
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/07/21 08:50 AM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-782-1
Laboratory Sample Delivery Group: 31403236.003.0129
Client Project/Site: Ross Draw 25

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

Attn: Dan Moir

JKramer

Authorized for release by:
6/9/2021 8:38:36 PM

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

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

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

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Laboratory Job ID: 890-782-1
SDG: 31403236.003.0129

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Qualifiers

GC VOA

Qualifier	Qualifier Description
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: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Job ID: 890-782-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-782-1

Receipt
The samples were received on 6/4/2021 4:25 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 6.6°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SW01 (890-782-1), SW02 (890-782-2), FS05 (890-782-3), FS06 (890-782-4), FS07 (890-782-5), FS08 (890-782-6) and FS09 (890-782-7).

GC VOA
Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: FS06 (890-782-4), FS07 (890-782-5) and FS08 (890-782-6). The sample(s) shows evidence of matrix interference.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS09 (890-782-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Client Sample ID: SW01

Lab Sample ID: 890-782-1
Matrix: Solid
Date Collected: 06/04/21 10:17
Date Received: 06/04/21 16:25
Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 13:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 13:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 13:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 13:53	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 13:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 13:53	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/08/21 09:13*	*06/08/21 13:53*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*06/08/21 09:13*	*06/08/21 13:53*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/08/21 15:00	06/08/21 21:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/08/21 15:00	06/08/21 21:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/08/21 15:00	06/08/21 21:00	1
Total TPH	<49.8	U	49.8		mg/Kg		06/08/21 15:00	06/08/21 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*06/08/21 15:00*	*06/08/21 21:00*	*1*
o-Terphenyl	*84*		*70 - 130*	*06/08/21 15:00*	*06/08/21 21:00*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5170**		49.5		mg/Kg			06/08/21 22:54	10

Client Sample ID: SW02

Lab Sample ID: 890-782-2
Matrix: Solid
Date Collected: 06/04/21 09:42
Date Received: 06/04/21 16:25
Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 14:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 14:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 14:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/08/21 09:13	06/08/21 14:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 14:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/08/21 09:13	06/08/21 14:13	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/08/21 09:13	06/08/21 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/08/21 09:13*	*06/08/21 14:13*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*06/08/21 09:13*	*06/08/21 14:13*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: SW02 Lab Sample ID: 890-782-2

Date Collected: 06/04/21 09:42 **Matrix: Solid**
Date Received: 06/04/21 16:25
Sample Depth: 0 - 2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 21:21	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 21:21	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 21:21	1
Total TPH	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 21:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*06/08/21 15:00*	*06/08/21 21:21*	*1*
o-Terphenyl	*85*		*70 - 130*	*06/08/21 15:00*	*06/08/21 21:21*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5900**		49.8		mg/Kg			06/08/21 22:59	10

Client Sample ID: FS05 Lab Sample ID: 890-782-3

Date Collected: 06/04/21 11:55 **Matrix: Solid**
Date Received: 06/04/21 16:25
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		06/08/21 09:13	06/08/21 14:34	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/08/21 09:13	06/08/21 14:34	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/08/21 09:13	06/08/21 14:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/08/21 09:13	06/08/21 14:34	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/08/21 09:13	06/08/21 14:34	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/08/21 09:13	06/08/21 14:34	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/08/21 09:13	06/08/21 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/08/21 09:13*	*06/08/21 14:34*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*06/08/21 09:13*	*06/08/21 14:34*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 21:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 21:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 21:42	1
Total TPH	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 21:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*06/08/21 15:00*	*06/08/21 21:42*	*1*
o-Terphenyl	*91*		*70 - 130*	*06/08/21 15:00*	*06/08/21 21:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2100**		24.9		mg/Kg			06/08/21 23:05	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Client Sample ID: FS06

Lab Sample ID: 890-782-4
Matrix: Solid
Date Collected: 06/04/21 12:00
Date Received: 06/04/21 16:25
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		06/08/21 09:13	06/08/21 14:54	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/08/21 09:13	06/08/21 14:54	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/08/21 09:13	06/08/21 14:54	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/08/21 09:13	06/08/21 14:54	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/08/21 09:13	06/08/21 14:54	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/08/21 09:13	06/08/21 14:54	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/08/21 09:13	06/08/21 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*06/08/21 09:13*	*06/08/21 14:54*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/08/21 09:13*	*06/08/21 14:54*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 22:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 22:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 22:03	1
Total TPH	<49.9	U	49.9		mg/Kg		06/08/21 15:00	06/08/21 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*06/08/21 15:00*	*06/08/21 22:03*	*1*
o-Terphenyl	*91*		*70 - 130*	*06/08/21 15:00*	*06/08/21 22:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4780**		25.0		mg/Kg			06/08/21 23:10	5

Client Sample ID: FS07

Lab Sample ID: 890-782-5
Matrix: Solid
Date Collected: 06/04/21 13:15
Date Received: 06/04/21 16:25
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 15:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 15:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 15:14	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/08/21 09:13	06/08/21 15:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 15:14	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/08/21 09:13	06/08/21 15:14	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/08/21 09:13	06/08/21 15:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*06/08/21 09:13*	*06/08/21 15:14*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/08/21 09:13*	*06/08/21 15:14*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: FS07 Lab Sample ID: 890-782-5

Date Collected: 06/04/21 13:15 **Matrix: Solid**
Date Received: 06/04/21 16:25
Sample Depth: - 1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:24	1
Total TPH	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/08/21 15:00*	*06/08/21 22:24*	*1*
o-Terphenyl	*91*		*70 - 130*	*06/08/21 15:00*	*06/08/21 22:24*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**873**		5.00		mg/Kg			06/08/21 23:16	1

Client Sample ID: FS08 Lab Sample ID: 890-782-6

Date Collected: 06/04/21 13:30 **Matrix: Solid**
Date Received: 06/04/21 16:25
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		06/08/21 09:13	06/08/21 15:35	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:35	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:35	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 15:35	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:35	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 15:35	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*06/08/21 09:13*	*06/08/21 15:35*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/08/21 09:13*	*06/08/21 15:35*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:45	1
Total TPH	<50.0	U	50.0		mg/Kg		06/08/21 15:00	06/08/21 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*06/08/21 15:00*	*06/08/21 22:45*	*1*
o-Terphenyl	*99*		*70 - 130*	*06/08/21 15:00*	*06/08/21 22:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**529**		5.00		mg/Kg			06/08/21 23:21	1

Client Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Client Sample ID: FS09

Date Collected: 06/04/21 13:42
Date Received: 06/04/21 16:25
Sample Depth: - 1

Lab Sample ID: 890-782-7

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:55	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:55	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:55	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 15:55	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/08/21 09:13	06/08/21 15:55	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 15:55	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/08/21 09:13	06/08/21 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*06/08/21 09:13*	*06/08/21 15:55*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/08/21 09:13*	*06/08/21 15:55*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/08/21 15:00	06/08/21 23:06	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/08/21 15:00	06/08/21 23:06	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/08/21 15:00	06/08/21 23:06	1
Total TPH	<49.7	U	49.7		mg/Kg		06/08/21 15:00	06/08/21 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*06/08/21 15:00*	*06/08/21 23:06*	*1*
o-Terphenyl	*88*		*70 - 130*	*06/08/21 15:00*	*06/08/21 23:06*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**78.3**		4.99		mg/Kg			06/08/21 23:27	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-782-1	SW01	117	102
890-782-2	SW02	118	101
890-782-3	FS05	118	102
890-782-4	FS06	120	100
890-782-5	FS07	123	100
890-782-6	FS08	130	97
890-782-7	FS09	126	98
LCS 880-3869/1-A	Lab Control Sample	107	94
LCSD 880-3869/2-A	Lab Control Sample Dup	107	95
MB 880-3869/5-A	Method Blank	112	95

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-782-1	SW01	93	84
890-782-2	SW02	94	85
890-782-3	FS05	101	91
890-782-4	FS06	101	91
890-782-5	FS07	102	91
890-782-6	FS08	111	99
890-782-7	FS09	101	88
LCS 880-3887/2-A	Lab Control Sample	86	68 S1-
LCSD 880-3887/3-A	Lab Control Sample Dup	83	67 S1-
MB 880-3887/1-A	Method Blank	90	81

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-3869/5-A
Matrix: Solid
Analysis Batch: 3870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3869

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 13:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 13:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 13:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/08/21 09:13	06/08/21 13:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/08/21 09:13	06/08/21 13:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/08/21 09:13	06/08/21 13:03	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/08/21 09:13	06/08/21 13:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*06/08/21 09:13*	*06/08/21 13:03*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/08/21 09:13*	*06/08/21 13:03*	*1*

Lab Sample ID: LCS 880-3869/1-A
Matrix: Solid
Analysis Batch: 3870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3869

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.08975		mg/Kg		90	70 - 130		
Toluene			0.100	0.1047		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1104		mg/Kg		110	70 - 130		
m-Xylene & p-Xylene			0.200	0.2269		mg/Kg		113	70 - 130		
o-Xylene			0.100	0.1153		mg/Kg		115	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-3869/2-A
Matrix: Solid
Analysis Batch: 3870

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3869

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.08806		mg/Kg		88	70 - 130	2	35
Toluene			0.100	0.1037		mg/Kg		104	70 - 130	1	35
Ethylbenzene			0.100	0.1099		mg/Kg		110	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.2258		mg/Kg		113	70 - 130	0	35
o-Xylene			0.100	0.1137		mg/Kg		114	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

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

Lab Sample ID: MB 880-3887/1-A
Matrix: Solid
Analysis Batch: 3877

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 3887

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/08/21 12:06	06/08/21 14:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/08/21 12:06	06/08/21 14:22	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/08/21 12:06	06/08/21 14:22	1
Total TPH	<50.0	U	50.0		mg/Kg		06/08/21 12:06	06/08/21 14:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*06/08/21 12:06*	*06/08/21 14:22*	*1*
o-Terphenyl	*81*		*70 - 130*	*06/08/21 12:06*	*06/08/21 14:22*	*1*

Lab Sample ID: LCS 880-3887/2-A
Matrix: Solid
Analysis Batch: 3877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 3887

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	748.9		mg/Kg		75	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	825.8		mg/Kg		83	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*68*	*S1-*	*70 - 130*

Lab Sample ID: LCSD 880-3887/3-A
Matrix: Solid
Analysis Batch: 3877

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 3887

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	775.5		mg/Kg		78	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	800.9		mg/Kg		80	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*83*		*70 - 130*
o-Terphenyl	*67*	*S1-*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-3838/1-A
Matrix: Solid
Analysis Batch: 3904

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/08/21 20:43	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-3838/2-A
Matrix: Solid
Analysis Batch: 3904

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	251.2		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-3838/3-A
Matrix: Solid
Analysis Batch: 3904

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	254.5		mg/Kg		102	90 - 110	1	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

GC VOA

Prep Batch: 3869

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-782-1	SW01	Total/NA	Solid	5035	
890-782-2	SW02	Total/NA	Solid	5035	
890-782-3	FS05	Total/NA	Solid	5035	
890-782-4	FS06	Total/NA	Solid	5035	
890-782-5	FS07	Total/NA	Solid	5035	
890-782-6	FS08	Total/NA	Solid	5035	
890-782-7	FS09	Total/NA	Solid	5035	
MB 880-3869/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-3869/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-3869/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 3870

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-782-1	SW01	Total/NA	Solid	8021B	3869
890-782-2	SW02	Total/NA	Solid	8021B	3869
890-782-3	FS05	Total/NA	Solid	8021B	3869
890-782-4	FS06	Total/NA	Solid	8021B	3869
890-782-5	FS07	Total/NA	Solid	8021B	3869
890-782-6	FS08	Total/NA	Solid	8021B	3869
890-782-7	FS09	Total/NA	Solid	8021B	3869
MB 880-3869/5-A	Method Blank	Total/NA	Solid	8021B	3869
LCS 880-3869/1-A	Lab Control Sample	Total/NA	Solid	8021B	3869
LCSD 880-3869/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3869

GC Semi VOA

Analysis Batch: 3877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-782-1	SW01	Total/NA	Solid	8015B NM	3887
890-782-2	SW02	Total/NA	Solid	8015B NM	3887
890-782-3	FS05	Total/NA	Solid	8015B NM	3887
890-782-4	FS06	Total/NA	Solid	8015B NM	3887
890-782-5	FS07	Total/NA	Solid	8015B NM	3887
890-782-6	FS08	Total/NA	Solid	8015B NM	3887
890-782-7	FS09	Total/NA	Solid	8015B NM	3887
MB 880-3887/1-A	Method Blank	Total/NA	Solid	8015B NM	3887
LCS 880-3887/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	3887
LCSD 880-3887/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	3887

Prep Batch: 3887

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-782-1	SW01	Total/NA	Solid	8015NM Prep	
890-782-2	SW02	Total/NA	Solid	8015NM Prep	
890-782-3	FS05	Total/NA	Solid	8015NM Prep	
890-782-4	FS06	Total/NA	Solid	8015NM Prep	
890-782-5	FS07	Total/NA	Solid	8015NM Prep	
890-782-6	FS08	Total/NA	Solid	8015NM Prep	
890-782-7	FS09	Total/NA	Solid	8015NM Prep	
MB 880-3887/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-3887/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-3887/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

HPLC/IC

Leach Batch: 3838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-782-1	SW01	Soluble	Solid	DI Leach	
890-782-2	SW02	Soluble	Solid	DI Leach	
890-782-3	FS05	Soluble	Solid	DI Leach	
890-782-4	FS06	Soluble	Solid	DI Leach	
890-782-5	FS07	Soluble	Solid	DI Leach	
890-782-6	FS08	Soluble	Solid	DI Leach	
890-782-7	FS09	Soluble	Solid	DI Leach	
MB 880-3838/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-3838/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-3838/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 3904

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-782-1	SW01	Soluble	Solid	300.0	3838
890-782-2	SW02	Soluble	Solid	300.0	3838
890-782-3	FS05	Soluble	Solid	300.0	3838
890-782-4	FS06	Soluble	Solid	300.0	3838
890-782-5	FS07	Soluble	Solid	300.0	3838
890-782-6	FS08	Soluble	Solid	300.0	3838
890-782-7	FS09	Soluble	Solid	300.0	3838
MB 880-3838/1-A	Method Blank	Soluble	Solid	300.0	3838
LCS 880-3838/2-A	Lab Control Sample	Soluble	Solid	300.0	3838
LCSD 880-3838/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	3838

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: SW01 Lab Sample ID: 890-782-1

Date Collected: 06/04/21 10:17 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 13:53	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 21:00	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		10	3904	06/08/21 22:54	CH	XEN MID

Client Sample ID: SW02 Lab Sample ID: 890-782-2

Date Collected: 06/04/21 09:42 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 14:13	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 21:21	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		10	3904	06/08/21 22:59	CH	XEN MID

Client Sample ID: FS05 Lab Sample ID: 890-782-3

Date Collected: 06/04/21 11:55 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 14:34	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 21:42	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		5	3904	06/08/21 23:05	CH	XEN MID

Client Sample ID: FS06 Lab Sample ID: 890-782-4

Date Collected: 06/04/21 12:00 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 14:54	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 22:03	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		5	3904	06/08/21 23:10	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

Client Sample ID: FS07 Lab Sample ID: 890-782-5

Date Collected: 06/04/21 13:15 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 15:14	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 22:24	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		1	3904	06/08/21 23:16	CH	XEN MID

Client Sample ID: FS08 Lab Sample ID: 890-782-6

Date Collected: 06/04/21 13:30 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 15:35	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 22:45	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		1	3904	06/08/21 23:21	CH	XEN MID

Client Sample ID: FS09 Lab Sample ID: 890-782-7

Date Collected: 06/04/21 13:42 **Matrix: Solid**
Date Received: 06/04/21 16:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			3869	06/08/21 09:13	MR	XEN MID
Total/NA	Analysis	8021B		1	3870	06/08/21 15:55	MR	XEN MID
Total/NA	Prep	8015NM Prep			3887	06/08/21 15:00	DM	XEN MID
Total/NA	Analysis	8015B NM		1	3877	06/08/21 23:06	AJ	XEN MID
Soluble	Leach	DI Leach			3838	06/07/21 10:18	CH	XEN MID
Soluble	Analysis	300.0		1	3904	06/08/21 23:27	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Laboratory: Eurofins Xenco, Midland

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

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

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

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

Method Summary

Client: WSP USA Inc. Job ID: 890-782-1
Project/Site: Ross Draw 25 SDG: 31403236.003.0129

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

Protocol References:

ASTM = ASTM International

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

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

Laboratory References:

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

Sample Summary

Client: WSP USA Inc.
Project/Site: Ross Draw 25

Job ID: 890-782-1
SDG: 31403236.003.0129

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-782-1	SW01	Solid	06/04/21 10:17	06/04/21 16:25	0 - 2
890-782-2	SW02	Solid	06/04/21 09:42	06/04/21 16:25	0 - 2
890-782-3	FS05	Solid	06/04/21 11:55	06/04/21 16:25	- 1
890-782-4	FS06	Solid	06/04/21 12:00	06/04/21 16:25	- 1
890-782-5	FS07	Solid	06/04/21 13:15	06/04/21 16:25	- 1
890-782-6	FS08	Solid	06/04/21 13:30	06/04/21 16:25	- 1
890-782-7	FS09	Solid	06/04/21 13:42	06/04/21 16:25	- 1

Chain of Custody

Work Order No: _____

XENCO LABORATORIES

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

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 e Green Street
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	Carlsbad, NM, 88220
Phone:	(432) 236-3849 Email:	Email:	Elliot.Lee@wsp.com, Tacoma.Morrissey@wsp.com

Work Order Comments

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

Project Name:	Ross Draw 25	Turn Around	
Project Number:	31403236.003.0129	Routine ☐	
P.O. Number:		Rush: 24H	
Sampler's Name:	Elliot Lee	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	6.8 / 6.6	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.7
Sample Custody Seals:	Yes No (N/A)	Total Containers:	

ANALYSIS REQUEST

Work Order Notes

Cost Center 1056651001
Incident # NAPP2111853419

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

890-782 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
SW01	S	6/4/2021	10:17	0-2'	1	X	X	X	Composite
SW02	S	6/4/2021	9:42	0-2'	1	X	X	X	Composite
FS05	S	6/4/2021	11:55	1'	1	X	X	X	Composite
FS06	S	6/4/2021	12:00	1'	1	X	X	X	Composite
FS07	S	6/4/2021	13:15	1'	1	X	X	X	Composite
FS08	S	6/4/2021	13:30	1'	1	X	X	X	Composite
FS09	S	6/4/2021	13:42	1'	1	X	X	X	Composite

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6/4/21 / 16:25	2		
3			4		
5			6		

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-253 1
Client Contact: Shipping/Receiving	Phone	E-Mail: jessica kramer@eurofinset com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Louisiana, NELAP - Texas		Job #: 890-782-1
Address: 1211 W Florida Ave,	Due Date Requested: 6/8/2021			
City: Midland	TAT Requested (days)			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Ross Draw 25	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep Full TPH	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SW01 (890-782-1)	6/4/21	10 17 Mountain		Solid			X	X	X	1	
SW02 (890-782-2)	6/4/21	09 42 Mountain		Solid			X	X	X	1	
FS05 (890-782-3)	6/4/21	11 55 Mountain		Solid			X	X	X	1	
FS06 (890-782-4)	6/4/21	12 00 Mountain		Solid			X	X	X	1	
FS07 (890-782-5)	6/4/21	13 15 Mountain		Solid			X	X	X	1	
FS08 (890-782-6)	6/4/21	13 30 Mountain		Solid			X	X	X	1	
FS09 (890-782-7)	6/4/21	13 42 Mountain		Solid			X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment:

Relinquished by: Cloe Cuyle 6-7-21	Date/Time:	Company	Received by:	Date/Time: 6-8-21 1000	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-782-1
SDG Number: 31403236.003.0129

Login Number: 782
List Number: 1
Creator: Clifton, Cloe

List Source: Eurofins Xenco, Carlsbad

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

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-782-1
SDG Number: 31403236.003.0129

Login Number: 782
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/08/21 01:15 PM

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

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

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

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 55971
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	11/17/2021