Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NRM2025263987
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: SSHE Manager

Signature: Adrian Baker Date: 08/12/2021

email: Adrian.Baker@exxonmobil.com Telephone: 432-221-7331

OCD Only

Received by: Chad Hensley Date: 09/17/2021

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: 09/17/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced

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

August 13, 2021

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

RE: Closure Request
Poker Lake Unit 28 BS 158H
Incident Number NRM2025263987
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 Poker Lake Unit (PLU) 28 BS 158H (Site) in Unit H, Section 28, Township 25 South, Range 31 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 frac fluid at the Site. Based on the excavation activities and analytical results from the soil sampling events, XTO is submitting this Closure Request, describing remediation that has occurred and requesting no further action (NFA) for Incident Number NRM2025263987.

RELEASE BACKGROUND

On August 21, 2020, a rupture disk failed, resulting in the release of 20 barrels (bbls) of frac fluid onto the surface of the well pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 15 bbls of frac fluid was recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on September 3, 2020. The release was assigned Incident Number NRM2025263987.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. During March 2021, WSP installed a soil boring (C-4500) within 0.5 miles of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring C-4500 was drilled to a depth of 110 feet bgs. A WSP geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The Well Record and Log is included in Attachment 1. The location of the borehole is approximately 0.49 miles west of the Site and is depicted on Figure

1. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 110 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The next closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 320643103465002, located approximately 0.74 miles north-northwest of the Site. The groundwater well was most recently measured in January 2013 has a reported depth to groundwater of 318 feet bgs and a total depth of 400 feet bgs. Ground surface elevation at the groundwater well location is 3,374 feet amsl, which is approximately 32 feet higher in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1. There are no regional or Site-specific hydrological conditions, such as shallow surface water, karst features, wetlands, or vegetation that suggest the Site is conducive to shallow groundwater.

The closest continuously flowing or significant watercourse to the Site is an emergent wetland, located approximately 1.38 miles southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES

On June 18, 2021, upon completion of hydraulic fracturing operations, 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 five preliminary assessment soil samples (SS01 through SS05) 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.

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 Midland, Texas, 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 SS02 and SS04 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for preliminary soil samples SS01, SS03, and SS05 indicated that TPH-GRO/TPH-DRO, TPH, and/or 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

Between June 18, 2021 and June 21, 2021, WSP personnel were at the Site to oversee delineation and excavation activities. One pothole (PH01) was advanced within the release extent to assess the vertical extent of impacted soil. Pothole PH01 was advanced to a depth of 4 feet bgs. Delineation soil samples were collected from the pothole at depths of 1-foot, 2 feet, and 4 feet bgs. Soil from the pothole was field screened for volatile aromatic hydrocarbons and chloride as previously described. Field screening results and observations for pothole PH01 were logged on a lithologic/soil sampling log, which is included in Attachment 2. The pothole and delineation soil sample locations are depicted on Figure 3.

Impacted soil was excavated from the release area as indicated by visible staining, field screening activities, and laboratory analytical results for the preliminary and delineation soil samples. To direct excavation activities, WSP screened soil for volatile aromatic hydrocarbons and chloride as previously described. The excavation was completed to depths ranging from 1-foot to 1.5 feet bgs. Following removal of impacted soil, WSP collected 5-point composite soil samples at least every 200 square feet from the 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 FS01 through FS12 were collected from the floor of the excavation from depths ranging from of 1 foot bgs to 1.5 feet bgs. Due to the shallow depth of the excavation, the floor samples were also representative

of the excavation sidewalls. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 4. Photographic documentation is included in Attachment 3.

The excavation area measured approximately 2,300 square feet. A total of approximately 130 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 areas were secured with fencing.

SOIL ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01, SS03, and SS05 indicated that TPH-GRO/TPH-DRO, TPH, and/or chloride concentrations exceeded the Closure Criteria.

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

Based on laboratory analytical results for the preliminary and delineation soil samples, impacted soil was excavated. Laboratory analytical results for excavation floor samples FS01 through FS12 indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Attachment 4.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the August 21, 2020 release of frac fluid. 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. Additionally, laboratory analytical results for delineation samples PH01A/PH01B provided vertical delineation to the most stringent Table 1 Closure Criteria. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site 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 NRM2025263987.

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

Sincerely,

WSP USA Inc.

Anna Byers
Consultant, Geologist

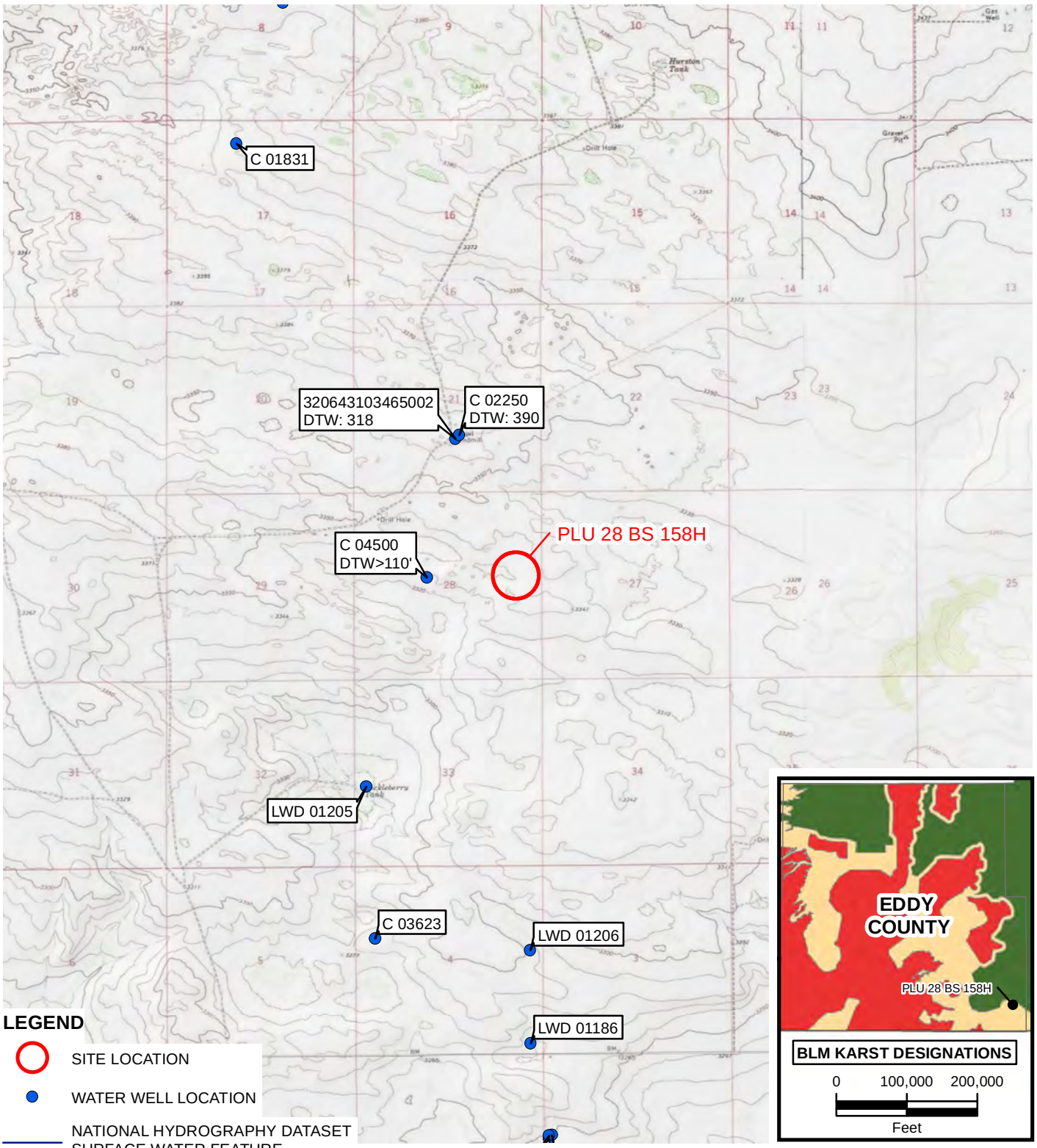
Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Adrian Baker, XTO
Bureau of Land Management

Attachments:

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

FIGURES



LEGEND

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

DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT
TD: TOTAL DEPTH IN FEET
NOTE: INCIDENT NUMBER NRM2025263987

FIGURE 1
SITE LOCATION MAP
PLU 28 BS 158H
UNIT H SEC 28 T25S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC

P:\XTO Energy\GIS\MXD\012920134_PLU 28 BS 158H\012920134_FIG01_SL_RECEPTOR_2021.mxd

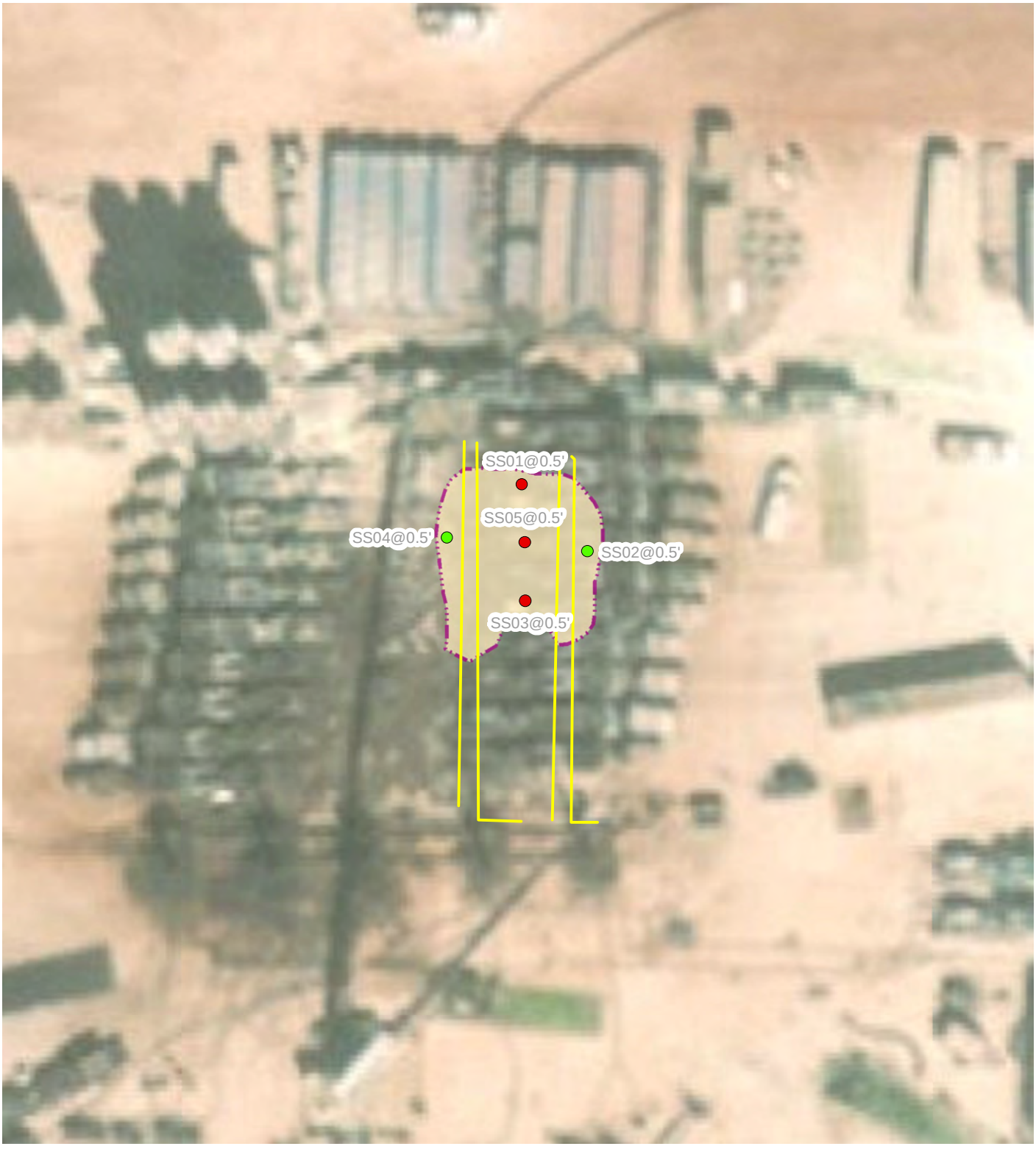


IMAGE COURTESY OF ESRI

LEGEND

- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE CLOSURE CRITERIA
- PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA
- GAS LINE
- RELEASE EXTENT

NOTE: INCIDENT NUMBER NRM2025263987
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)

0 40 80
Feet

N

FIGURE 2
PRELIMINARY SOIL SAMPLE LOCATIONS
PLU 28 BS 158H
UNIT H SEC 28 T25S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920134_PLU 28 BS 158H\012920134_FIG02_PRELIMINARY_2021.mxd

LEGEND

DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

GAS LINE

RELEASE EXTENT

NOTE: INCIDENT NUMBER NRM2025263987
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

0 40 80
Feet

N

FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
PLU 28 BS 158H
UNIT H SEC 28 T25S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920134_PLU 28 BS 158H\012920134_FIG03_DELINEATION_2021.mxd

LEGEND

FLOOR SAMPLE IN COMPLIANCE WITH APPLICABLE CLOSURE CRITERIA

GAS LINE

EXCAVATION EXTENT

NOTE: INCIDENT NUMBER NRM2025263987
SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
TEXT: INDICATES SOIL REPRESENTED BY SAMPLE THAT WAS REMOVED

IMAGE COURTESY OF ESRI

0 40 80
Feet

N

FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
PLU 28 BS 158H
UNIT H SEC 28 T25S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920134_PLU 28 BS 158H\012920134_FIG04_EXCAVATION_2021.mxd

TABLES

Table 1

Soil Analytical Results
PLU 28 BS 158H
Incident Number NRM2025263987
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Surface Samples										
SS01	06/18/2021	0.5	<0.00200	<0.00399	609	<50.0	182	609	791	**39,300**
SS02	06/18/2021	0.5	<0.00200	<0.00399	101	<49.9	<49.9	101	101	17,700
SS03	06/18/2021	0.5	<0.00198	<0.00396	1,030	<49.9	381	**1,030**	1,410	**37,400**
SS04	06/18/2021	0.5	<0.00201	<0.00402	123	<50.0	<50.0	123	123	16,200
SS05	06/18/2021	0.5	<0.00202	<0.00403	5,750	<50.0	3,110	**5,750**	**8,860**	**20,500**
Delineation Samples										
PH01	06/18/2021	1	<0.00200	<0.00401	115	<49.7	<49.7	115	115	3,050
PH01A	06/18/2021	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	309
PH01B	06/18/2021	4	<0.00202	0.00659	<50.0	<50.0	<50.0	<50.0	<50.0	6.71
Excavation Samples										
FS01	06/18/2021	1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	3,940
FS02	06/18/2021	1.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	3,560
FS03	06/18/2021	1.5	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	2,270
FS04	06/18/2021	1.5	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	5,870
FS05	06/21/2021	1.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,520
FS06	06/21/2021	1.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	3,050
FS07	06/21/2021	1.5	<0.00200	<0.00400	<49.8	70.9	<49.8	70.9	70.9	4,300
FS08	06/21/2021	1	<0.00201	<0.00402	<49.9	85.9	<49.9	85.9	85.9	5,310
FS09	06/21/2021	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,910
FS10	06/21/2021	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	1,370

Table 1

Soil Analytical Results
PLU 28 BS 158H
Incident Number NRM2025263987
Eddy County, New Mexico

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
FS11	06/21/2021	1.5	<0.00201	<0.00402	<49.8	121	<49.8	121	121	7,920
FS12	06/21/2021	1.5	<0.00202	<0.00404	<50.0	68.1	<50.0	68.1	68.1	4,730

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 - motor 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 RECORD

PLUGGING RECORD

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

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: C-4500- POD1

Well owner: XTO ENERGY (Kyle Littrell) Phone No.: 432.682.8873

Mailing address: 6401 Holiday Hill Dr.

City: Midland State: Texas Zip code: 79707

II. WELL PLUGGING INFORMATION:

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

2) New Mexico Well Driller License No.: 1249 Expiration Date: 04/30/23

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

4) Date well plugging began: 04/27/2021 Date well plugging concluded: 04/27/2021

5) GPS Well Location: Latitude: 32 deg, 6 min, 6.96 sec
Longitude: 103 deg, 47 min, 6.75 sec, WGS 84

6) Depth of well confirmed at initiation of plugging as: 110 ft below ground level (bgl), by the following manner: weighted tape

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

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

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

OSE DIT MAY 5 2021 PM 4:03

255.31E.28.144 / 682534

Version: September 8, 2009
Page 1 of 2

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

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
	0-10' Hydrated Bentonite	Approx.15.8 gallons	16 gallons	Augers	
	10'-110' Drill Cuttings	Approx. 172 gallons	172 gallons	Boring	

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

OSE DIT MAY 5 2021 PM2:03

III. SIGNATURE:

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

Jack Atkins

Signature of Well Driller

05/05/2021

Date

Version: September 8, 2009
Page 2 of 2

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02250	3	1	4	21	25S	31E	614912	3553620*

x

Driller License: **Driller Company:**

Driller Name: UNKNOWN

Drill Start Date:		**Drill Finish Date:**	12/31/1941	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	6 GPM
Casing Size:	8.63	**Depth Well:**	400 feet	**Depth Water:**	390 feet

x

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

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
NA	C 04500 POD1	4	4	1	28	25S	31E	614620	3552380

Driller License: 1249 **Driller Company:** ATKINS ENGINEERING ASSOC. INC.

Driller Name: ATKINS, JACKIE D.UELENER

Drill Start Date: 03/24/2021 **Drill Finish Date:** 03/24/2021 **Plug Date:** 04/27/2021

Log File Date: 05/05/2021 **PCW Rcv Date:** **Source:**

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

Casing Size: **Depth Well:** **Depth Water:**

USGS 320643103465002 25S.31E.21.413314A

Available data for this site SUMMARY OF ALL AVAILABLE DATA GO

Well Site

DESCRIPTION:

Latitude 32°06'46.0", Longitude 103°46'56.3" NAD83
Eddy County, New Mexico , Hydrologic Unit 13070001
Well depth: 400 feet
Land surface altitude: 3,374.00 feet above NGVD29.
Well completed in "Pecos River Basin alluvial aquifer" (N100PCSRVR) national aquifer.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-02-17	2013-01-17	2
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320329103462501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320329103462501 26S.31E.08.321433

Eddy County, New Mexico
Latitude 32°03'29", Longitude 103°46'25" NAD27
Land-surface elevation 3,250 feet above NAVD88
The depth of the well is 326 feet below land surface.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1949-03-10		D	278.45			2		U		U	A
1958-08-18		D	274.76			2		U		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions about sites/data?
Feedback on this web site
Automated retrievals
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News

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2020-08-31 12:37:51 EDT
0.26 0.24 nadww01

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320330103462501

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320330103462501 26S.31E.08.32143

Eddy County, New Mexico
Latitude 32°03'30", Longitude 103°46'25" NAD27
Land-surface elevation 3,252 feet above NAVD88
The depth of the well is 338 feet below land surface.
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-02-18		D	287.10			2	P	U		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status	P	Site was being pumped.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions about sites/data?
Feedback on this web site
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Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2020-08-31 12:37:37 EDT
0.27 0.24 nadww01

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320643103465002

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320643103465002 25S.31E.21.413314A

Eddy County, New Mexico
Latitude 32°06'46.0", Longitude 103°46'56.3" NAD83
Land-surface elevation 3,374.00 feet above NGVD29
The depth of the well is 400 feet below land surface.
This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1959-02-17		D	318.02			2	P	U		U	A
2013-01-17	12:40 MST	m					D	S	USGS	R	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Water-level accuracy		Not determined
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status	D	Site was dry (no water level was recorded).
Status	P	Site was being pumped.
Method of measurement	S	Steel-tape measurement.
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement	R	Reported by person other than the owner, driller, or another government agency.
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2020-08-31 12:16:11 EDT
0.29 0.26 nadww01

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

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- Full News

Groundwater levels for the Nation

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320932103443801

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320932103443801 25S.31E.02.23441

Eddy County, New Mexico
Latitude 32°09'37.4", Longitude 103°44'29.6" NAD83
Land-surface elevation 3,460.00 feet above NGVD29
The depth of the well is 1,016 feet below land surface.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Water-level accuracy	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1966-08-18		D	400.00			2		U		U	A
1976-01-28		D	390.27			2		U		U	A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level accuracy	2	Water level accuracy to nearest hundredth of a foot
Status		The reported water-level measurement represents a static level
Method of measurement	U	Unknown method.
Measuring agency		Not determined
Source of measurement	U	Source is unknown.
Water-level approval status	A	Approved for publication -- Processing and review completed.

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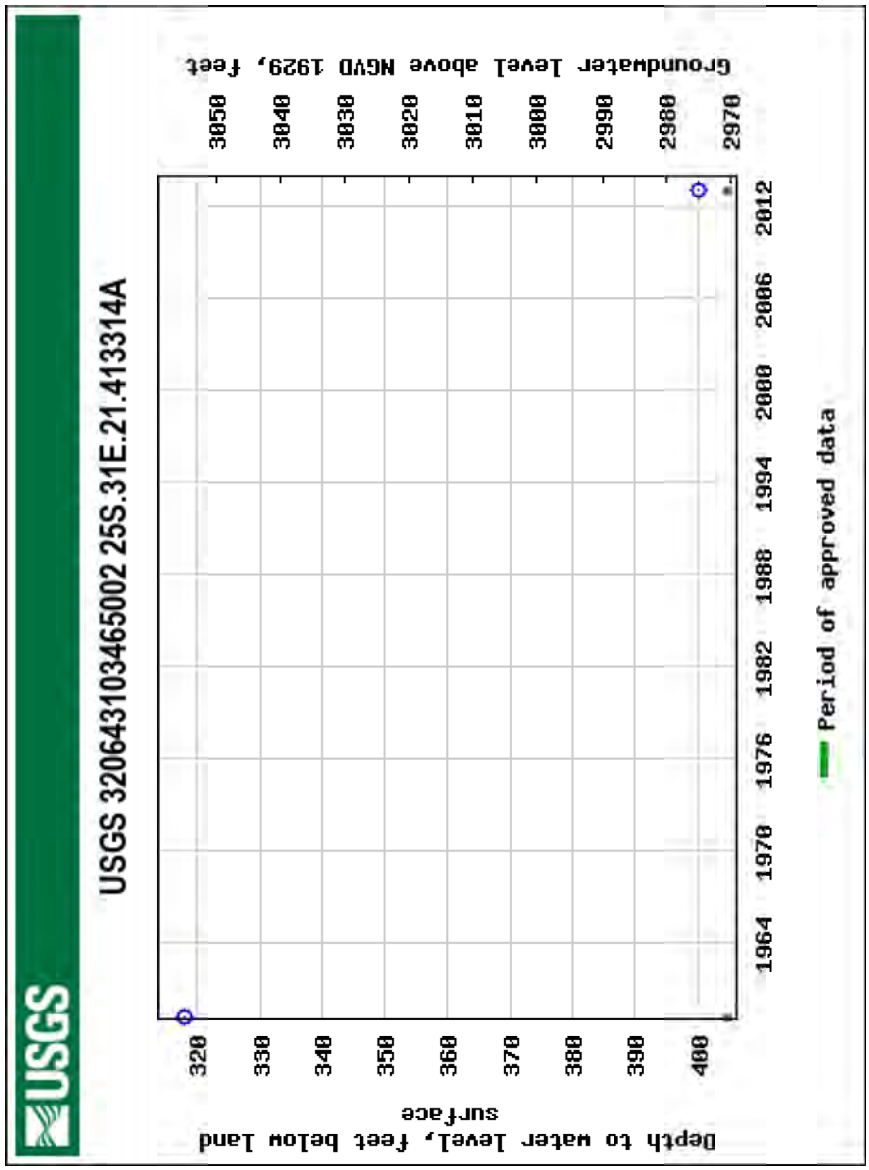
USGS 320643103465002 25S.31E.21.413314A
USGS
Depth to water level, feet below land surface
320
330
340
350
360
370
380
390
400
Groundwater level above NGVD 1929, feet
3050
3040
3030
3020
3010
3000
2990
2980
2970
1964
1970
1976
1982
1988
1994
2000
2006
2012
Period of approved data

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 01777				08	26S	31E	613245	3547409*

x

Driller License:	208	**Driller Company:**	VAN NOY, W.L.		
Driller Name:	VAN NOY, W.L.				
Drill Start Date:	09/09/1977	**Drill Finish Date:**	09/16/1977	**Plug Date:**	
Log File Date:	09/28/1977	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.63	**Depth Well:**	325 feet	**Depth Water:**	300 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	300	325	Sandstone/Gravel/Conglomerate

x

Casing Perforations:	Top	Bottom
	295	325

x

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

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02248	1	2	3	08	26S	31E	612942	3547316*

x

Driller License: **Driller Company:**

Driller Name: UNKNOWN

Drill Start Date:		**Drill Finish Date:**	12/31/1946	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	6 GPM
Casing Size:	6.38	**Depth Well:**	300 feet	**Depth Water:**	292 feet

x

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

New Mexico Office of the State Engineer
Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) Q64	Q16	Q4	Sec	Tws	Rng	(NAD83 UTM in meters) X	Y
	C 03639 POD1	3	4	2	01	26S	31E	620168	3549279

Driller License: 1654 **Driller Company:** NOT WORKING FOR HIRE--SIRMAN DRILLING AND CONSTRUC

Driller Name:

Drill Start Date: 09/23/2013 **Drill Finish Date:** 09/25/2013 **Plug Date:**

Log File Date: 10/25/2013 **PCW Rcv Date:** **Source:** Shallow

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

Casing Size: 6.00 **Depth Well:** 700 feet **Depth Water:** 365 feet

Water Bearing Stratifications:

Top	Bottom	Description
560	600	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
600	660

Meter Number: 16575 **Meter Make:** MASTERMETER

Meter Serial Number: 8827642 **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
12/26/2013	2013	4487	A	RPT		0	
04/01/2014	2014	15593	A	RPT		3.408	
07/01/2014	2014	27654	A	RPT		3.701	
10/01/2014	2014	43114	A	RPT		4.744	
12/31/2014	2014	54047	A	RPT		3.355	
02/01/2015	2015	55287	A	RPT		0.381	
03/02/2015	2015	56670	A	RPT		0.424	
04/02/2015	2015	60341	A	RPT		1.127	
04/30/2015	2015	65590	A	RPT		1.611	
05/31/2015	2015	71252	A	RPT		1.738	
07/01/2015	2015	74451	A	RPT		0.982	
08/01/2015	2015	77975	A	RPT		1.081	
08/31/2015	2015	82253	A	RPT		1.313	
10/01/2015	2015	86369	A	RPT		1.263	

****YTD Meter Amounts:**

Year	Amount
2013	0
2014	15.208
2015	9.920

8/31/20 10:34 AM POINT OF DIVERSION SUMMARY

New Mexico Office of the State Engineer
Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 03781 POD1	3	3	3	13	25S	30E	609306	3554761

x

Driller License: 331 **Driller Company:** SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.

Driller Name:

Drill Start Date: 01/08/2015 **Drill Finish Date:** 01/10/2015 **Plug Date:**

Log File Date: 02/19/2015 **PCW Rcv Date:** **Source:** Artesian

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

Casing Size: 8.63 **Depth Well:** 720 feet **Depth Water:** 325 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	200	370	Sandstone/Gravel/Conglomerate
	370	390	Sandstone/Gravel/Conglomerate
	390	410	Sandstone/Gravel/Conglomerate
	410	440	Sandstone/Gravel/Conglomerate
	440	460	Shale/Mudstone/Siltstone
	460	470	Shale/Mudstone/Siltstone
	470	490	Shale/Mudstone/Siltstone
	490	500	Shale/Mudstone/Siltstone
	500	510	Sandstone/Gravel/Conglomerate
	510	530	Shale/Mudstone/Siltstone
	530	660	Shale/Mudstone/Siltstone
	660	690	Shale/Mudstone/Siltstone
	690	700	Shale/Mudstone/Siltstone
	700	720	Shale/Mudstone/Siltstone

x

Casing Perforations:	Top	Bottom
	340	720

x

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
NA	C 04256 POD1	4	4	2	01	26S	31E	620384	3549257

x

Driller License: 1706 **Driller Company:** ELITE DRILLERS CORPORATION

Driller Name: BRYCE WALLACE

Drill Start Date: 06/28/2018 **Drill Finish Date:** 07/04/2018 **Plug Date:**

Log File Date: 07/18/2018 **PCW Rcv Date:** **Source:** Artesian

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 40 GPM

Casing Size: 5.80 **Depth Well:** 666 feet **Depth Water:** 340 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	330	390	Sandstone/Gravel/Conglomerate
	390	430	Sandstone/Gravel/Conglomerate
	430	480	Sandstone/Gravel/Conglomerate
	480	610	Sandstone/Gravel/Conglomerate

x

Casing Perforations:	Top	Bottom
	326	666

x

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG

WSP USA
508 West Stevens Street
Carlsbad, New Mexico 88220

BH or PH Name: PH01	Date: 6/18/2021
Site Name:	PLU 28 BS 158H
RP or Incident Number:	NRM2025263987
WSP Job Number:	TE012920134

LITHOLOGIC / SOIL SAMPLING LOG

Logged By: Will M.	Method: T. Hoe		
Lat/Long: 32.10227, -103.77669	Field Screening: Hatch Chloride Strips, PID	Hole Diameter: 24"	Total Depth: 4.0'

Comments:
TD at 4.0 feet

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks
						0		
D	3,040	1.1	N	PH01	1.0	1.0	CCHE	Poorly consolidated caliche, some sand. Odor, no plasticity, Organics. Tan
D	582	0.8	N	PH01A	2.0	2.0	CCHE	Poorly consolidated caliche, some sand and silt. No odor, no plasticity, Organics. Tan/White
D	BDL	0.6	N	PH01B	4.0	4.0	CCHE	Poorly consolidated caliche, some sand and silt. No odor, no plasticity, Organics. Tan/White

ATTACHMENT 3: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU 28 BS 158H Eddy County, NM	TE012920134

Photo No.	Date
1	June 18, 2021

Advancement of delineation PH01 within central area of release extent

Photo No.	Date
2	June 18, 2021

Western view of excavation extent

PHOTOGRAPHIC LOG		
XTO Energy, Inc.	PLU 28 BS 158H Eddy County, NM	TE012920134

Photo No.	Date
3	June 21, 2021

Continued excavation efforts

Photo No.	Date
4	June 21, 2021

Southwestern view of final excavation extent

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: 890-841-1
Laboratory Sample Delivery Group: TE012920134
Client Project/Site: PLU 28 BS 158H

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

Attn: Dan Moir

JKramer

Authorized for release by:
6/24/2021 10:21:47 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: PLU 28 BS 158H

Laboratory Job ID: 890-841-1
SDG: TE012920134

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-841-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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
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: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Job ID: 890-841-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-841-1

Receipt
The samples were received on 6/21/2021 8:43 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 4.6°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS01 (890-841-1), FS02 (890-841-2), FS03 (890-841-3) and FS04 (890-841-4).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: FS01 (890-841-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Internal standard responses were outside of acceptance limits for the following sample: FS01 (890-841-1). 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: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Client Sample ID: FS01

Lab Sample ID: 890-841-1
Matrix: Solid
Date Collected: 06/18/21 13:21
Date Received: 06/21/21 08:43
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		06/22/21 13:12	06/22/21 17:51	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 17:51	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 17:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/22/21 13:12	06/22/21 17:51	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 17:51	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/22/21 13:12	06/22/21 17:51	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/22/21 13:12	06/22/21 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*06/22/21 13:12*	*06/22/21 17:51*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/22/21 13:12*	*06/22/21 17:51*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:19	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:19	1
Total TPH	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*06/22/21 14:14*	*06/22/21 19:19*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/22/21 14:14*	*06/22/21 19:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3940**		25.0		mg/Kg			06/23/21 01:14	5

Client Sample ID: FS02

Lab Sample ID: 890-841-2
Matrix: Solid
Date Collected: 06/18/21 14:45
Date Received: 06/21/21 08:43
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/22/21 13:12	06/22/21 18:11	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/22/21 13:12	06/22/21 18:11	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/22/21 13:12	06/22/21 18:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/22/21 13:12	06/22/21 18:11	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/22/21 13:12	06/22/21 18:11	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/22/21 13:12	06/22/21 18:11	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/22/21 13:12	06/22/21 18:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*06/22/21 13:12*	*06/22/21 18:11*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/22/21 13:12*	*06/22/21 18:11*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-841-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Client Sample ID: FS02 Lab Sample ID: 890-841-2

Date Collected: 06/18/21 14:45 **Matrix: Solid**
Date Received: 06/21/21 08:43
Sample Depth: - 1.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:40	1
Total TPH	<49.8	U	49.8		mg/Kg		06/22/21 14:14	06/22/21 19:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*121*		*70 - 130*	*06/22/21 14:14*	*06/22/21 19:40*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/22/21 14:14*	*06/22/21 19:40*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3560**		25.3		mg/Kg			06/23/21 01:19	5

Client Sample ID: FS03 Lab Sample ID: 890-841-3

Date Collected: 06/18/21 14:50 **Matrix: Solid**
Date Received: 06/21/21 08:43
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 18:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 18:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 18:32	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/22/21 13:12	06/22/21 18:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 18:32	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/22/21 13:12	06/22/21 18:32	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/22/21 13:12	06/22/21 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/22/21 13:12*	*06/22/21 18:32*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/22/21 13:12*	*06/22/21 18:32*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		06/22/21 14:14	06/22/21 20:01	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		06/22/21 14:14	06/22/21 20:01	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/22/21 14:14	06/22/21 20:01	1
Total TPH	<49.7	U	49.7		mg/Kg		06/22/21 14:14	06/22/21 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*06/22/21 14:14*	*06/22/21 20:01*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/22/21 14:14*	*06/22/21 20:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2270**		25.2		mg/Kg			06/23/21 03:40	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Client Sample ID: FS04

Date Collected: 06/18/21 12:54
Date Received: 06/21/21 08:43
Sample Depth: - 1.5

Lab Sample ID: 890-841-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 18:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 18:52	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 18:52	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/22/21 13:12	06/22/21 18:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 18:52	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/22/21 13:12	06/22/21 18:52	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		06/22/21 13:12	06/22/21 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*06/22/21 13:12*	*06/22/21 18:52*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*06/22/21 13:12*	*06/22/21 18:52*	*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		06/22/21 14:14	06/22/21 20:22	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 20:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 20:22	1
Total TPH	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*06/22/21 14:14*	*06/22/21 20:22*	*1*
o-Terphenyl	*130*		*70 - 130*	*06/22/21 14:14*	*06/22/21 20:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5870**		50.0		mg/Kg			06/23/21 03:45	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

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)
890-841-1	FS01	136 S1+	93
890-841-2	FS02	115	99
890-841-3	FS03	117	100
890-841-4	FS04	120	102
LCS 880-4418/1-A	Lab Control Sample	109	97
MB 880-4418/5-A	Method Blank	114	91

Surrogate Legend

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

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		
LCSD 880-4418/2-A	Lab Control Sample Dup		

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)
890-841-1	FS01	107	116
890-841-2	FS02	121	126
890-841-3	FS03	118	126
890-841-4	FS04	124	130
LCS 880-4481/2-A	Lab Control Sample	115	113
LCSD 880-4481/3-A	Lab Control Sample Dup	114	113
MB 880-4481/1-A	Method Blank	106	116

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4418/5-A
Matrix: Solid
Analysis Batch: 4445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4418

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/21/21 13:11	06/22/21 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*06/21/21 13:11*	*06/22/21 11:20*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/21/21 13:11*	*06/22/21 11:20*	*1*

Lab Sample ID: LCS 880-4418/1-A
Matrix: Solid
Analysis Batch: 4445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4418

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09076		mg/Kg		91	70 - 130		
Toluene			0.100	0.1052		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1066		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2235		mg/Kg		112	70 - 130		
o-Xylene			0.100	0.1124		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4418/2-A
Matrix: Solid
Analysis Batch: 4445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4418

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09727		mg/Kg					
Toluene			0.100	0.1169		mg/Kg					
Ethylbenzene			0.100	0.1171		mg/Kg					
m-Xylene & p-Xylene			0.200	0.2436		mg/Kg					
o-Xylene			0.100	0.1217		mg/Kg					

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

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

Lab Sample ID: MB 880-4481/1-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4481

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		06/22/21 14:14	06/22/21 15:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1
Total TPH	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/22/21 14:14*	*06/22/21 15:25*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/22/21 14:14*	*06/22/21 15:25*	*1*

Lab Sample ID: LCS 880-4481/2-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4481

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	855.3		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.3		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-4481/3-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4481

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	838.4		mg/Kg		84	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	934.8		mg/Kg		93	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4412/1-A
Matrix: Solid
Analysis Batch: 4486

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			06/22/21 22:52	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4412/2-A
Matrix: Solid
Analysis Batch: 4486

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	236.6		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-4412/3-A
Matrix: Solid
Analysis Batch: 4486

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	237.1		mg/Kg		95	90 - 110	0	20

Lab Sample ID: MB 880-4413/1-A
Matrix: Solid
Analysis Batch: 4487

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			06/23/21 01:43	1

Lab Sample ID: LCS 880-4413/2-A
Matrix: Solid
Analysis Batch: 4487

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	232.2		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-4413/3-A
Matrix: Solid
Analysis Batch: 4487

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	232.4		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

GC VOA

Prep Batch: 4418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-1	FS01	Total/NA	Solid	5035	
890-841-2	FS02	Total/NA	Solid	5035	
890-841-3	FS03	Total/NA	Solid	5035	
890-841-4	FS04	Total/NA	Solid	5035	
MB 880-4418/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4418/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4418/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-1	FS01	Total/NA	Solid	8021B	4418
890-841-2	FS02	Total/NA	Solid	8021B	4418
890-841-3	FS03	Total/NA	Solid	8021B	4418
890-841-4	FS04	Total/NA	Solid	8021B	4418
MB 880-4418/5-A	Method Blank	Total/NA	Solid	8021B	4418
LCS 880-4418/1-A	Lab Control Sample	Total/NA	Solid	8021B	4418
LCSD 880-4418/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4418

GC Semi VOA

Analysis Batch: 4468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-1	FS01	Total/NA	Solid	8015B NM	4481
890-841-2	FS02	Total/NA	Solid	8015B NM	4481
890-841-3	FS03	Total/NA	Solid	8015B NM	4481
890-841-4	FS04	Total/NA	Solid	8015B NM	4481
MB 880-4481/1-A	Method Blank	Total/NA	Solid	8015B NM	4481
LCS 880-4481/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4481
LCSD 880-4481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4481

Prep Batch: 4481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-1	FS01	Total/NA	Solid	8015NM Prep	
890-841-2	FS02	Total/NA	Solid	8015NM Prep	
890-841-3	FS03	Total/NA	Solid	8015NM Prep	
890-841-4	FS04	Total/NA	Solid	8015NM Prep	
MB 880-4481/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4481/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 4412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-1	FS01	Soluble	Solid	DI Leach	
890-841-2	FS02	Soluble	Solid	DI Leach	
MB 880-4412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

HPLC/IC

Leach Batch: 4413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-3	FS03	Soluble	Solid	DI Leach	
890-841-4	FS04	Soluble	Solid	DI Leach	
MB 880-4413/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4413/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4413/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-1	FS01	Soluble	Solid	300.0	4412
890-841-2	FS02	Soluble	Solid	300.0	4412
MB 880-4412/1-A	Method Blank	Soluble	Solid	300.0	4412
LCS 880-4412/2-A	Lab Control Sample	Soluble	Solid	300.0	4412
LCSD 880-4412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4412

Analysis Batch: 4487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-841-3	FS03	Soluble	Solid	300.0	4413
890-841-4	FS04	Soluble	Solid	300.0	4413
MB 880-4413/1-A	Method Blank	Soluble	Solid	300.0	4413
LCS 880-4413/2-A	Lab Control Sample	Soluble	Solid	300.0	4413
LCSD 880-4413/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4413

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Client Sample ID: FS01
Date Collected: 06/18/21 13:21
Date Received: 06/21/21 08:43

Lab Sample ID: 890-841-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 17:51	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 19:19	AM	XEN MID
Soluble	Leach	DI Leach			4412	06/21/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5	4486	06/23/21 01:14	CH	XEN MID

Client Sample ID: FS02
Date Collected: 06/18/21 14:45
Date Received: 06/21/21 08:43

Lab Sample ID: 890-841-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 18:11	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 19:40	AM	XEN MID
Soluble	Leach	DI Leach			4412	06/21/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5	4486	06/23/21 01:19	CH	XEN MID

Client Sample ID: FS03
Date Collected: 06/18/21 14:50
Date Received: 06/21/21 08:43

Lab Sample ID: 890-841-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 18:32	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 20:01	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		5	4487	06/23/21 03:40	CH	XEN MID

Client Sample ID: FS04
Date Collected: 06/18/21 12:54
Date Received: 06/21/21 08:43

Lab Sample ID: 890-841-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 18:52	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 20:22	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		10	4487	06/23/21 03:45	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-841-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: 890-841-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: PLU 28 BS 158H

Job ID: 890-841-1
SDG: TE012920134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-841-1	FS01	Solid	06/18/21 13:21	06/21/21 08:43	- 1
890-841-2	FS02	Solid	06/18/21 14:45	06/21/21 08:43	- 1.5
890-841-3	FS03	Solid	06/18/21 14:50	06/21/21 08:43	- 1.5
890-841-4	FS04	Solid	06/18/21 12:54	06/21/21 08:43	- 1.5

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)

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.mather@wsp.com, dan.moir@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:	PLU 28 BS 158H	Turn Around	
Project Number:	TE012920134	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
FS01	s	6/18/2021	13:21	1'	1	x	x	x
FS02	s	6/18/2021	14:45	1.5'	1	x	x	x
FS03	s	6/18/2021	14:50	1.5'	1	x	x	x
FS04	s	6/18/2021	12:54	1.5'	1	x	x	x

890-841 Chain of Custody

Work Order Notes

AFE: DD.2017.01918.CAP.CMP.01
Incident ID: NRM2025263987

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

Sample Comments

Sample Comments
Composite
Composite
Composite
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			6-21-21 0843	2			
3				4			
5				6			

Revised Date 051418 Rev 2018 1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-841-1
SDG Number: TE012920134

Login Number: 841
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: 890-841-1
SDG Number: TE012920134

Login Number: 841
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/22/21 11:59 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-842-1
Laboratory Sample Delivery Group: TE012920134
Client Project/Site: PLU 28 BS 158H

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

Attn: Dan Moir

JKramer

Authorized for release by:
6/24/2021 10:24:00 AM

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

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Laboratory Job ID: 890-842-1
SDG: TE012920134

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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, 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: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Job ID: 890-842-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-842-1

Comments
No additional comments.

Receipt
The samples were received on 6/21/2021 8:48 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 was 4.6º C.

Receipt Exceptions

The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: SS01 (890-842-1), SS02 (890-842-2), SS03 (890-842-3), SS04 (890-842-4) and SS05 (890-842-5).

GC VOA
Method 8021B: Internal standard responses were outside of acceptance limits for the following samples: SS01 (890-842-1), SS02 (890-842-2), SS03 (890-842-3) and SS05 (890-842-5). 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
Method 8015B NM: The continuing calibration verifications were spiked at a 1000ppm when the usual concentration is 500ppm. Recovery is still in acceptable limits, so the data was qualified and reported.

(CCV 880-4468/28) and (CCV 880-4468/39)

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

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Client Sample ID: SS01

Lab Sample ID: 890-842-1
Matrix: Solid
Date Collected: 06/18/21 09:40
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/22/21 13:12	06/22/21 19:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:12	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/22/21 13:12	06/22/21 19:12	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/22/21 13:12	06/22/21 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*06/22/21 13:12*	*06/22/21 19:12*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/22/21 13:12*	*06/22/21 19:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 20:43	1
Diesel Range Organics (Over C10-C28)	**609**		50.0		mg/Kg		06/22/21 14:14	06/22/21 20:43	1
Oil Range Organics (Over C28-C36)	**182**		50.0		mg/Kg		06/22/21 14:14	06/22/21 20:43	1
Total TPH	**791**		50.0		mg/Kg		06/22/21 14:14	06/22/21 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*06/22/21 14:14*	*06/22/21 20:43*	*1*
o-Terphenyl	*128*		*70 - 130*	*06/22/21 14:14*	*06/22/21 20:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39300**		251		mg/Kg			06/23/21 03:50	50

Client Sample ID: SS02

Lab Sample ID: 890-842-2
Matrix: Solid
Date Collected: 06/18/21 09:42
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:33	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:33	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:33	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		06/22/21 13:12	06/22/21 19:33	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/22/21 13:12	06/22/21 19:33	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		06/22/21 13:12	06/22/21 19:33	1
Total BTEX	<0.00399	U	0.00399		mg/Kg		06/22/21 13:12	06/22/21 19:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*06/22/21 13:12*	*06/22/21 19:33*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/22/21 13:12*	*06/22/21 19:33*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Client Sample ID: SS02 Lab Sample ID: 890-842-2

Date Collected: 06/18/21 09:42 **Matrix: Solid**
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 21:04	1
Diesel Range Organics (Over C10-C28)	**101**		49.9		mg/Kg		06/22/21 14:14	06/22/21 21:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 21:04	1
Total TPH	**101**		49.9		mg/Kg		06/22/21 14:14	06/22/21 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*06/22/21 14:14*	*06/22/21 21:04*	*1*
o-Terphenyl	*107*		*70 - 130*	*06/22/21 14:14*	*06/22/21 21:04*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17700**		252		mg/Kg			06/23/21 08:31	50

Client Sample ID: SS03 Lab Sample ID: 890-842-3

Date Collected: 06/18/21 09:44 **Matrix: Solid**
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/22/21 13:12	06/22/21 19:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/22/21 13:12	06/22/21 19:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/22/21 13:12	06/22/21 19:53	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/22/21 13:12	06/22/21 19:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/22/21 13:12	06/22/21 19:53	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/22/21 13:12	06/22/21 19:53	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/22/21 13:12	06/22/21 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*124*		*70 - 130*	*06/22/21 13:12*	*06/22/21 19:53*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/22/21 13:12*	*06/22/21 19:53*	*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	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 21:25	1
Diesel Range Organics (Over C10-C28)	**1030**		49.9		mg/Kg		06/22/21 14:14	06/22/21 21:25	1
Oil Range Organics (Over C28-C36)	**381**		49.9		mg/Kg		06/22/21 14:14	06/22/21 21:25	1
Total TPH	**1410**		49.9		mg/Kg		06/22/21 14:14	06/22/21 21:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*06/22/21 14:14*	*06/22/21 21:25*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/22/21 14:14*	*06/22/21 21:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37400**		251		mg/Kg			06/23/21 03:56	50

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Client Sample ID: SS04

Lab Sample ID: 890-842-4
Matrix: Solid
Date Collected: 06/18/21 09:45
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 20:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 20:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 20:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/22/21 13:12	06/22/21 20:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/22/21 13:12	06/22/21 20:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/22/21 13:12	06/22/21 20:14	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/22/21 13:12	06/22/21 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*06/22/21 13:12*	*06/22/21 20:14*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/22/21 13:12*	*06/22/21 20:14*	*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		06/22/21 14:14	06/22/21 22:07	1
Diesel Range Organics (Over C10-C28)	**123**		50.0		mg/Kg		06/22/21 14:14	06/22/21 22:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 22:07	1
Total TPH	**123**		50.0		mg/Kg		06/22/21 14:14	06/22/21 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*06/22/21 14:14*	*06/22/21 22:07*	*1*
o-Terphenyl	*144*	*S1+*	*70 - 130*	*06/22/21 14:14*	*06/22/21 22:07*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16200**		253		mg/Kg			06/23/21 04:01	50

Client Sample ID: SS05

Lab Sample ID: 890-842-5
Matrix: Solid
Date Collected: 06/18/21 09:47
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 20:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 20:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 20:34	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/22/21 13:12	06/22/21 20:34	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/22/21 13:12	06/22/21 20:34	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/22/21 13:12	06/22/21 20:34	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		06/22/21 13:12	06/22/21 20:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*06/22/21 13:12*	*06/22/21 20:34*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*06/22/21 13:12*	*06/22/21 20:34*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Client Sample ID: SS05

Date Collected: 06/18/21 09:47
Date Received: 06/21/21 08:48
Sample Depth: - 0.5

Lab Sample ID: 890-842-5

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		06/22/21 14:14	06/22/21 22:28	1
Diesel Range Organics (Over C10-C28)	**5750**		50.0		mg/Kg		06/22/21 14:14	06/22/21 22:28	1
Oil Range Organics (Over C28-C36)	**3110**		50.0		mg/Kg		06/22/21 14:14	06/22/21 22:28	1
Total TPH	**8860**		50.0		mg/Kg		06/22/21 14:14	06/22/21 22:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*06/22/21 14:14*	*06/22/21 22:28*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*06/22/21 14:14*	*06/22/21 22:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20500**		249		mg/Kg			06/23/21 04:06	50

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

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)								
890-842-1	SS01	127	98								
890-842-2	SS02	121	99								
890-842-3	SS03	124	95								
890-842-4	SS04	117	99								
890-842-5	SS05	120	93								
LCS 880-4418/1-A	Lab Control Sample	109	97								
MB 880-4418/5-A	Method Blank	114	91								

Surrogate Legend

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

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										
LCSD 880-4418/2-A	Lab Control Sample Dup										

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)								
890-842-1	SS01	125	128								
890-842-2	SS02	99	107								
890-842-3	SS03	126	126								
890-842-4	SS04	137 S1+	144 S1+								
890-842-5	SS05	125	140 S1+								
LCS 880-4481/2-A	Lab Control Sample	115	113								
LCSD 880-4481/3-A	Lab Control Sample Dup	114	113								
MB 880-4481/1-A	Method Blank	106	116								

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4418/5-A
Matrix: Solid
Analysis Batch: 4445

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4418

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/21/21 13:11	06/22/21 11:20	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/21/21 13:11	06/22/21 11:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*06/21/21 13:11*	*06/22/21 11:20*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*06/21/21 13:11*	*06/22/21 11:20*	*1*

Lab Sample ID: LCS 880-4418/1-A
Matrix: Solid
Analysis Batch: 4445

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4418

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.09076		mg/Kg		91	70 - 130		
Toluene			0.100	0.1052		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1066		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2235		mg/Kg		112	70 - 130		
o-Xylene			0.100	0.1124		mg/Kg		112	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: LCSD 880-4418/2-A
Matrix: Solid
Analysis Batch: 4445

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4418

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.09727		mg/Kg					
Toluene			0.100	0.1169		mg/Kg					
Ethylbenzene			0.100	0.1171		mg/Kg					
m-Xylene & p-Xylene			0.200	0.2436		mg/Kg					
o-Xylene			0.100	0.1217		mg/Kg					

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

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

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

Lab Sample ID: MB 880-4481/1-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4481

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		06/22/21 14:14	06/22/21 15:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1
Total TPH	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/22/21 14:14*	*06/22/21 15:25*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/22/21 14:14*	*06/22/21 15:25*	*1*

Lab Sample ID: LCS 880-4481/2-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4481

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	855.3		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.3		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-4481/3-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4481

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	838.4		mg/Kg		84	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	934.8		mg/Kg		93	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4413/1-A
Matrix: Solid
Analysis Batch: 4487

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			06/23/21 01:43	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4413/2-A
Matrix: Solid
Analysis Batch: 4487

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	232.2		mg/Kg		93	90 - 110

Lab Sample ID: LCSD 880-4413/3-A
Matrix: Solid
Analysis Batch: 4487

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	232.4		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc. Job ID: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

GC VOA

Prep Batch: 4418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-1	SS01	Total/NA	Solid	5035	
890-842-2	SS02	Total/NA	Solid	5035	
890-842-3	SS03	Total/NA	Solid	5035	
890-842-4	SS04	Total/NA	Solid	5035	
890-842-5	SS05	Total/NA	Solid	5035	
MB 880-4418/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4418/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4418/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-1	SS01	Total/NA	Solid	8021B	4418
890-842-2	SS02	Total/NA	Solid	8021B	4418
890-842-3	SS03	Total/NA	Solid	8021B	4418
890-842-4	SS04	Total/NA	Solid	8021B	4418
890-842-5	SS05	Total/NA	Solid	8021B	4418
MB 880-4418/5-A	Method Blank	Total/NA	Solid	8021B	4418
LCS 880-4418/1-A	Lab Control Sample	Total/NA	Solid	8021B	4418
LCSD 880-4418/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4418

GC Semi VOA

Analysis Batch: 4468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-1	SS01	Total/NA	Solid	8015B NM	4481
890-842-2	SS02	Total/NA	Solid	8015B NM	4481
890-842-3	SS03	Total/NA	Solid	8015B NM	4481
890-842-4	SS04	Total/NA	Solid	8015B NM	4481
890-842-5	SS05	Total/NA	Solid	8015B NM	4481
MB 880-4481/1-A	Method Blank	Total/NA	Solid	8015B NM	4481
LCS 880-4481/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4481
LCSD 880-4481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4481

Prep Batch: 4481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-1	SS01	Total/NA	Solid	8015NM Prep	
890-842-2	SS02	Total/NA	Solid	8015NM Prep	
890-842-3	SS03	Total/NA	Solid	8015NM Prep	
890-842-4	SS04	Total/NA	Solid	8015NM Prep	
890-842-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-4481/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4481/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 4413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-1	SS01	Soluble	Solid	DI Leach	
890-842-2	SS02	Soluble	Solid	DI Leach	
890-842-3	SS03	Soluble	Solid	DI Leach	
890-842-4	SS04	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

HPLC/IC (Continued)

Leach Batch: 4413 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-5	SS05	Soluble	Solid	DI Leach	
MB 880-4413/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4413/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4413/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 4487

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-842-1	SS01	Soluble	Solid	300.0	4413
890-842-2	SS02	Soluble	Solid	300.0	4413
890-842-3	SS03	Soluble	Solid	300.0	4413
890-842-4	SS04	Soluble	Solid	300.0	4413
890-842-5	SS05	Soluble	Solid	300.0	4413
MB 880-4413/1-A	Method Blank	Soluble	Solid	300.0	4413
LCS 880-4413/2-A	Lab Control Sample	Soluble	Solid	300.0	4413
LCSD 880-4413/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4413

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Client Sample ID: SS01 Lab Sample ID: 890-842-1

Date Collected: 06/18/21 09:40 **Matrix: Solid**
Date Received: 06/21/21 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 19:12	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 20:43	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		50	4487	06/23/21 03:50	CH	XEN MID

Client Sample ID: SS02 Lab Sample ID: 890-842-2

Date Collected: 06/18/21 09:42 **Matrix: Solid**
Date Received: 06/21/21 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 19:33	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 21:04	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		50	4487	06/23/21 08:31	CH	XEN MID

Client Sample ID: SS03 Lab Sample ID: 890-842-3

Date Collected: 06/18/21 09:44 **Matrix: Solid**
Date Received: 06/21/21 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 19:53	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 21:25	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		50	4487	06/23/21 03:56	CH	XEN MID

Client Sample ID: SS04 Lab Sample ID: 890-842-4

Date Collected: 06/18/21 09:45 **Matrix: Solid**
Date Received: 06/21/21 08:48

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 20:14	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 22:07	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		50	4487	06/23/21 04:01	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Client Sample ID: SS05

Date Collected: 06/18/21 09:47
Date Received: 06/21/21 08:48

Lab Sample ID: 890-842-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4418	06/22/21 13:12	KL	XEN MID
Total/NA	Analysis	8021B		1	4445	06/22/21 20:34	MR	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 22:28	AM	XEN MID
Soluble	Leach	DI Leach			4413	06/21/21 12:22	CH	XEN MID
Soluble	Analysis	300.0		50	4487	06/23/21 04:06	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: 890-842-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: PLU 28 BS 158H

Job ID: 890-842-1
SDG: TE012920134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-842-1	SS01	Solid	06/18/21 09:40	06/21/21 08:48	- 0.5
890-842-2	SS02	Solid	06/18/21 09:42	06/21/21 08:48	- 0.5
890-842-3	SS03	Solid	06/18/21 09:44	06/21/21 08:48	- 0.5
890-842-4	SS04	Solid	06/18/21 09:45	06/21/21 08:48	- 0.5
890-842-5	SS05	Solid	06/18/21 09:47	06/21/21 08:48	- 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)

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849	Email:	will.mather@wsp.com, dan.moir@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:	PLU 28 BS 158H	Turn Around	
Project Number:	TE012920134	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

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

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
SS01	s	6/18/2021	9:40	0.5'	1	x	x	x
SS02	s	6/18/2021	9:42	0.5'	1	x	x	x
SS03	s	6/18/2021	9:44	0.5'	1	x	x	x
SS04	s	6/18/2021	9:45	0.5'	1	x	x	x
SS05	s	6/18/2021	9:47	0.5'	1	x	x	x

890-842 Chain of Custody

Work Order Notes

AFE: DD.2017.01918.CAP.CMP.01
Incident ID: NRM2025263987

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

Sample Comments

Discrete
Discrete
Discrete
Discrete
Discrete

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			6.21.21 0843			
3				4		
5				6		

Revised Date 051418 Rev 2018.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-842-1
SDG Number: TE012920134

Login Number: 842
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: 890-842-1
SDG Number: TE012920134

Login Number: 842
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/22/21 11:59 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-840-1
Laboratory Sample Delivery Group: TE012920134
Client Project/Site: PLU 28 BS 158H
Revision: 1

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

Attn: Dan Moir

JKramer

Authorized for release by:
6/25/2021 9:28:12 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: PLU 28 BS 158H

Laboratory Job ID: 890-840-1
SDG: TE012920134

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-840-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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, 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: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

Job ID: 890-840-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-840-1

Receipt
The samples were received on 6/21/2021 8:49 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 4.6°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: PH01 (890-840-1), PH02 (890-840-2) and PH03 (890-840-3).

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): PH01 (890-840-1), PH02 (890-840-2) and PH03 (890-840-3).
login number 890-840
Sample #1 COC- PH01 6-18-2021 10:38 depth 1
Container #1- ph01 6-18-2021 10:38 depth 1 concludes they are the same sample
Sample #2 COC- PH02 6-18-2021 10:39 depth 2
Container #2-PH01A 6-18-2021 10:39 depth 2 concludes they are the same sample
Sample #3 COC-PH03 6-18-2021 10:47 depth 4
Container #3-PH01B 6-18-2021 10:47 depth 4 concludes they are the same sample

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: PH01 (890-840-1), PH02 (890-840-2) and PH03 (890-840-3). 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: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

Client Sample ID: PH01

Date Collected: 06/18/21 10:38
Date Received: 06/21/21 08:49
Sample Depth: - 1'

Lab Sample ID: 890-840-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 19:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 19:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 19:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		06/22/21 08:33	06/22/21 19:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 19:04	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/22/21 08:33	06/22/21 19:04	1
Total BTEX	<0.00401	U	0.00401		mg/Kg		06/22/21 08:33	06/22/21 19:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*06/22/21 08:33*	*06/22/21 19:04*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/22/21 08:33*	*06/22/21 19:04*	*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		06/22/21 14:14	06/22/21 16:28	1
Diesel Range Organics (Over C10-C28)	**115**		49.7		mg/Kg		06/22/21 14:14	06/22/21 16:28	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		06/22/21 14:14	06/22/21 16:28	1
Total TPH	**115**		49.7		mg/Kg		06/22/21 14:14	06/22/21 16:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*06/22/21 14:14*	*06/22/21 16:28*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*06/22/21 14:14*	*06/22/21 16:28*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3050**		25.3		mg/Kg			06/23/21 00:59	5

Client Sample ID: PH01A

Date Collected: 06/18/21 10:39
Date Received: 06/21/21 08:49
Sample Depth: - 2'

Lab Sample ID: 890-840-2

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		06/22/21 08:33	06/22/21 19:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/22/21 08:33	06/22/21 19:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/22/21 08:33	06/22/21 19:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/22/21 08:33	06/22/21 19:24	1
o-Xylene	**0.00201**		0.00199		mg/Kg		06/22/21 08:33	06/22/21 19:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/22/21 08:33	06/22/21 19:24	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/22/21 08:33	06/22/21 19:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*06/22/21 08:33*	*06/22/21 19:24*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*06/22/21 08:33*	*06/22/21 19:24*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

Client Sample ID: PH01A

Date Collected: 06/18/21 10:39
Date Received: 06/21/21 08:49
Sample Depth: - 2'

Lab Sample ID: 890-840-2

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 18:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 18:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 18:37	1
Total TPH	<49.9	U	49.9		mg/Kg		06/22/21 14:14	06/22/21 18:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*06/22/21 14:14*	*06/22/21 18:37*	*1*
o-Terphenyl	*139*	*S1+*	*70 - 130*	*06/22/21 14:14*	*06/22/21 18:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**309**		5.01		mg/Kg			06/23/21 01:04	1

Client Sample ID: PH01B

Date Collected: 06/18/21 10:47
Date Received: 06/21/21 08:49
Sample Depth: - 4'

Lab Sample ID: 890-840-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/22/21 08:33	06/22/21 19:45	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/22/21 08:33	06/22/21 19:45	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/22/21 08:33	06/22/21 19:45	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/22/21 08:33	06/22/21 19:45	1
o-Xylene	**0.00659**		0.00202		mg/Kg		06/22/21 08:33	06/22/21 19:45	1
Xylenes, Total	**0.00659**		0.00404		mg/Kg		06/22/21 08:33	06/22/21 19:45	1
Total BTEX	**0.00659**		0.00404		mg/Kg		06/22/21 08:33	06/22/21 19:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*06/22/21 08:33*	*06/22/21 19:45*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*06/22/21 08:33*	*06/22/21 19:45*	*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		06/22/21 14:14	06/22/21 18:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 18:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 18:58	1
Total TPH	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 18:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*06/22/21 14:14*	*06/22/21 18:58*	*1*
o-Terphenyl	*129*		*70 - 130*	*06/22/21 14:14*	*06/22/21 18:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.71**		4.96		mg/Kg			06/23/21 01:09	1

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

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)
890-840-1	PH01	134 S1+	90
890-840-2	PH01A	127	105
890-840-3	PH01B	121	106
LCS 880-4446/1-A	Lab Control Sample	108	101
LCSD 880-4446/2-A	Lab Control Sample Dup	113	104
MB 880-4446/5-A	Method Blank	92	94

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)
890-840-1	PH01	129	140 S1+
890-840-1 MS	PH01	118	114
890-840-1 MSD	PH01	113	108
890-840-2	PH01A	133 S1+	139 S1+
890-840-3	PH01B	120	129
LCS 880-4481/2-A	Lab Control Sample	115	113
LCSD 880-4481/3-A	Lab Control Sample Dup	114	113
MB 880-4481/1-A	Method Blank	106	116

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4446/5-A
Matrix: Solid
Analysis Batch: 4447

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4446

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 11:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 11:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 11:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/22/21 08:33	06/22/21 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/22/21 08:33	06/22/21 11:55	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/22/21 08:33	06/22/21 11:55	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/22/21 08:33	06/22/21 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*06/22/21 08:33*	*06/22/21 11:55*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/22/21 08:33*	*06/22/21 11:55*	*1*

Lab Sample ID: LCS 880-4446/1-A
Matrix: Solid
Analysis Batch: 4447

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4446

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1065		mg/Kg		106	70 - 130		
Toluene			0.100	0.09853		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.09988		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.2170		mg/Kg		108	70 - 130		
o-Xylene			0.100	0.1077		mg/Kg		108	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-4446/2-A
Matrix: Solid
Analysis Batch: 4447

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4446

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1140		mg/Kg		114	70 - 130	7	35
Toluene			0.100	0.1052		mg/Kg		105	70 - 130	7	35
Ethylbenzene			0.100	0.1067		mg/Kg		107	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2318		mg/Kg		116	70 - 130	7	35
o-Xylene			0.100	0.1154		mg/Kg		115	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

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

Lab Sample ID: MB 880-4481/1-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4481

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		06/22/21 14:14	06/22/21 15:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1
Total TPH	<50.0	U	50.0		mg/Kg		06/22/21 14:14	06/22/21 15:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*06/22/21 14:14*	*06/22/21 15:25*	*1*
o-Terphenyl	*116*		*70 - 130*	*06/22/21 14:14*	*06/22/21 15:25*	*1*

Lab Sample ID: LCS 880-4481/2-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4481

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	855.3		mg/Kg		86	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.3		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*115*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-4481/3-A
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4481

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	838.4		mg/Kg		84	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	934.8		mg/Kg		93	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: 890-840-1 MS
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 4481

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	999	908.9		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)	115		999	894.8		mg/Kg		78	70 - 130		

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

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

Lab Sample ID: 890-840-1 MS
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 4481

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*118*		*70 - 130*
o-Terphenyl	*114*		*70 - 130*

Lab Sample ID: 890-840-1 MSD
Matrix: Solid
Analysis Batch: 4468

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 4481

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	997	882.5		mg/Kg		89	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	115		997	861.0		mg/Kg		75	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4412/1-A
Matrix: Solid
Analysis Batch: 4486

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			06/22/21 22:52	1

Lab Sample ID: LCS 880-4412/2-A
Matrix: Solid
Analysis Batch: 4486

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	236.6		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-4412/3-A
Matrix: Solid
Analysis Batch: 4486

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	237.1		mg/Kg		95	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

GC VOA

Prep Batch: 4446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-840-1	PH01	Total/NA	Solid	5035	
890-840-2	PH01A	Total/NA	Solid	5035	
890-840-3	PH01B	Total/NA	Solid	5035	
MB 880-4446/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4446/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4446/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-840-1	PH01	Total/NA	Solid	8021B	4446
890-840-2	PH01A	Total/NA	Solid	8021B	4446
890-840-3	PH01B	Total/NA	Solid	8021B	4446
MB 880-4446/5-A	Method Blank	Total/NA	Solid	8021B	4446
LCS 880-4446/1-A	Lab Control Sample	Total/NA	Solid	8021B	4446
LCSD 880-4446/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4446

GC Semi VOA

Analysis Batch: 4468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-840-1	PH01	Total/NA	Solid	8015B NM	4481
890-840-2	PH01A	Total/NA	Solid	8015B NM	4481
890-840-3	PH01B	Total/NA	Solid	8015B NM	4481
MB 880-4481/1-A	Method Blank	Total/NA	Solid	8015B NM	4481
LCS 880-4481/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4481
LCSD 880-4481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4481
890-840-1 MS	PH01	Total/NA	Solid	8015B NM	4481
890-840-1 MSD	PH01	Total/NA	Solid	8015B NM	4481

Prep Batch: 4481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-840-1	PH01	Total/NA	Solid	8015NM Prep	
890-840-2	PH01A	Total/NA	Solid	8015NM Prep	
890-840-3	PH01B	Total/NA	Solid	8015NM Prep	
MB 880-4481/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4481/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-840-1 MS	PH01	Total/NA	Solid	8015NM Prep	
890-840-1 MSD	PH01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 4412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-840-1	PH01	Soluble	Solid	DI Leach	
890-840-2	PH01A	Soluble	Solid	DI Leach	
890-840-3	PH01B	Soluble	Solid	DI Leach	
MB 880-4412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

HPLC/IC

Analysis Batch: 4486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-840-1	PH01	Soluble	Solid	300.0	4412
890-840-2	PH01A	Soluble	Solid	300.0	4412
890-840-3	PH01B	Soluble	Solid	300.0	4412
MB 880-4412/1-A	Method Blank	Soluble	Solid	300.0	4412
LCS 880-4412/2-A	Lab Control Sample	Soluble	Solid	300.0	4412
LCSD 880-4412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4412

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

Client Sample ID: PH01

Date Collected: 06/18/21 10:38
Date Received: 06/21/21 08:49

Lab Sample ID: 890-840-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4446	06/22/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	4447	06/22/21 19:04	KL	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 16:28	AM	XEN MID
Soluble	Leach	DI Leach			4412	06/21/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		5	4486	06/23/21 00:59	CH	XEN MID

Client Sample ID: PH01A

Date Collected: 06/18/21 10:39
Date Received: 06/21/21 08:49

Lab Sample ID: 890-840-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4446	06/22/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	4447	06/22/21 19:24	KL	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 18:37	AM	XEN MID
Soluble	Leach	DI Leach			4412	06/21/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1	4486	06/23/21 01:04	CH	XEN MID

Client Sample ID: PH01B

Date Collected: 06/18/21 10:47
Date Received: 06/21/21 08:49

Lab Sample ID: 890-840-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4446	06/22/21 08:33	KL	XEN MID
Total/NA	Analysis	8021B		1	4447	06/22/21 19:45	KL	XEN MID
Total/NA	Prep	8015NM Prep			4481	06/22/21 14:14	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4468	06/22/21 18:58	AM	XEN MID
Soluble	Leach	DI Leach			4412	06/21/21 12:20	CH	XEN MID
Soluble	Analysis	300.0		1	4486	06/23/21 01:09	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-840-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

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: PLU 28 BS 158H

Job ID: 890-840-1
SDG: TE012920134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-840-1	PH01	Solid	06/18/21 10:38	06/21/21 08:49	- 1'
890-840-2	PH01A	Solid	06/18/21 10:39	06/21/21 08:49	- 2'
890-840-3	PH01B	Solid	06/18/21 10:47	06/21/21 08:49	- 4'

Chain of Custody

XENCO LABORATORIES

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

Work Order No: _____

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Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	
Phone:	(432) 236-3849 Email:	will.mather@wsp.com, dan.moir@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:	PLU 28 BS 158H	Turn Around	
Project Number:	TE012920134	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	4.8/4.6	Thermometer ID	
Received Intact:	(Yes) No	TNM007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Sample Comments
PH01	s	6/18/2021	10:38	1'	1	x	x	x	Discrete
PH02	s	6/18/2021	10:39	2'	1	x	x	x	Discrete
PH03	s	6/18/2021	10:47	4'	1	x	x	x	Discrete

890-840 Chain of Custody

Work Order Notes

AFE: DD.2017.01918.CAP.CMP.01
Incident ID: NRM2025263987

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

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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		6-21-210849	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-840-1
SDG Number: TE012920134

Login Number: 840
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: 890-840-1
SDG Number: TE012920134

Login Number: 840
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/22/21 12:00 PM

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

eurofins | Environment Testing America

ANALYTICAL REPORT

Job Number: 890-846-1

SDG Number: TE012920134

Job Description: PLU 28 BS 158H

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

Attention: Dan Moir

Approved for release.
Jessica Kramer
Project Manager
6/28/2021 10:45 AM

Jessica Kramer, Project Manager
1211 W. Florida Ave, Midland, TX, 79701
jessica.kramer@eurofinset.com
06/28/2021

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

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.

Eurofins Xenco, Carlsbad
1089 N Canal St., Carlsbad, NM 88220
Tel (575) 988-3199 Fax (575) 988-3199 www.EurofinsUS.com

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Lab Sample ID:	890-846-1	890-846-2	890-846-3	890-846-4	890-846-5
Client Sample ID:	FS05	FS06	FS07	FS08	FS09
Depth:	1.5	1.5	1.5	1	1
Matrix:	Solid	Solid	Solid	Solid	Solid
Date Collected:	06/21/2021 10:07	06/21/2021 10:12	06/21/2021 10:18	06/21/2021 10:24	06/21/2021 15:39

Method: 8021B - Volatile Organic Compounds (GC)

Prepared:	06/23/2021 08:30		06/23/2021 08:30		06/23/2021 08:30		06/23/2021 08:30		06/23/2021 08:30	
Analyzed:	06/23/2021 16:31		06/23/2021 16:52		06/23/2021 17:12		06/23/2021 17:33		06/23/2021 17:53	
Analyte **Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
Toluene	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
Ethylbenzene	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
m-Xylene & p-Xylene	<0.00402 U	0.00402	<0.00396 U	0.00396	<0.00400 U	0.00400	<0.00402 U	0.00402	<0.00398 U	0.00398
o-Xylene	<0.00201 U	0.00201	<0.00198 U	0.00198	<0.00200 U	0.00200	<0.00201 U	0.00201	<0.00199 U	0.00199
Xylenes, Total	<0.00402 U	0.00402	<0.00396 U	0.00396	<0.00400 U	0.00400	<0.00402 U	0.00402	<0.00398 U	0.00398
Total BTEX	<0.00402 U	0.00402	<0.00396 U	0.00396	<0.00400 U	0.00400	<0.00402 U	0.00402	<0.00398 U	0.00398

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

Prepared:	06/23/2021 09:28		06/23/2021 09:28		06/23/2021 09:28		06/23/2021 09:28		06/23/2021 09:28	
Analyzed:	06/23/2021 17:26		06/23/2021 17:47		06/23/2021 18:08		06/23/2021 18:29		06/23/2021 18:50	
Analyte **Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10	<49.9 U	49.9	<49.9 U	49.9	<49.8 U	49.8	<49.9 U	49.9	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)	<49.9 U	49.9	<49.9 U	49.9	**70.9**	49.8	**85.9**	49.9	<50.0 U	50.0
Oil Range Organics (Over C28-C36)	<49.9 U	49.9	<49.9 U	49.9	<49.8 U	49.8	<49.9 U	49.9	<50.0 U	50.0
Total TPH	<49.9 U	49.9	<49.9 U	49.9	**70.9**	49.8	**85.9**	49.9	<50.0 U	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

Prepared:										
Analyzed:	06/24/2021 20:42		06/24/2021 20:47		06/24/2021 21:15		06/24/2021 21:32		06/24/2021 21:37	
Analyte **Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride	**1520**	25.0	**3050**	25.1	**4300**	25.2	**5310**	49.9	**3910**	24.8

Client Sample Result Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Lab Sample ID:	890-846-6	890-846-7	890-846-8
Client Sample ID:	FS10	FS11	FS12
Depth:	1	1.5	1.5
Matrix:	Solid	Solid	Solid
Date Collected:	06/21/2021 16:03	06/21/2021 15:11	06/21/2021 15:08

Method: 8021B - Volatile Organic Compounds (GC)

	Prepared:	06/23/2021 08:30		06/23/2021 08:30		06/23/2021 08:30	
	Analyzed:	06/23/2021 18:13		06/23/2021 18:34		06/23/2021 18:54	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Benzene		<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
Toluene		<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
Ethylbenzene		<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
m-Xylene & p-Xylene		<0.00403 U	0.00403	<0.00402 U	0.00402	<0.00404 U	0.00404
o-Xylene		<0.00202 U	0.00202	<0.00201 U	0.00201	<0.00202 U	0.00202
Xylenes, Total		<0.00403 U	0.00403	<0.00402 U	0.00402	<0.00404 U	0.00404
Total BTEX		<0.00403 U	0.00403	<0.00402 U	0.00402	<0.00404 U	0.00404

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

	Prepared:	06/23/2021 09:28		06/23/2021 09:28		06/23/2021 09:28	
	Analyzed:	06/23/2021 19:11		06/23/2021 19:32		06/23/2021 19:53	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Gasoline Range Organics (GRO)-C6-C10		<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0
Diesel Range Organics (Over C10-C28)		<50.0 U	50.0	**121**	49.8	**68.1**	50.0
OII Range Organics (Over C28-C36)		<50.0 U	50.0	<49.8 U	49.8	<50.0 U	50.0
Total TPH		<50.0 U	50.0	**121**	49.8	**68.1**	50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble

	Prepared:						
	Analyzed:	06/24/2021 21:42		06/24/2021 21:48		06/24/2021 22:04	
Analyte	**Unit/RL:**	mg/Kg	RL	mg/Kg	RL	mg/Kg	RL
Chloride		**1370**	24.8	**7920**	49.9	**4730**	50.5

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-846-1
Laboratory Sample Delivery Group: TE012920134
Client Project/Site: PLU 28 BS 158H

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

Attn: Dan Moir

JKramer

Authorized for release by:
6/28/2021 10:44:48 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: PLU 28 BS 158H

Laboratory Job ID: 890-846-1
SDG: TE012920134

Table of Contents

Definitions/Glossary

Client: WSP USA Inc. Job ID: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Job ID: 890-846-1

Laboratory: Eurofins Xenco, Carlsbad

Narrative

Job Narrative
890-846-1

Receipt
The samples were received on 6/22/2021 11:57 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 5.0°C

Receipt Exceptions
The following samples analyzed for method BTEX 8021 were received and analyzed from an unpreserved bulk soil jar: FS05 (890-846-1), FS06 (890-846-2), FS07 (890-846-3), FS08 (890-846-4), FS09 (890-846-5), FS10 (890-846-6), FS11 (890-846-7) and FS12 (890-846-8).

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

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

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

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Client Sample ID: FS05

Lab Sample ID: 890-846-1
Matrix: Solid
Date Collected: 06/21/21 10:07
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 16:31	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 16:31	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 16:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 16:31	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 16:31	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 16:31	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*06/23/21 08:30*	*06/23/21 16:31*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*06/23/21 08:30*	*06/23/21 16:31*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:26	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:26	1
Total TPH	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane				*06/23/21 09:28*	*06/23/21 17:26*	*1*
o-Terphenyl				*06/23/21 09:28*	*06/23/21 17:26*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1520**		25.0		mg/Kg			06/24/21 20:42	5

Client Sample ID: FS06

Lab Sample ID: 890-846-2
Matrix: Solid
Date Collected: 06/21/21 10:12
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		06/23/21 08:30	06/23/21 16:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/23/21 08:30	06/23/21 16:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		06/23/21 08:30	06/23/21 16:52	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		06/23/21 08:30	06/23/21 16:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/23/21 08:30	06/23/21 16:52	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		06/23/21 08:30	06/23/21 16:52	1
Total BTEX	<0.00396	U	0.00396		mg/Kg		06/23/21 08:30	06/23/21 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*06/23/21 08:30*	*06/23/21 16:52*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*06/23/21 08:30*	*06/23/21 16:52*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Client Sample ID: FS06 Lab Sample ID: 890-846-2

Date Collected: 06/21/21 10:12 **Matrix: Solid**
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:47	1
Total TPH	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane				*06/23/21 09:28*	*06/23/21 17:47*	*1*
o-Terphenyl				*06/23/21 09:28*	*06/23/21 17:47*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3050**		25.1		mg/Kg			06/24/21 20:47	5

Client Sample ID: FS07 Lab Sample ID: 890-846-3

Date Collected: 06/21/21 10:18 **Matrix: Solid**
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 17:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 17:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 17:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/23/21 08:30	06/23/21 17:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 17:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/23/21 08:30	06/23/21 17:12	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/23/21 08:30	06/23/21 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*06/23/21 08:30*	*06/23/21 17:12*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*06/23/21 08:30*	*06/23/21 17:12*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		06/23/21 09:28	06/23/21 18:08	1
Diesel Range Organics (Over C10-C28)	**70.9**		49.8		mg/Kg		06/23/21 09:28	06/23/21 18:08	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/23/21 09:28	06/23/21 18:08	1
Total TPH	**70.9**		49.8		mg/Kg		06/23/21 09:28	06/23/21 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane				*06/23/21 09:28*	*06/23/21 18:08*	*1*
o-Terphenyl				*06/23/21 09:28*	*06/23/21 18:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4300**		25.2		mg/Kg			06/24/21 21:15	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Client Sample ID: FS08

Lab Sample ID: 890-846-4
Matrix: Solid
Date Collected: 06/21/21 10:24
Date Received: 06/22/21 11:57
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		06/23/21 08:30	06/23/21 17:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 17:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 17:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 17:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 17:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 17:33	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*06/23/21 08:30*	*06/23/21 17:33*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/23/21 08:30*	*06/23/21 17:33*	*1*

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 18:29	1
Diesel Range Organics (Over C10-C28)	**85.9**		49.9		mg/Kg		06/23/21 09:28	06/23/21 18:29	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/23/21 09:28	06/23/21 18:29	1
Total TPH	**85.9**		49.9		mg/Kg		06/23/21 09:28	06/23/21 18:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*06/23/21 09:28*	*06/23/21 18:29*	*1*
o-Terphenyl	*118*		*70 - 130*	*06/23/21 09:28*	*06/23/21 18:29*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5310**		49.9		mg/Kg			06/24/21 21:32	10

Client Sample ID: FS09

Lab Sample ID: 890-846-5
Matrix: Solid
Date Collected: 06/21/21 15:39
Date Received: 06/22/21 11:57
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		06/23/21 08:30	06/23/21 17:53	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/23/21 08:30	06/23/21 17:53	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/23/21 08:30	06/23/21 17:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/23/21 08:30	06/23/21 17:53	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/23/21 08:30	06/23/21 17:53	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/23/21 08:30	06/23/21 17:53	1
Total BTEX	<0.00398	U	0.00398		mg/Kg		06/23/21 08:30	06/23/21 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*06/23/21 08:30*	*06/23/21 17:53*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*06/23/21 08:30*	*06/23/21 17:53*	*1*

Client Sample Results

Client: WSP USA Inc. Job ID: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Client Sample ID: FS09 Lab Sample ID: 890-846-5

Date Collected: 06/21/21 15:39 **Matrix: Solid**
Date Received: 06/22/21 11:57
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		06/23/21 09:28	06/23/21 18:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 18:50	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 18:50	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*06/23/21 09:28*	*06/23/21 18:50*	*1*
o-Terphenyl	*126*		*70 - 130*	*06/23/21 09:28*	*06/23/21 18:50*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3910**		24.8		mg/Kg			06/24/21 21:37	5

Client Sample ID: FS10 Lab Sample ID: 890-846-6

Date Collected: 06/21/21 16:03 **Matrix: Solid**
Date Received: 06/22/21 11:57
Sample Depth: - 1

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:13	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:13	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:13	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		06/23/21 08:30	06/23/21 18:13	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:13	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		06/23/21 08:30	06/23/21 18:13	1
Total BTEX	<0.00403	U	0.00403		mg/Kg		06/23/21 08:30	06/23/21 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*06/23/21 08:30*	*06/23/21 18:13*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*06/23/21 08:30*	*06/23/21 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	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 19:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 19:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 19:11	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*06/23/21 09:28*	*06/23/21 19:11*	*1*
o-Terphenyl	*115*		*70 - 130*	*06/23/21 09:28*	*06/23/21 19:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1370**		24.8		mg/Kg			06/24/21 21:42	5

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Client Sample ID: FS11

Lab Sample ID: 890-846-7
Matrix: Solid
Date Collected: 06/21/21 15:11
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 18:34	1
Toluene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 18:34	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 18:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 18:34	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		06/23/21 08:30	06/23/21 18:34	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 18:34	1
Total BTEX	<0.00402	U	0.00402		mg/Kg		06/23/21 08:30	06/23/21 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/23/21 08:30*	*06/23/21 18:34*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*06/23/21 08:30*	*06/23/21 18:34*	*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	<49.8	U	49.8		mg/Kg		06/23/21 09:28	06/23/21 19:32	1
Diesel Range Organics (Over C10-C28)	**121**		49.8		mg/Kg		06/23/21 09:28	06/23/21 19:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/23/21 09:28	06/23/21 19:32	1
Total TPH	**121**		49.8		mg/Kg		06/23/21 09:28	06/23/21 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/23/21 09:28*	*06/23/21 19:32*	*1*
o-Terphenyl	*123*		*70 - 130*	*06/23/21 09:28*	*06/23/21 19:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7920**		49.9		mg/Kg			06/24/21 21:48	10

Client Sample ID: FS12

Lab Sample ID: 890-846-8
Matrix: Solid
Date Collected: 06/21/21 15:08
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:54	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		06/23/21 08:30	06/23/21 18:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		06/23/21 08:30	06/23/21 18:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		06/23/21 08:30	06/23/21 18:54	1
Total BTEX	<0.00404	U	0.00404		mg/Kg		06/23/21 08:30	06/23/21 18:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*06/23/21 08:30*	*06/23/21 18:54*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*06/23/21 08:30*	*06/23/21 18:54*	*1*

Client Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Client Sample ID: FS12

Date Collected: 06/21/21 15:08
Date Received: 06/22/21 11:57
Sample Depth: - 1.5

Lab Sample ID: 890-846-8

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	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 19:53	1
Diesel Range Organics (Over C10-C28)	**68.1**		50.0		mg/Kg		06/23/21 09:28	06/23/21 19:53	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 19:53	1
Total TPH	**68.1**		50.0		mg/Kg		06/23/21 09:28	06/23/21 19:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*06/23/21 09:28*	*06/23/21 19:53*	*1*
o-Terphenyl	*124*		*70 - 130*	*06/23/21 09:28*	*06/23/21 19:53*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4730**		50.5		mg/Kg			06/24/21 22:04	10

Surrogate Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

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)
890-846-1	FS05	106	98
890-846-2	FS06	106	96
890-846-3	FS07	105	95
890-846-4	FS08	113	97
890-846-5	FS09	106	99
890-846-6	FS10	95	100
890-846-7	FS11	118	94
890-846-8	FS12	115	97
LCS 880-4490/1-A	Lab Control Sample	113	108
LCSD 880-4490/2-A	Lab Control Sample Dup	117	108
MB 880-4490/5-A	Method Blank	94	89

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		
890-846-1	FS05		
890-846-2	FS06		
890-846-3	FS07		

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-846-4	FS08	97	118
890-846-5	FS09	103	126
890-846-6	FS10	97	115
890-846-7	FS11	102	123
890-846-8	FS12	104	124
LCS 880-4499/2-A	Lab Control Sample	102	115
LCSD 880-4499/3-A	Lab Control Sample Dup	104	120
MB 880-4499/1-A	Method Blank	97	119

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-4490/5-A
Matrix: Solid
Analysis Batch: 4491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4490

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 11:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 11:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 11:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/23/21 08:30	06/23/21 11:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/23/21 08:30	06/23/21 11:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/23/21 08:30	06/23/21 11:45	1
Total BTEX	<0.00400	U	0.00400		mg/Kg		06/23/21 08:30	06/23/21 11:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*06/23/21 08:30*	*06/23/21 11:45*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*06/23/21 08:30*	*06/23/21 11:45*	*1*

Lab Sample ID: LCS 880-4490/1-A
Matrix: Solid
Analysis Batch: 4491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4490

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzene			0.100	0.1127		mg/Kg		113	70 - 130		
Toluene			0.100	0.1052		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1068		mg/Kg		107	70 - 130		
m-Xylene & p-Xylene			0.200	0.2309		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1177		mg/Kg		118	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-4490/2-A
Matrix: Solid
Analysis Batch: 4491

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4490

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.100	0.1144		mg/Kg		114	70 - 130	1	35
Toluene			0.100	0.1071		mg/Kg		107	70 - 130	2	35
Ethylbenzene			0.100	0.1071		mg/Kg		107	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.2316		mg/Kg		116	70 - 130	0	35
o-Xylene			0.100	0.1173		mg/Kg		117	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

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

Lab Sample ID: MB 880-4499/1-A
Matrix: Solid
Analysis Batch: 4494

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 4499

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 10:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 10:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 10:48	1
Total TPH	<50.0	U	50.0		mg/Kg		06/23/21 09:28	06/23/21 10:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*06/23/21 09:28*	*06/23/21 10:48*	*1*
o-Terphenyl	*119*		*70 - 130*	*06/23/21 09:28*	*06/23/21 10:48*	*1*

Lab Sample ID: LCS 880-4499/2-A
Matrix: Solid
Analysis Batch: 4494

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 4499

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	852.5		mg/Kg		85	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1003		mg/Kg		100	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Lab Sample ID: LCSD 880-4499/3-A
Matrix: Solid
Analysis Batch: 4494

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 4499

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	911.7		mg/Kg		91	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	1045		mg/Kg		104	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-4513/1-A
Matrix: Solid
Analysis Batch: 4596

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/24/21 18:20	1

QC Sample Results

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-4513/2-A
Matrix: Solid
Analysis Batch: 4596

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	243.1		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-4513/3-A
Matrix: Solid
Analysis Batch: 4596

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	244.3		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-4514/1-A
Matrix: Solid
Analysis Batch: 4598

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/24/21 20:59	1

Lab Sample ID: LCS 880-4514/2-A
Matrix: Solid
Analysis Batch: 4598

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			250	250.5		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-4514/3-A
Matrix: Solid
Analysis Batch: 4598

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	248.2		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-846-3 MS
Matrix: Solid
Analysis Batch: 4598

Client Sample ID: FS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	4300		1260	5448		mg/Kg		91	90 - 110		

Lab Sample ID: 890-846-3 MSD
Matrix: Solid
Analysis Batch: 4598

Client Sample ID: FS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4300		1260	5436		mg/Kg		90	90 - 110	0	20

QC Association Summary

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

GC VOA

Prep Batch: 4490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-1	FS05	Total/NA	Solid	5035	
890-846-2	FS06	Total/NA	Solid	5035	
890-846-3	FS07	Total/NA	Solid	5035	
890-846-4	FS08	Total/NA	Solid	5035	
890-846-5	FS09	Total/NA	Solid	5035	
890-846-6	FS10	Total/NA	Solid	5035	
890-846-7	FS11	Total/NA	Solid	5035	
890-846-8	FS12	Total/NA	Solid	5035	
MB 880-4490/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-4490/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-4490/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 4491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-1	FS05	Total/NA	Solid	8021B	4490
890-846-2	FS06	Total/NA	Solid	8021B	4490
890-846-3	FS07	Total/NA	Solid	8021B	4490
890-846-4	FS08	Total/NA	Solid	8021B	4490
890-846-5	FS09	Total/NA	Solid	8021B	4490
890-846-6	FS10	Total/NA	Solid	8021B	4490
890-846-7	FS11	Total/NA	Solid	8021B	4490
890-846-8	FS12	Total/NA	Solid	8021B	4490
MB 880-4490/5-A	Method Blank	Total/NA	Solid	8021B	4490
LCS 880-4490/1-A	Lab Control Sample	Total/NA	Solid	8021B	4490
LCSD 880-4490/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	4490

GC Semi VOA

Analysis Batch: 4494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-1	FS05	Total/NA	Solid	8015B NM	4499
890-846-2	FS06	Total/NA	Solid	8015B NM	4499
890-846-3	FS07	Total/NA	Solid	8015B NM	4499
890-846-4	FS08	Total/NA	Solid	8015B NM	4499
890-846-5	FS09	Total/NA	Solid	8015B NM	4499
890-846-6	FS10	Total/NA	Solid	8015B NM	4499
890-846-7	FS11	Total/NA	Solid	8015B NM	4499
890-846-8	FS12	Total/NA	Solid	8015B NM	4499
MB 880-4499/1-A	Method Blank	Total/NA	Solid	8015B NM	4499
LCS 880-4499/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	4499
LCSD 880-4499/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	4499

Prep Batch: 4499

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-1	FS05	Total/NA	Solid	8015NM Prep	
890-846-2	FS06	Total/NA	Solid	8015NM Prep	
890-846-3	FS07	Total/NA	Solid	8015NM Prep	
890-846-4	FS08	Total/NA	Solid	8015NM Prep	
890-846-5	FS09	Total/NA	Solid	8015NM Prep	
890-846-6	FS10	Total/NA	Solid	8015NM Prep	
890-846-7	FS11	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: WSP USA Inc. Job ID: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

GC Semi VOA (Continued)

Prep Batch: 4499 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-8	FS12	Total/NA	Solid	8015NM Prep	
MB 880-4499/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-4499/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-4499/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 4513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-1	FS05	Soluble	Solid	DI Leach	
890-846-2	FS06	Soluble	Solid	DI Leach	
MB 880-4513/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4513/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4513/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 4514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-3	FS07	Soluble	Solid	DI Leach	
890-846-4	FS08	Soluble	Solid	DI Leach	
890-846-5	FS09	Soluble	Solid	DI Leach	
890-846-6	FS10	Soluble	Solid	DI Leach	
890-846-7	FS11	Soluble	Solid	DI Leach	
890-846-8	FS12	Soluble	Solid	DI Leach	
MB 880-4514/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-4514/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-4514/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-846-3 MS	FS07	Soluble	Solid	DI Leach	
890-846-3 MSD	FS07	Soluble	Solid	DI Leach	

Analysis Batch: 4596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-1	FS05	Soluble	Solid	300.0	4513
890-846-2	FS06	Soluble	Solid	300.0	4513
MB 880-4513/1-A	Method Blank	Soluble	Solid	300.0	4513
LCS 880-4513/2-A	Lab Control Sample	Soluble	Solid	300.0	4513
LCSD 880-4513/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4513

Analysis Batch: 4598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-846-3	FS07	Soluble	Solid	300.0	4514
890-846-4	FS08	Soluble	Solid	300.0	4514
890-846-5	FS09	Soluble	Solid	300.0	4514
890-846-6	FS10	Soluble	Solid	300.0	4514
890-846-7	FS11	Soluble	Solid	300.0	4514
890-846-8	FS12	Soluble	Solid	300.0	4514
MB 880-4514/1-A	Method Blank	Soluble	Solid	300.0	4514
LCS 880-4514/2-A	Lab Control Sample	Soluble	Solid	300.0	4514
LCSD 880-4514/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	4514
890-846-3 MS	FS07	Soluble	Solid	300.0	4514
890-846-3 MSD	FS07	Soluble	Solid	300.0	4514

Lab Chronicle

Client: WSP USA Inc. Job ID: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

Client Sample ID: FS05 Lab Sample ID: 890-846-1

Date Collected: 06/21/21 10:07 **Matrix: Solid**
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 16:31	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 17:26	AJ	XEN MID
Soluble	Leach	DI Leach			4513	06/23/21 12:38	CH	XEN MID
Soluble	Analysis	300.0		5	4596	06/24/21 20:42	CH	XEN MID

Client Sample ID: FS06 Lab Sample ID: 890-846-2

Date Collected: 06/21/21 10:12 **Matrix: Solid**
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 16:52	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 17:47	AJ	XEN MID
Soluble	Leach	DI Leach			4513	06/23/21 12:38	CH	XEN MID
Soluble	Analysis	300.0		5	4596	06/24/21 20:47	CH	XEN MID

Client Sample ID: FS07 Lab Sample ID: 890-846-3

Date Collected: 06/21/21 10:18 **Matrix: Solid**
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 17:12	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 18:08	AJ	XEN MID
Soluble	Leach	DI Leach			4514	06/23/21 12:40	CH	XEN MID
Soluble	Analysis	300.0		5	4598	06/24/21 21:15	CH	XEN MID

Client Sample ID: FS08 Lab Sample ID: 890-846-4

Date Collected: 06/21/21 10:24 **Matrix: Solid**
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 17:33	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 18:29	AJ	XEN MID
Soluble	Leach	DI Leach			4514	06/23/21 12:40	CH	XEN MID
Soluble	Analysis	300.0		10	4598	06/24/21 21:32	CH	XEN MID

Lab Chronicle

Client: WSP USA Inc.
Project/Site: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Client Sample ID: FS09

Lab Sample ID: 890-846-5
Matrix: Solid
Date Collected: 06/21/21 15:39
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 17:53	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 18:50	AJ	XEN MID
Soluble	Leach	DI Leach			4514	06/23/21 12:40	CH	XEN MID
Soluble	Analysis	300.0		5	4598	06/24/21 21:37	CH	XEN MID

Client Sample ID: FS10

Lab Sample ID: 890-846-6
Matrix: Solid
Date Collected: 06/21/21 16:03
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 18:13	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 19:11	AJ	XEN MID
Soluble	Leach	DI Leach			4514	06/23/21 12:40	CH	XEN MID
Soluble	Analysis	300.0		5	4598	06/24/21 21:42	CH	XEN MID

Client Sample ID: FS11

Lab Sample ID: 890-846-7
Matrix: Solid
Date Collected: 06/21/21 15:11
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 18:34	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 19:32	AJ	XEN MID
Soluble	Leach	DI Leach			4514	06/23/21 12:40	CH	XEN MID
Soluble	Analysis	300.0		10	4598	06/24/21 21:48	CH	XEN MID

Client Sample ID: FS12

Lab Sample ID: 890-846-8
Matrix: Solid
Date Collected: 06/21/21 15:08
Date Received: 06/22/21 11:57

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4490	06/23/21 08:30	KL	XEN MID
Total/NA	Analysis	8021B		1	4491	06/23/21 18:54	KL	XEN MID
Total/NA	Prep	8015NM Prep			4499	06/23/21 09:28	DM	XEN MID
Total/NA	Analysis	8015B NM		1	4494	06/23/21 19:53	AJ	XEN MID
Soluble	Leach	DI Leach			4514	06/23/21 12:40	CH	XEN MID
Soluble	Analysis	300.0		10	4598	06/24/21 22:04	CH	XEN MID

Laboratory References:

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc. Job ID: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: 890-846-1
Project/Site: PLU 28 BS 158H SDG: TE012920134

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: PLU 28 BS 158H

Job ID: 890-846-1
SDG: TE012920134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-846-1	FS05	Solid	06/21/21 10:07	06/22/21 11:57	- 1.5
890-846-2	FS06	Solid	06/21/21 10:12	06/22/21 11:57	- 1.5
890-846-3	FS07	Solid	06/21/21 10:18	06/22/21 11:57	- 1.5
890-846-4	FS08	Solid	06/21/21 10:24	06/22/21 11:57	- 1
890-846-5	FS09	Solid	06/21/21 15:39	06/22/21 11:57	- 1
890-846-6	FS10	Solid	06/21/21 16:03	06/22/21 11:57	- 1
890-846-7	FS11	Solid	06/21/21 15:11	06/22/21 11:57	- 1.5
890-846-8	FS12	Solid	06/21/21 15:08	06/22/21 11:57	- 1.5

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)
www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc., Permian office	Company Name:	XTO Energy, Inc.
Address:	3300 North A Street	Address:	3104 E. GREENE STREET
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	CARLSBAD, NM 88220
Phone:	(432) 236-3849	Email:	will.mather@wsp.com, dan.moir@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:	PLU 28 BS 158H	Turn Around	
Project Number:	TE012920134	Routine	☑
P.O. Number:	Eddy	Rush:	
Sampler's Name:	William Mather	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	5.2/5.0	Thermometer ID	IR-007
Received Intact:	Yes No		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	
Sample Custody Seals:	Yes No N/A	Total Containers:	

ANALYSIS REQUEST

890-846 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
FS05	s	6/21/2021	10:07	1.5'	1	x	x	x
FS06	s	6/21/2021	10:12	1.5'	1	x	x	x
FS07	s	6/21/2021	10:18	1.5'	1	x	x	x
FS08	s	6/21/2021	10:24	1'	1	x	x	x
FS09	s	6/21/2021	15:39	1'	1	x	x	x
FS10	s	6/21/2021	16:03	1'	1	x	x	x
FS11	s	6/21/2021	15:11	1.5'	1	x	x	x
FS12	s	6/21/2021	15:08	1.5'	1	x	x	x

Work Order Notes

AFE: DD.2017.01918.CAP.CMP.01
Incident ID: NRM2025263987

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

Sample Comments

Composite
Composite
Composite
Composite
Composite
Composite
Composite
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	Anna Byers	6/22/21 @ 1125	2 Anna Byers		6-22-21 1139
3			4		
5			6		

Revised Date 051418 Rev 2018 1

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

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-271 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 #: 890-846-1
Address: 1211 W Florida Ave	Due Date Requested: 6/28/2021			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU 28 BS 158H	Project #: 89000004			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M - Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, 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:								
FS05 (890-846-1)	6/21/21	10 07 Mountain		Solid			X	X	X	1	
FS06 (890-846-2)	6/21/21	10 12 Mountain		Solid			X	X	X	1	
FS07 (890-846-3)	6/21/21	10 18 Mountain		Solid			X	X	X	1	
FS08 (890-846-4)	6/21/21	10 24 Mountain		Solid			X	X	X	1	
FS09 (890-846-5)	6/21/21	15 39 Mountain		Solid			X	X	X	1	
FS10 (890-846-6)	6/21/21	16 03 Mountain		Solid			X	X	X	1	
FS11 (890-846-7)	6/21/21	15 11 Mountain		Solid			X	X	X	1	
FS12 (890-846-8)	6/21/21	15 08 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: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment:

	Relinquished by	Date/Time:	Company	Received by	Date/Time	Company
1	Alex Crespo 6-22-21				6-24-21 1:30pm	
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 11/01/2020

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: 890-271 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: jessica kramer@eurofinset.com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Xenco		Accreditations Required (See note): NELAP - Texas		Job #: 890-844-1
Address: 1211 W Florida Ave	Due Date Requested: 6/25/2021			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: Holly A Federal #006	Project #: 88000203			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA

M Hexane, N - None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, 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)	300_ORGFM_28D/DI_LEACH Chloride	8015MOD_NM/8015NM_S_Prep Full TPH	8021B/5035FP_Calc BTEX	Total Number of containers	Special Instructions/Note.
			Preservation Code:		X	X				X	
BH05 (890-844-10)	6/18/21	13 25 Mountain		Solid			X	X	X	1	
BH06 (890-844-11)	6/18/21	13 45 Mountain		Solid			X	X	X	1	
BH06 (890-844-12)	6/18/21	14 10 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 *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *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: Cire Cuft 6-22-21	Date/Time:	Company	Received by: [signature]	Date/Time: 6-28-21 1:30pm	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.	

Ver 11/01/2020

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-846-1
SDG Number: TE012920134

Login Number: 846
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: 890-846-1
SDG Number: TE012920134

Login Number: 846
List Number: 2
Creator: Copeland, Tatiana

List Source: Eurofins Xenco, Midland
List Creation: 06/23/21 11:31 AM

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

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

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

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 43132
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	9/17/2021