District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NRM2033631417
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.12437 Longitude -103.89633
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Pierce Canyon 17	Site Type Central Tank Battery
Date Release Discovered 11-13-2020	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	17	25S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 0.16	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Fluid escaped the flare stack and scorched the pad around the flare at the battery. The wells were immediately shut in. A third-party contractor has been retained for remediation activities.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NRM2033631417
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release of fluids that is the result of a fire or results in a fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Adrian Baker to Venegas, Victoria, EMNRD; Hamlet, Robert, EMNRD; Bratcher, Mike, EMNRD; 'Griswold, Jim, EMNRD'; CFO_Spill, BLM_NM; Morgan, Crisha A on Friday, November 13, 2020 at 3:55 p.m. via email.

Initial Response

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

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

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

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

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

Printed Name: Kyle Littrell
Title: SH&E Supervisor
Signature:
Date: 11-19-20
email: Kyle_Littrell@xtoenergy.com
Telephone: 432-221-7331

OCD Only

Received by: Ramona Marcus
Date: 12/1/2020

NRM2033631417

Location:	Pierce Canyon 17 TB	
Spill Date:	11/13/2020	
Area 1		
Approximate Area =	574.00	sq. ft.
Average Saturation (or depth) of spill =	0.13	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	0.16	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.16**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**

Incident ID	NRM2033631417
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NRM2033631417
District RP	
Facility ID	
Application ID	

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

Printed Name: Kyle Littrell Title: SH&E Supervisor

Signature: Date:

email: Kyle_Littrell@xtoenergy.com Telephone: (432)-221-7331

OCD Only

Received by: Date:

Incident ID	NRM2033631417
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: Kyle Littrell Title: SH&E Supervisor

Signature: _____ Date: _____

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

State of New Mexico
Oil Conservation Division

Incident ID	NRM2033631417
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: Kyle Littrell Title: SH&E Supervisor

Signature: _____ Date: _____

email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Robert Hamlet Date: 6/17/2021

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: Robert Hamlet Date: 6/17/2021

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

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

February 3, 2021

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

RE: Closure Request
Pierce Canyon 17
Incident Number NRM2033631417
Eddy County, New Mexico

To Whom it May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), is pleased to present the following Closure Request detailing site assessment and soil sampling activities at the Pierce Canyon 17 (Site) in Unit P, Section 17, Township 25 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling was to assess for the presence or absence of impacts to soil following a release of crude oil and resulting fire at the Site. Based on field observations, field screening results, and laboratory analytical results following soil sampling events, XTO is submitting this Closure Request and requesting no further action (NFA) for Incident Number NRM2033631417.

RELEASE BACKGROUND

On November 13, 2020, approximately 0.16 barrels (bbls) of crude oil released through the flare stack and resulted in a small fire that scorched the surface of the well pad around the flare. The wells on site were immediately shut in. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Form C-141 on November 19, 2020. The release was assigned Incident Number NRM2033631417.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 320628103533001, located approximately 1.15 miles south of the Site. The groundwater well was most recently measured in January 1998 has a reported depth to groundwater of 265 feet bgs and a total depth of 288 feet bgs. Ground surface elevation at the groundwater well location is 3,216 feet above mean sea level (amsl), which is approximately 28 feet lower in elevation than

the Site. The next closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C 03782, located approximately 2.06 miles south of the Site. The groundwater well has a reported depth to groundwater of 277 feet bgs and a total depth of 805 feet bgs. Ground surface elevation at the groundwater well location is 3,199 feet amsl, which is approximately 45 feet lower in elevation than the Site. NMOSE well C-03782 was drilled in January 2015. Within a 3.63-mile radius from the Site, there are nine additional water wells that indicate regional depth to groundwater is greater than 100 feet bgs at the Site. All water wells used for depth to groundwater determination are depicted on Figure 1 and the referenced well records are included in Attachment 1. USGS well 320850103533801 was referenced for depth to groundwater determination for a release at the nearby Poker Lake Unit Pierce Canyon 17 SWD #1 (Incident Number NAB1914836701) and was approximately 0.96 miles from the Site. Closure of Incident Number NAB1914836701 was approved by the NMOCD on July 29, 2019. 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 intermittent stream, located approximately 3,300 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

CLOSURE CRITERIA

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On December 1, 2020, WSP personnel inspected 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 and around the release extent

from a depth of approximately 0.5 feet bgs to assess for the presence or absence of soil impacts at the ground surface. On December 22, 2020, WSP personnel returned to the Site to complete additional soil assessment activities. Soil samples SS01A, SS03A, and SS04A were collected from a depth of 1 foot bgs at the SS01, SS03, and SS04 preliminary soil sample locations to further confirm the absence of impacted soil in the subsurface. The 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 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 Xenco Laboratories (Xenco) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Attachment 2.

Laboratory analytical results for preliminary soil samples SS01 through SS05, SS01A, SS03A, and SS04A indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria and no excavation was required. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Attachment 3.

CLOSURE REQUEST

Site assessment and soil sampling activities were conducted at the Site to address the November 13, 2020 release of crude oil. Laboratory analytical results for soil samples SS01 through SS05, SS01A, SS03A, and SS04A collected within and around the release extent, indicated that benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the soil sample analytical results, no further remediation was required.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria, no impacted soil was identified, and no soil excavation was required as a result of the crude oil fire. As such, XTO respectfully requests no further action for Incident Number NRM2033631417.

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

Sincerely,

WSP USA Inc.

Spencer Lo
Staff Geologist

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

cc: Kyle Littrell, XTO
United States Bureau of Land Management – New Mexico

Attachments:

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

FIGURES

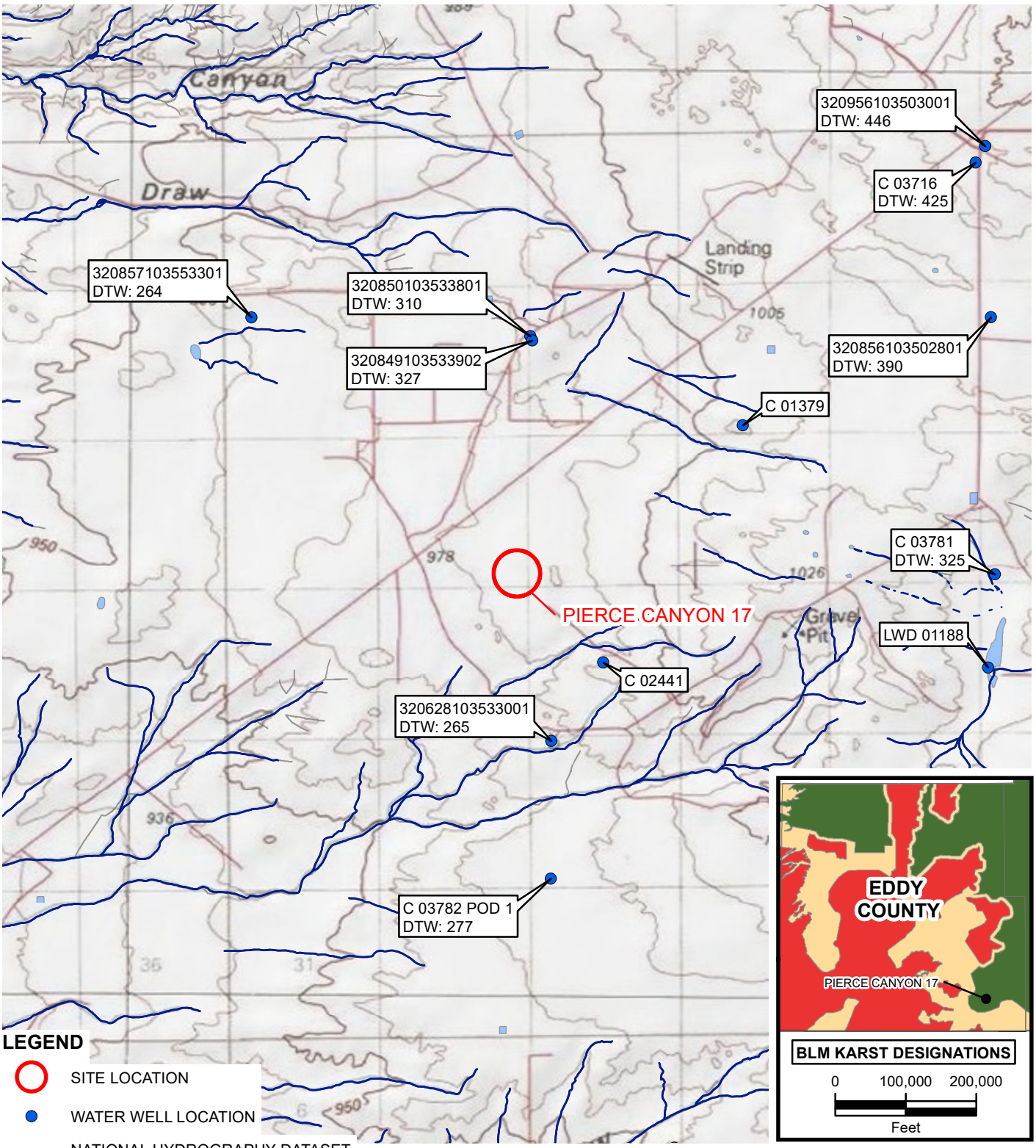


IMAGE COURTESY OF ESRI/USGS

LEGEND

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

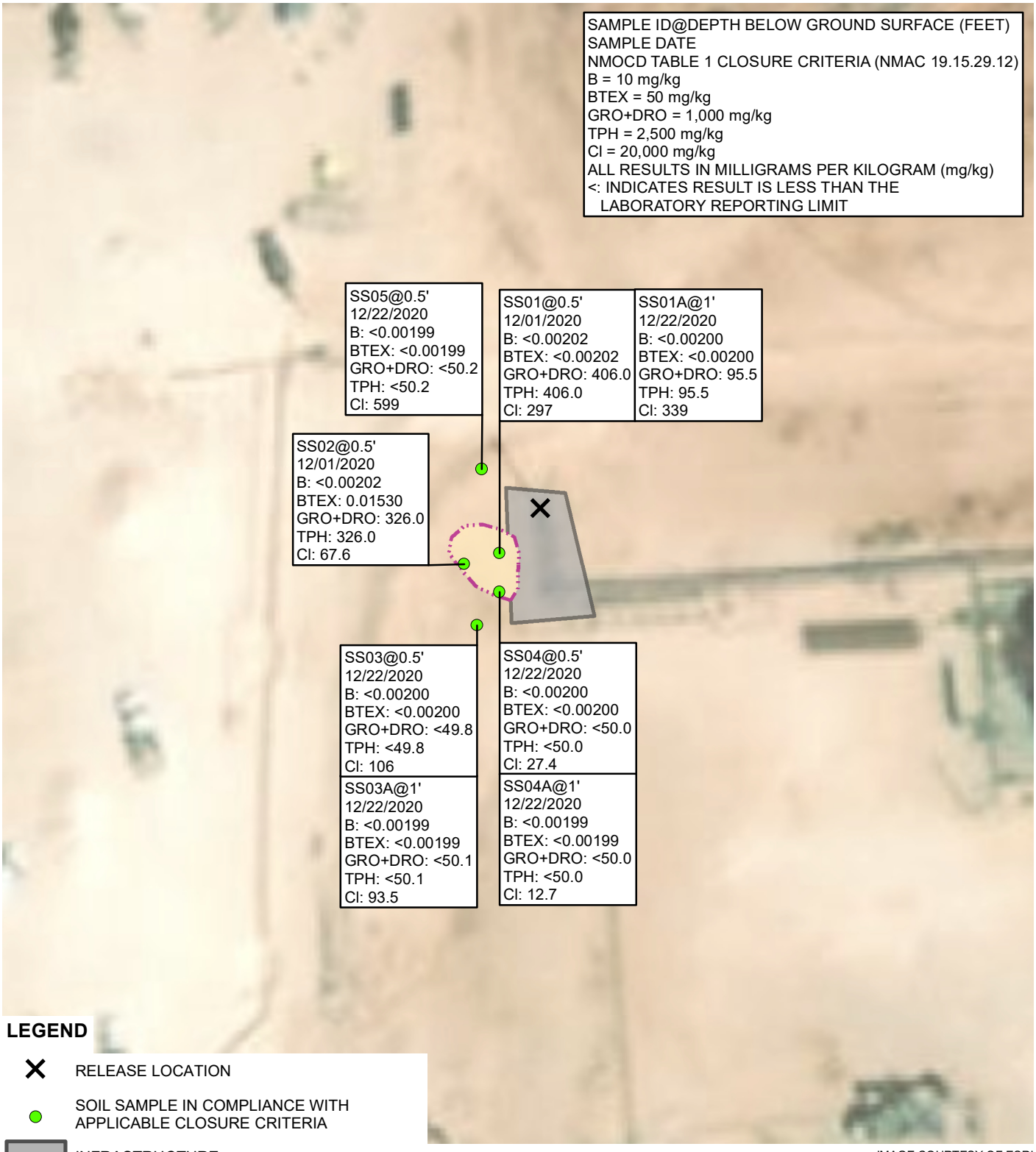
NOTE: INCIDENT NUMBER NRM2033631417
DTW: DEPTH TO WATER IN FEET
BLM: BUREAU OF LAND MANAGEMENT

0 5,000 10,000
Feet

N

FIGURE 1
SITE LOCATION MAP
PIERCE CANYON 17
UNIT P SEC 17 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920158_PIERCE CANYON 17 CTB\012920158_FIG01_SL_RECEPTOR_2020.mxd



B: BENZENE
BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
GRO: GASOLINE RANGE ORGANICS
DRO: DIESEL RANGE ORGANICS
TPH: TOTAL PETROLEUM HYDROCARBONS
Cl: CHLORIDE
NMAC: NEW MEXICO ADMINISTRATIVE CODE
NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
NOTE: INCIDENT NUMBER NRM2033631417

FIGURE 2
SOIL SAMPLE LOCATIONS
PIERCE CANYON 17
UNIT P SEC 17 T25S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

P:\XTO Energy\GIS\MXD\012920158_PIERCE CANYON 17 CTB\012920158_FIG02_PRELIMINARY_2020.mxd

TABLES

Table 1

Soil Analytical Results
Pierce Canyon 17
Incident Number NRM2033631417
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	12/1/2020	0.5	<0.00202	<0.002020	<50.1	406	<50.1	406.0	406.0	297
SS01A	12/22/2020	1	<0.00200	<0.00200	<50.3	95.5	<50.3	95.5	95.5	339
SS02	12/1/2020	0.5	<0.00202	0.01530	<50.0	326	<50.0	326.0	326.0	67.6
SS03	12/22/2020	0.5	<0.00200	<0.00200	<49.8	<49.8	<49.8	<49.8	<49.8	106
SS03A	12/22/2020	1	<0.00199	<0.00199	<50.1	<50.1	<50.1	<50.1	<50.1	93.5
SS04	12/22/2020	0.5	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	27.4
SS04A	12/22/2020	1	<0.00199	<0.00199	<50.0	<50.0	<50.0	<50.0	<50.0	12.7
SS05	12/22/2020	0.5	<0.00199	<0.00199	<50.2	<50.2	<50.2	<50.2	<50.2	599

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
* - indicates sample was collected in area to be reclaimed after remediation is complete;
closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

ATTACHMENT 1: REFERENCED WELL RECORD

USGS 320628103533001 25S.30E.21.333424

Available data for this site

Well Site

DESCRIPTION:

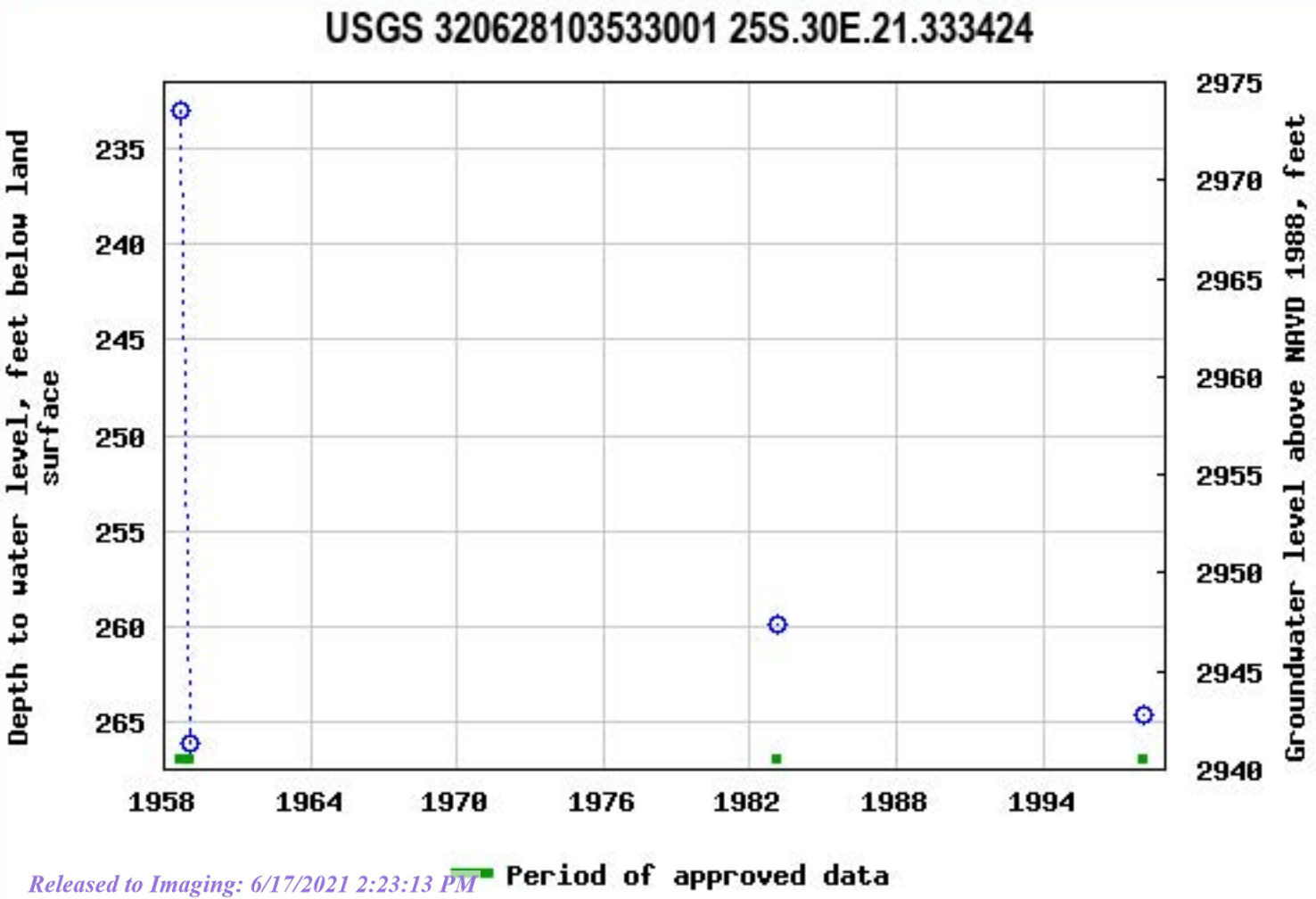
Latitude 32°06'28", Longitude 103°53'30" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 288 feet
Land surface altitude: 3,207 feet above NAVD88.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-21	1998-01-28	4
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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


USGS 320628103533001 25S.30E.21.333424
Depth to water level, feet below land surface
235
240
245
250
255
260
265
Groundwater level above NAVD 1988, feet
2975
2970
2965
2960
2955
2950
2945
2940
1958
1964
1970
1976
1982
1988
1994
Period of approved data

USGS 320849103533902 25S.30E.08.242221A

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°08'49", Longitude 103°53'39" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 500 feet
Land surface altitude: 3,230 feet above NAVD88.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

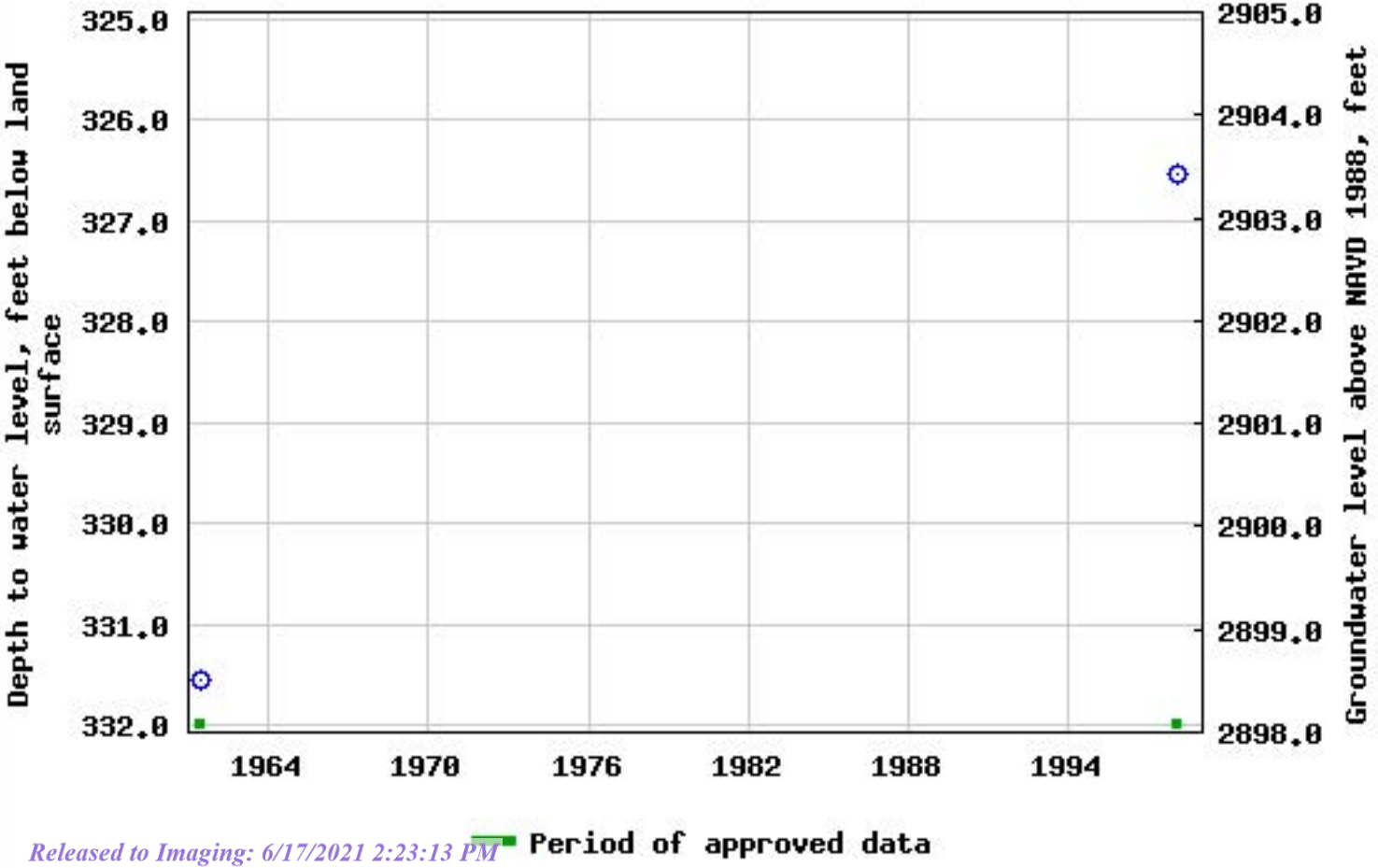
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1961-06-14	1998-01-28	2
Revisions	Unavailable (site:0) (timeseries:0)		

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

USGS

USGS 320849103533902 25S.30E.08.242221A



USGS 320850103533801 25S.30E.08.224444

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°08'50", Longitude 103°53'38" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: not determined.
Land surface altitude: 3,232 feet above NAVD88.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

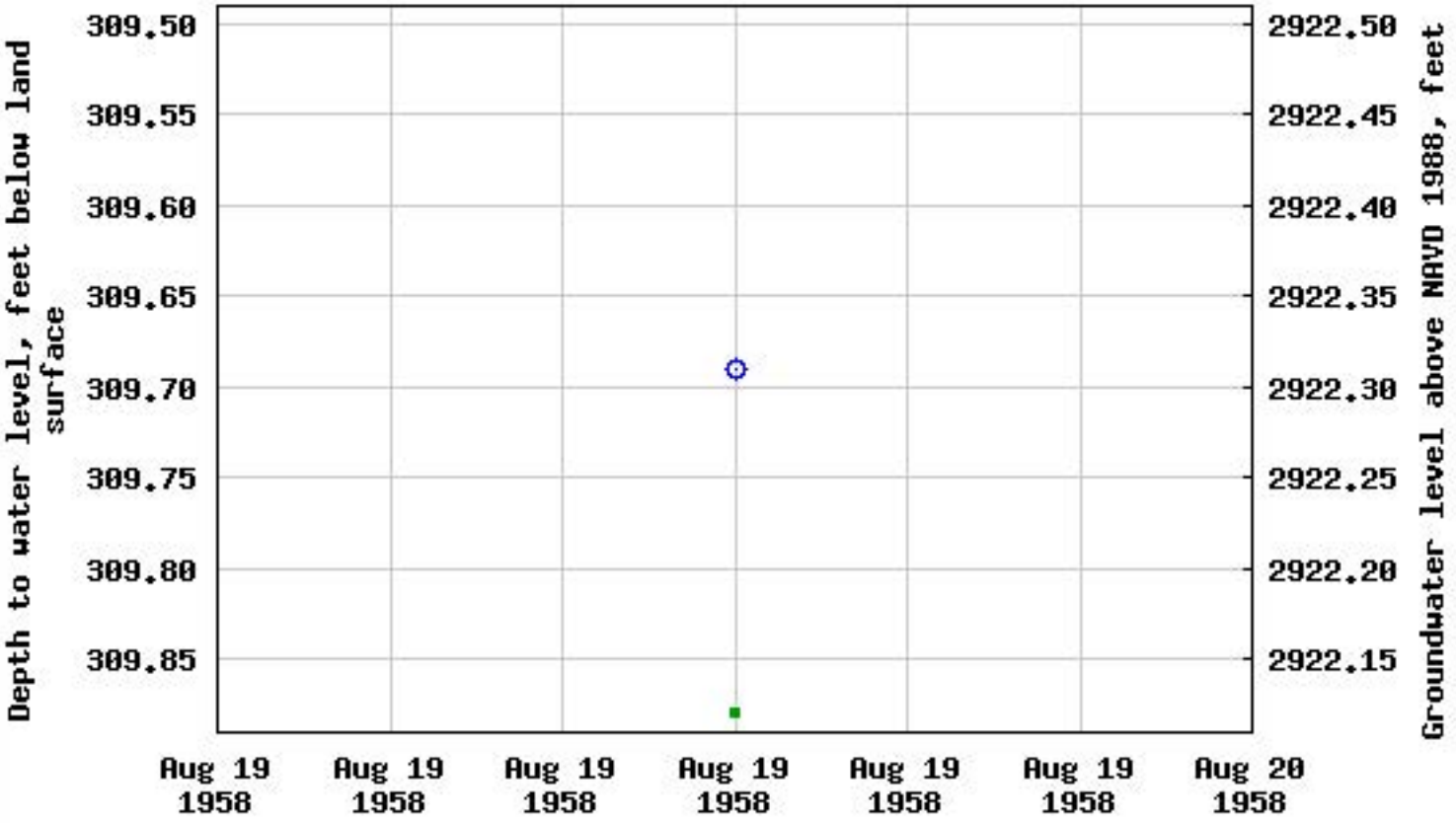
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-19	1958-08-19	1
Revisions	Unavailable (site:0) (timeseries:0)		

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

USGS

USGS 320850103533801 25S.30E.08.224444



USGS 320856103502801 25S.30E.12.113211

Available data for this site

Well Site

DESCRIPTION:

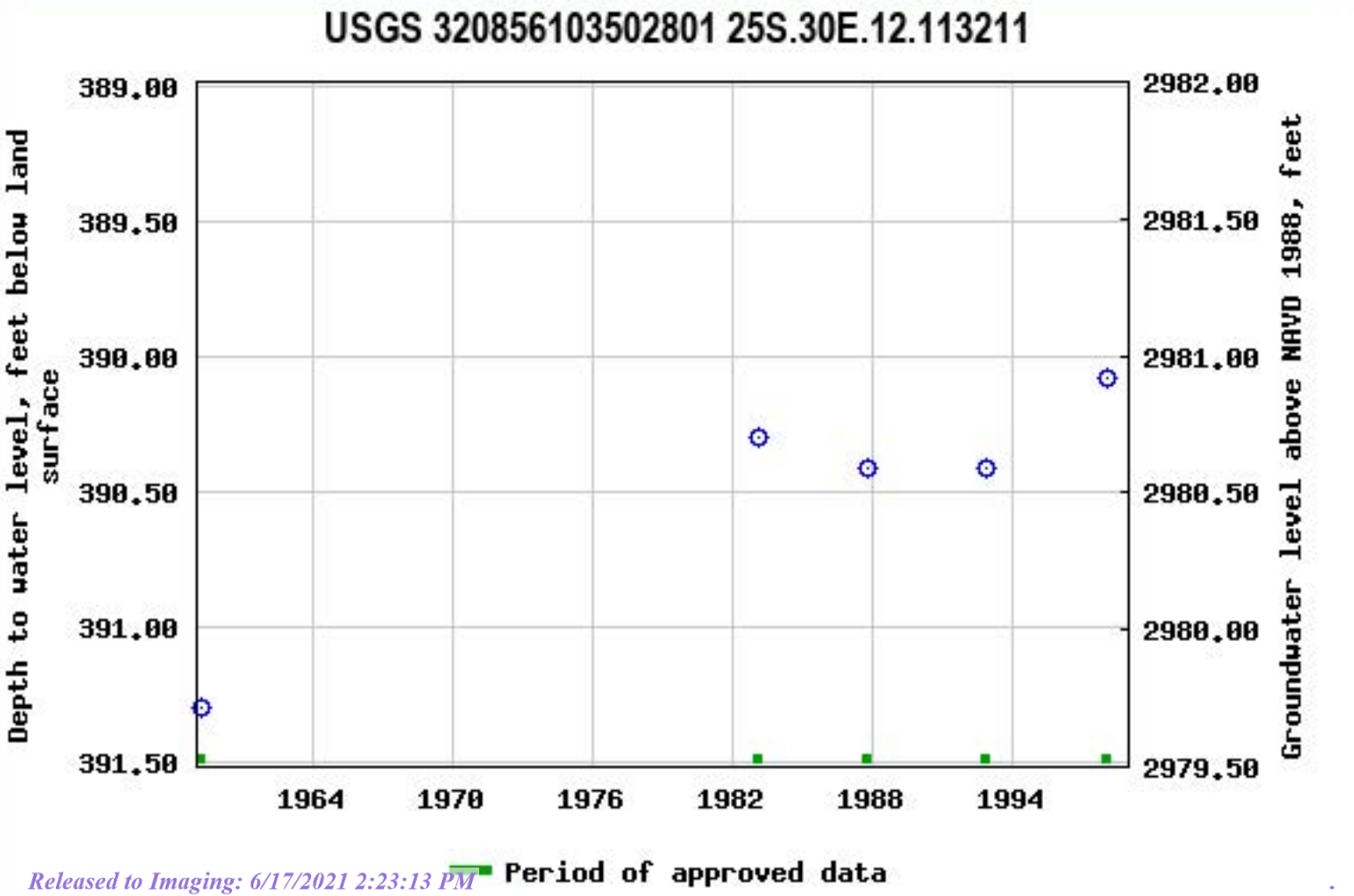
Latitude 32°08'56", Longitude 103°50'28" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 482 feet
Land surface altitude: 3,371 feet above NAVD88.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-03-25	1998-01-28	5
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


USGS 320856103502801 25S.30E.12.113211
Depth to water level, feet below land surface
389.00
389.50
390.00
390.50
391.00
391.50
Groundwater level above NAVD 1988, feet
2982.00
2981.50
2981.00
2980.50
2980.00
2979.50
1964
1970
1976
1982
1988
1994
Period of approved data

USGS 320857103553301 25S.30E.07.112331

Available data for this site

Well Site

DESCRIPTION:

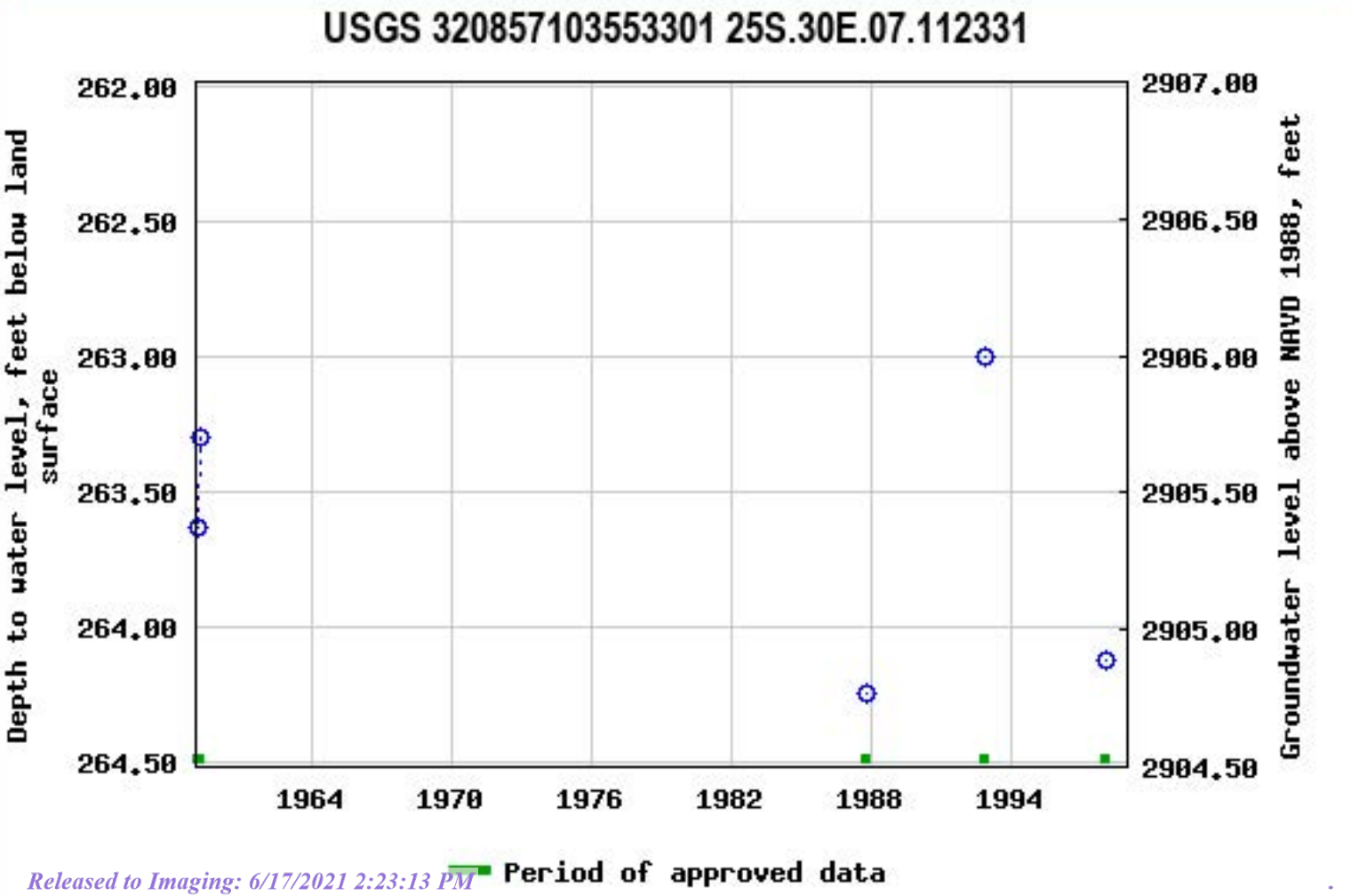
Latitude 32°08'57", Longitude 103°55'33" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 385 feet
Land surface altitude: 3,169 feet above NAVD88.
Well completed in "Alluvium, Bolson Deposits and Other Surface Deposits" (110AVMB) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1959-02-05	1998-01-28	5
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


USGS 320857103553301 25S.30E.07.112331
Depth to water level, feet below land surface
262.00
262.50
263.00
263.50
264.00
264.50
Groundwater level above NAVD 1988, feet
2907.00
2906.50
2906.00
2905.50
2905.00
2904.50
1964
1970
1976
1982
1988
1994
Period of approved data

USGS 320956103503001 24S.30E.36.33333

Available data for this site

Well Site

DESCRIPTION:

Latitude 32°09'56", Longitude 103°50'30" NAD27
Eddy County, New Mexico , Hydrologic Unit 13060011
Well depth: 480 feet
Land surface altitude: 3,408 feet above NAVD88.
Well completed in "Rustler Formation" (312RSLR) local aquifer

AVAILABLE DATA:

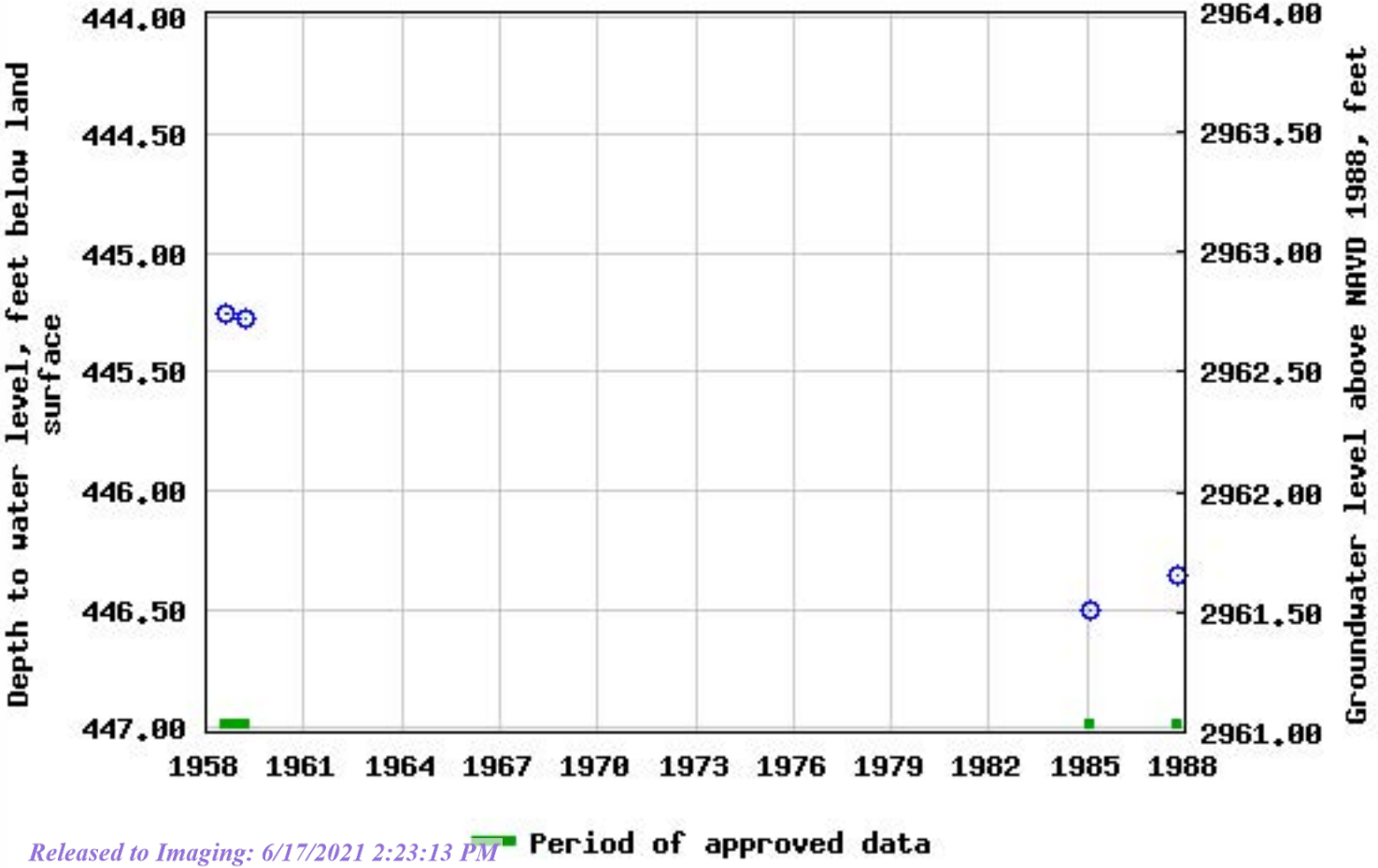
Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1958-08-19	1987-10-15	4
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

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

USGS

USGS 320956103503001 24S.30E.36.33333



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 03716 POD1	4	2	2	02	25S	30E	609069	3559211

x

Driller License: 1229 **Driller Company:** CARTER'S WELL DRILLING

Driller Name: RICHARD CARTER

Drill Start Date: 02/05/2014 **Drill Finish Date:** 03/03/2014 **Plug Date:**

Log File Date: 03/12/2014 **PCW Rcv Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 50 GPM

Casing Size: **Depth Well:** 600 feet **Depth Water:** 425 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	442	600	Sandstone/Gravel/Conglomerate

x

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	Twns	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
	C 03782 POD1	4	3	3	28	25S	30E	604526	3551444

x

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

Driller Name:

Drill Start Date: 01/16/2015 **Drill Finish Date:** 01/17/2015 **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:** 805 feet **Depth Water:** 277 feet

x

Water Bearing Stratifications:	Top	Bottom	Description
	260	320	Sandstone/Gravel/Conglomerate
	320	380	Sandstone/Gravel/Conglomerate
	380	410	Sandstone/Gravel/Conglomerate
	410	530	Shale/Mudstone/Siltstone
	530	590	Shale/Mudstone/Siltstone
	590	600	Shale/Mudstone/Siltstone
	600	630	Shale/Mudstone/Siltstone
	630	650	Shale/Mudstone/Siltstone
	650	700	Shale/Mudstone/Siltstone
	700	710	Shale/Mudstone/Siltstone
	710	760	Shale/Mudstone/Siltstone
	760	770	Shale/Mudstone/Siltstone
	770	780	Shale/Mudstone/Siltstone
	780	790	Shale/Mudstone/Siltstone
	790	805	Shale/Mudstone/Siltstone

x

Casing Perforations:	Top	Bottom
	270	805

x

ATTACHMENT 2: PHOTOGRAPHIC LOG

PHOTOGRAPHIC LOG		
XTO Energy, Inc	Pierce Canyon 17 Eddy County, NM	TE012920158

Photo No.	Date
1	December 1, 2020

Northern view of release area.

Photo No.	Date
2	December 1, 2020

North eastern view of release area near flare.

PHOTOGRAPHIC LOG		
XTO Energy, Inc	Pierce Canyon 17 Eddy County, NM	TE012920158

Photo No.	Date
3	December 1, 2020

North eastern view of release area.

Photo No.	Date
4	December 1, 2020

Southern view of release area.

ATTACHMENT 3: LABORATORY ANALYTICAL RESULTS

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 679467

WSP USA, Dallas, TX

Project Name: Pierce Canyon 17 CTB

Project Id: TE012920158
Contact: Dan Moir
Project Location:

Date Received in Lab: Wed 12.02.2020 08:50
Report Date: 12.04.2020 14:07
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	679467-001		679467-002			
	Field Id:	SS01		SS02			
	Depth:	0.5- ft		0.5- ft			
	Matrix:	SOIL		SOIL			
	Sampled:	12.01.2020 12:39		12.01.2020 12:48			
BTEX by EPA 8021B	***Extracted:***	12.02.2020 13:15		12.02.2020 13:15			
	Analyzed:	12.03.2020 01:40		12.03.2020 02:03			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		<0.00202	0.00202	<0.00202	0.00202		
Toluene		<0.00202	0.00202	<0.00202	0.00202		
Ethylbenzene		<0.00202	0.00202	<0.00202	0.00202		
m,p-Xylenes		<0.00403	0.00403	0.0153	0.00403		
o-Xylene		<0.00202	0.00202	<0.00202	0.00202		
Total Xylenes		<0.002020	0.002020	0.01530	0.002020		
Total BTEX		<0.002020	0.002020	0.01530	0.002020		
Chloride by EPA 300	***Extracted:***	12.02.2020 18:09		12.02.2020 18:09			
	Analyzed:	12.03.2020 19:44		12.03.2020 19:50			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		297	10.0	67.6	9.96		
TPH by SW8015 Mod	***Extracted:***	12.02.2020 16:00		12.02.2020 16:00			
	Analyzed:	12.03.2020 02:00		12.03.2020 02:20			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<50.1	50.1	<50.0	50.0		
Diesel Range Organics (DRO)		406	50.1	326	50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.1	50.1	<50.0	50.0		
Total GRO-DRO		406.0	50.10	326.0	50.00		
Total TPH		406.0	50.10	326.0	50.00		

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Analytical Report 679467

for

WSP USA

Project Manager: Dan Moir

Pierce Canyon 17 CTB

TE012920158

12.04.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.04.2020

Project Manager: **Dan Moir**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **679467**
Pierce Canyon 17 CTB
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 679467. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 679467 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 679467

WSP USA, Dallas, TX

Pierce Canyon 17 CTB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	12.01.2020 12:39	0.5 ft	679467-001
SS02	S	12.01.2020 12:48	0.5 ft	679467-002

eurofins | Environment Testing Xenco

CASE NARRATIVE

Client Name: WSP USA

Project Name: Pierce Canyon 17 CTB

Project ID: *TE012920158*
Work Order Number(s): *679467*

Report Date: *12.04.2020*
Date Received: *12.02.2020*

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 679467

WSP USA, Dallas, TX

Pierce Canyon 17 CTB

Sample Id: **SS01** Matrix: Soil Date Received:12.02.2020 08:50

Lab Sample Id: 679467-001 Date Collected: 12.01.2020 12:39 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.02.2020 18:09 % Moisture:

Seq Number: 3143893 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**297**	10.0	mg/kg	12.03.2020 19:44		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: MAB

Analyst: CAC Date Prep: 12.02.2020 16:00 % Moisture:

Seq Number: 3143799 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.03.2020 02:00	U	1
Diesel Range Organics (DRO)	C10C28DRO	**406**	50.1	mg/kg	12.03.2020 02:00		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.03.2020 02:00	U	1
Total GRO-DRO	PHC628	**406.0**	50.10	mg/kg	12.03.2020 02:00		1
Total TPH	PHC635	**406.0**	50.10	mg/kg	12.03.2020 02:00		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	12.03.2020 02:00	
o-Terphenyl	84-15-1	97	%	70-135	12.03.2020 02:00	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 679467

WSP USA, Dallas, TX

Pierce Canyon 17 CTB

Sample Id:	**SS01**	Matrix:	Soil	Date Received:	12.02.2020 08:50
Lab Sample Id:	679467-001	Date Collected:	12.01.2020 12:39	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.02.2020 13:15	% Moisture:	
Seq Number:	3143773			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.03.2020 01:40	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.03.2020 01:40	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.03.2020 01:40	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	12.03.2020 01:40	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.03.2020 01:40	U	1
Total Xylenes	1330-20-7	<0.002020	0.002020	mg/kg	12.03.2020 01:40	U	1
Total BTEX		<0.002020	0.002020	mg/kg	12.03.2020 01:40	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	93	%	70-130	12.03.2020 01:40	
1,4-Difluorobenzene	540-36-3	98	%	70-130	12.03.2020 01:40	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 679467

WSP USA, Dallas, TX

Pierce Canyon 17 CTB

Sample Id: **SS02** Matrix: Soil Date Received:12.02.2020 08:50

Lab Sample Id: 679467-002 Date Collected: 12.01.2020 12:48 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.02.2020 18:09 % Moisture:

Seq Number: 3143893 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**67.6**	9.96	mg/kg	12.03.2020 19:50		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: MAB

Analyst: CAC Date Prep: 12.02.2020 16:00 % Moisture:

Seq Number: 3143799 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.03.2020 02:20	U	1
Diesel Range Organics (DRO)	C10C28DRO	**326**	50.0	mg/kg	12.03.2020 02:20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.03.2020 02:20	U	1
Total GRO-DRO	PHC628	**326.0**	50.00	mg/kg	12.03.2020 02:20		1
Total TPH	PHC635	**326.0**	50.00	mg/kg	12.03.2020 02:20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	12.03.2020 02:20	
o-Terphenyl	84-15-1	106	%	70-135	12.03.2020 02:20	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 679467

WSP USA, Dallas, TX

Pierce Canyon 17 CTB

Sample Id:	**SS02**	Matrix:	Soil	Date Received:	12.02.2020 08:50
Lab Sample Id:	679467-002	Date Collected:	12.01.2020 12:48	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.02.2020 13:15	% Moisture:	
Seq Number:	3143773			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	12.03.2020 02:03	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	12.03.2020 02:03	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	12.03.2020 02:03	U	1
m,p-Xylenes	179601-23-1	**0.0153**	0.00403	mg/kg	12.03.2020 02:03		1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	12.03.2020 02:03	U	1
Total Xylenes	1330-20-7	**0.01530**	0.002020	mg/kg	12.03.2020 02:03		1
Total BTEX		**0.01530**	0.002020	mg/kg	12.03.2020 02:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	103	%	70-130	12.03.2020 02:03	
1,4-Difluorobenzene	540-36-3	103	%	70-130	12.03.2020 02:03	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

eurofins | Environment Testing Xenco

QC Summary 679467

WSP USA

Pierce Canyon 17 CTB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3143893 — Matrix: Solid — Date Prep: 12.02.2020
MB Sample Id: 7716287-1-BLK — LCS Sample Id: 7716287-1-BKS — LCSD Sample Id: 7716287-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	257	103	257	103	90-110	0	20	mg/kg	12.03.2020 16:57	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3143893 — Matrix: Soil — Date Prep: 12.02.2020
Parent Sample Id: 679462-021 — MS Sample Id: 679462-021 S — MSD Sample Id: 679462-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	13.8	201	211	98	212	99	90-110	0	20	mg/kg	12.03.2020 17:16	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3143893 — Matrix: Soil — Date Prep: 12.02.2020
Parent Sample Id: 679462-031 — MS Sample Id: 679462-031 S — MSD Sample Id: 679462-031 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	113	200	314	101	324	105	90-110	3	20	mg/kg	12.03.2020 18:42	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3143799 — Matrix: Solid — Date Prep: 12.02.2020
MB Sample Id: 7716294-1-BLK — LCS Sample Id: 7716294-1-BKS — LCSD Sample Id: 7716294-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	1130	113	1010	101	70-135	11	35	mg/kg	12.02.2020 18:43	
Diesel Range Organics (DRO)	<50.0	1000	1060	106	1160	116	70-135	9	35	mg/kg	12.02.2020 18:43	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	118		100		108		70-135	%	12.02.2020 18:43
o-Terphenyl	114		95		112		70-135	%	12.02.2020 18:43

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3143799 — Matrix: Solid — Date Prep: 12.02.2020
MB Sample Id: 7716294-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.02.2020 18:23	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

eurofins | Environment Testing Xenco

QC Summary 679467

WSP USA

Pierce Canyon 17 CTB

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3143799 Matrix: Soil Date Prep: 12.02.2020
Parent Sample Id: 679462-021 MS Sample Id: 679462-021 S MSD Sample Id: 679462-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.3	1010	1210	120	1070	107	70-135	12	35	mg/kg	12.02.2020 19:42	
Diesel Range Organics (DRO)	<50.3	1010	1060	105	1120	112	70-135	6	35	mg/kg	12.02.2020 19:42	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	107		114		70-135	%	12.02.2020 19:42
o-Terphenyl	103		109		70-135	%	12.02.2020 19:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3143773 Matrix: Solid Date Prep: 12.02.2020
MB Sample Id: 7716291-1-BLK LCS Sample Id: 7716291-1-BKS LCSD Sample Id: 7716291-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.101	101	0.103	103	70-130	2	35	mg/kg	12.02.2020 16:22	
Toluene	<0.00200	0.100	0.0962	96	0.0989	99	70-130	3	35	mg/kg	12.02.2020 16:22	
Ethylbenzene	<0.00200	0.100	0.0891	89	0.0924	92	71-129	4	35	mg/kg	12.02.2020 16:22	
m,p-Xylenes	<0.00400	0.200	0.182	91	0.189	95	70-135	4	35	mg/kg	12.02.2020 16:22	
o-Xylene	<0.00200	0.100	0.0901	90	0.0929	93	71-133	3	35	mg/kg	12.02.2020 16:22	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		99		99		70-130	%	12.02.2020 16:22
4-Bromofluorobenzene	90		87		88		70-130	%	12.02.2020 16:22

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3143773 Matrix: Soil Date Prep: 12.02.2020
Parent Sample Id: 679462-021 MS Sample Id: 679462-021 S MSD Sample Id: 679462-021 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.106	106	0.114	114	70-130	7	35	mg/kg	12.02.2020 17:06	
Toluene	<0.00200	0.100	0.103	103	0.110	110	70-130	7	35	mg/kg	12.02.2020 17:06	
Ethylbenzene	<0.00200	0.100	0.0954	95	0.104	104	71-129	9	35	mg/kg	12.02.2020 17:06	
m,p-Xylenes	<0.00401	0.200	0.195	98	0.212	106	70-135	8	35	mg/kg	12.02.2020 17:06	
o-Xylene	<0.00200	0.100	0.0960	96	0.104	104	71-133	8	35	mg/kg	12.02.2020 17:06	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		98		70-130	%	12.02.2020 17:06
4-Bromofluorobenzene	90		86		70-130	%	12.02.2020 17:06

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 679467

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 Inc.,	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; korey.kennedy@wsp.com

Work Order Comments

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

Project Name:	Pierce Canyon 17 CTB	Turn Around	
Project Number:	TE012920158	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Temperature (°C):	2.0/1.8	Thermometer ID		
Received Intact:	(Yes) No	T-NM-007		
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Total Containers:	2	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01	S	12/1/2020	1239	0.5'	1	X	X	X
SS02	S	12/1/2020	1248	0.5'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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	Clove Clifton	12.2.20 0850	2		
3			4		
5			6		

Revised Date 051418 Rev. 2018.1

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 682306

WSP USA, Dallas, TX

Project Name: PC 17 CTB

Project Id: TE012920158
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 12.22.2020 16:00
Report Date: 12.29.2020 11:45
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	682306-001		682306-002			
	Field Id:	SS04		SS04 A			
	Depth:	0.5- ft		1- ft			
	Matrix:	SOIL		SOIL			
	Sampled:	12.22.2020 11:19		12.22.2020 11:26			
BTEX by EPA 8021B	***Extracted:***	12.22.2020 17:30		12.22.2020 17:30			
	Analyzed:	12.22.2020 19:43		12.22.2020 20:06			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Benzene		<0.00200	0.00200	<0.00199	0.00199		
Toluene		<0.00200	0.00200	<0.00199	0.00199		
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199		
m,p-Xylenes		<0.00399	0.00399	<0.00398	0.00398		
o-Xylene		<0.00200	0.00200	<0.00199	0.00199		
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199		
Total BTEX		<0.00200	0.00200	<0.00199	0.00199		
Chloride by EPA 300	***Extracted:***	12.28.2020 11:46		12.28.2020 11:46			
	Analyzed:	12.28.2020 13:18		12.28.2020 13:36			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Chloride		27.4	9.98	12.7	9.92		
TPH by SW8015 Mod	***Extracted:***	12.28.2020 12:00		12.28.2020 12:00			
	Analyzed:	12.28.2020 17:16		12.28.2020 17:36			
	Units/RL:	mg/kg	RL	mg/kg	RL		
Gasoline Range Hydrocarbons (GRO)		<50.0	50.0	<50.0	50.0		
Diesel Range Organics (DRO)		<50.0	50.0	<50.0	50.0		
Motor Oil Range Hydrocarbons (MRO)		<50.0	50.0	<50.0	50.0		
Total GRO-DRO		<50.0	50.0	<50.0	50.0		
Total TPH		<50.0	50.0	<50.0	50.0		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Analytical Report 682306

for

WSP USA

Project Manager: Dan Moir

PC 17 CTB

TE012920158

12.29.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.29.2020

Project Manager: **Dan Moir**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **682306**
PC 17 CTB
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 682306. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 682306 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 682306

WSP USA, Dallas, TX

PC 17 CTB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS04	S	12.22.2020 11:19	0.5 ft	682306-001
SS04 A	S	12.22.2020 11:26	1 ft	682306-002

eurofins | Environment Testing Xenco

CASE NARRATIVE

Client Name: WSP USA

Project Name: PC 17 CTB

Project ID: *TE012920158*
Work Order Number(s): *682306*

Report Date: *12.29.2020*
Date Received: *12.22.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682306

WSP USA, Dallas, TX

PC 17 CTB

Sample Id: **SS04** Matrix: Soil Date Received:12.22.2020 16:00

Lab Sample Id: 682306-001 Date Collected: 12.22.2020 11:19 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.28.2020 11:46 % Moisture:

Seq Number: 3146198 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**27.4**	9.98	mg/kg	12.28.2020 13:18		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:

Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.28.2020 17:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.28.2020 17:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.28.2020 17:16	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	12.28.2020 17:16	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.28.2020 17:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.28.2020 17:16	
o-Terphenyl	84-15-1	101	%	70-135	12.28.2020 17:16	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682306

WSP USA, Dallas, TX

PC 17 CTB

Sample Id:	**SS04**	Matrix:	Soil	Date Received:	12.22.2020 16:00
Lab Sample Id:	682306-001	Date Collected:	12.22.2020 11:19	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.22.2020 17:30	% Moisture:	
Seq Number:	3146051			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.22.2020 19:43	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.22.2020 19:43	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.22.2020 19:43	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.22.2020 19:43	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.22.2020 19:43	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.22.2020 19:43	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.22.2020 19:43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	119	%	70-130	12.22.2020 19:43	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.22.2020 19:43	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682306

WSP USA, Dallas, TX

PC 17 CTB

Sample Id: **SS04 A** Matrix: Soil Date Received:12.22.2020 16:00

Lab Sample Id: 682306-002 Date Collected: 12.22.2020 11:26 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.28.2020 11:46 % Moisture:

Seq Number: 3146198 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**12.7**	9.92	mg/kg	12.28.2020 13:36		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:

Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.0	50.0	mg/kg	12.28.2020 17:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.0	50.0	mg/kg	12.28.2020 17:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.0	50.0	mg/kg	12.28.2020 17:36	U	1
Total GRO-DRO	PHC628	<50.0	50.0	mg/kg	12.28.2020 17:36	U	1
Total TPH	PHC635	<50.0	50.0	mg/kg	12.28.2020 17:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	12.28.2020 17:36	
o-Terphenyl	84-15-1	98	%	70-135	12.28.2020 17:36	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682306

WSP USA, Dallas, TX

PC 17 CTB

Sample Id:	**SS04 A**	Matrix:	Soil	Date Received:	12.22.2020 16:00
Lab Sample Id:	682306-002	Date Collected:	12.22.2020 11:26	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.22.2020 17:30	% Moisture:	
Seq Number:	3146051			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.22.2020 20:06	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.22.2020 20:06	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.22.2020 20:06	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.22.2020 20:06	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.22.2020 20:06	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.22.2020 20:06	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.22.2020 20:06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	115	%	70-130	12.22.2020 20:06	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.22.2020 20:06	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 682306

eurofins | Environment Testing Xenco

WSP USA

PC 17 CTB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717954-1-BLK — LCS Sample Id: 7717954-1-BKS — LCSD Sample Id: 7717954-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	260	104	90-110	0	20	mg/kg	12.28.2020 12:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682305-001 — MS Sample Id: 682305-001 S — MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	206	103	206	104	90-110	0	20	mg/kg	12.28.2020 12:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682314-001 — MS Sample Id: 682314-001 S — MSD Sample Id: 682314-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	393	200	611	109	613	110	90-110	0	20	mg/kg	12.28.2020 14:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK — LCS Sample Id: 7717990-1-BKS — LCSD Sample Id: 7717990-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	998	100	1080	108	70-135	8	35	mg/kg	12.28.2020 13:52	
Diesel Range Organics (DRO)	<50.0	1000	937	94	1060	106	70-135	12	35	mg/kg	12.28.2020 13:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		103		101		70-135	%	12.28.2020 13:52
o-Terphenyl	107		102		99		70-135	%	12.28.2020 13:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.28.2020 13:32	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 682306

eurofins | Environment Testing Xenco

WSP USA

PC 17 CTB

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3146194 Matrix: Soil Date Prep: 12.28.2020
Parent Sample Id: 682305-001 MS Sample Id: 682305-001 S MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1120	112	980	98	70-135	13	35	mg/kg	12.28.2020 14:55	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1130	113	70-135	12	35	mg/kg	12.28.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		102		70-135	%	12.28.2020 14:55
o-Terphenyl	106		116		70-135	%	12.28.2020 14:55

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Solid Date Prep: 12.22.2020
MB Sample Id: 7717927-1-BLK LCS Sample Id: 7717927-1-BKS LCSD Sample Id: 7717927-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0990	99	0.104	104	70-130	5	35	mg/kg	12.22.2020 15:42	
Toluene	<0.00200	0.100	0.0946	95	0.0977	98	70-130	3	35	mg/kg	12.22.2020 15:42	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.104	104	71-129	4	35	mg/kg	12.22.2020 15:42	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.212	106	70-135	4	35	mg/kg	12.22.2020 15:42	
o-Xylene	<0.00200	0.100	0.102	102	0.103	103	71-133	1	35	mg/kg	12.22.2020 15:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		99		103		70-130	%	12.22.2020 15:42
4-Bromofluorobenzene	118		105		112		70-130	%	12.22.2020 15:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Soil Date Prep: 12.22.2020
Parent Sample Id: 682137-006 MS Sample Id: 682137-006 S MSD Sample Id: 682137-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.115	115	0.116	116	70-130	1	35	mg/kg	12.22.2020 16:26	
Toluene	<0.00201	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	12.22.2020 16:26	
Ethylbenzene	<0.00201	0.100	0.113	113	0.114	114	71-129	1	35	mg/kg	12.22.2020 16:26	
m,p-Xylenes	<0.00402	0.201	0.231	115	0.232	116	70-135	0	35	mg/kg	12.22.2020 16:26	
o-Xylene	<0.00201	0.100	0.113	113	0.113	113	71-133	0	35	mg/kg	12.22.2020 16:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	12.22.2020 16:26
4-Bromofluorobenzene	110		112		70-130	%	12.22.2020 16:26

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 682306

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:	Korey Kennedy	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; korey.kennedy@wsp.com

Work Order Comments

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

Project Name:	PC 17 CTB	Turn Around	
Project Number:	TE012920158	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Temperature (°C):	1.2/1.0	Thermometer ID	
Received Intact:	Yes No	T-NM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	2

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)
SS04	S	12/22/2020	1119	0.5'	1	X	X	X
SS04A	S	12/22/2020	1126	1'	1	X	X	X

Work Order Notes

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

Sample Comments

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
	Cloe Clutts	12.22.20 1600	2		
			4		
			6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.22.2020 04.00.00 PM

Work Order #: 682306

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 12.22.2020

Checklist reviewed by: Jessica Kramer Date: 12.23.2020

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 682309

WSP USA, Dallas, TX

Project Name: PC 17 CTB

Project Id: TE012920158
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 12.22.2020 16:00
Report Date: 12.29.2020 11:45
Project Manager: Jessica Kramer

Analysis Requested									
	Lab Id:	682309-001		682309-002					
	Field Id:	SS03		SS03A					
	Depth:	0.5- ft		1- ft					
	Matrix:	SOIL		SOIL					
	Sampled:	12.22.2020 10:43		12.22.2020 10:49					
BTEX by EPA 8021B	***Extracted:***	12.22.2020 17:30		12.22.2020 17:30					
	Analyzed:	12.22.2020 20:28		12.22.2020 20:51					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Benzene		<0.00200	0.00200	<0.00199	0.00199				
Toluene		<0.00200	0.00200	<0.00199	0.00199				
Ethylbenzene		<0.00200	0.00200	<0.00199	0.00199				
m,p-Xylenes		<0.00401	0.00401	<0.00398	0.00398				
o-Xylene		<0.00200	0.00200	<0.00199	0.00199				
Total Xylenes		<0.00200	0.00200	<0.00199	0.00199				
Total BTEX		<0.00200	0.00200	<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	12.28.2020 11:46		12.28.2020 11:46					
	Analyzed:	12.28.2020 13:42		12.28.2020 13:48					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Chloride		106	9.98	93.5	9.94				
TPH by SW8015 Mod	***Extracted:***	12.28.2020 12:00		12.28.2020 12:00					
	Analyzed:	12.28.2020 17:56		12.28.2020 18:16					
	Units/RL:	mg/kg	RL	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<49.8	49.8	<50.1	50.1				
Diesel Range Organics (DRO)		<49.8	49.8	<50.1	50.1				
Motor Oil Range Hydrocarbons (MRO)		<49.8	49.8	<50.1	50.1				
Total GRO-DRO		<49.8	49.8	<50.1	50.1				
Total TPH		<49.8	49.8	<50.1	50.1				

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Analytical Report 682309

for

WSP USA

Project Manager: Dan Moir

PC 17 CTB

TE012920158

12.29.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.29.2020

Project Manager: **Dan Moir**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **682309**
PC 17 CTB
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 682309. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 682309 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 682309

WSP USA, Dallas, TX

PC 17 CTB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS03	S	12.22.2020 10:43	0.5 ft	682309-001
SS03A	S	12.22.2020 10:49	1 ft	682309-002

CASE NARRATIVE

eurofins | Environment Testing Xenco

Client Name: WSP USA

Project Name: PC 17 CTB

Project ID: *TE012920158*
Work Order Number(s): *682309*

Report Date: *12.29.2020*
Date Received: *12.22.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682309

WSP USA, Dallas, TX

PC 17 CTB

Sample Id: **SS03** Matrix: Soil Date Received:12.22.2020 16:00

Lab Sample Id: 682309-001 Date Collected: 12.22.2020 10:43 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.28.2020 11:46 % Moisture:

Seq Number: 3146198 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**106**	9.98	mg/kg	12.28.2020 13:42		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:

Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<49.8	49.8	mg/kg	12.28.2020 17:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<49.8	49.8	mg/kg	12.28.2020 17:56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<49.8	49.8	mg/kg	12.28.2020 17:56	U	1
Total GRO-DRO	PHC628	<49.8	49.8	mg/kg	12.28.2020 17:56	U	1
Total TPH	PHC635	<49.8	49.8	mg/kg	12.28.2020 17:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	12.28.2020 17:56	
o-Terphenyl	84-15-1	105	%	70-135	12.28.2020 17:56	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682309

WSP USA, Dallas, TX

PC 17 CTB

Sample Id:	**SS03**	Matrix:	Soil	Date Received:	12.22.2020 16:00
Lab Sample Id:	682309-001	Date Collected:	12.22.2020 10:43	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.22.2020 17:30	% Moisture:	
Seq Number:	3146051			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.22.2020 20:28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.22.2020 20:28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.22.2020 20:28	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	12.22.2020 20:28	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.22.2020 20:28	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.22.2020 20:28	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.22.2020 20:28	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	118	%	70-130	12.22.2020 20:28	
1,4-Difluorobenzene	540-36-3	104	%	70-130	12.22.2020 20:28	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682309

WSP USA, Dallas, TX

PC 17 CTB

Sample Id: **SS03A** Matrix: Soil Date Received:12.22.2020 16:00

Lab Sample Id: 682309-002 Date Collected: 12.22.2020 10:49 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.28.2020 11:46 % Moisture:

Seq Number: 3146198 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**93.5**	9.94	mg/kg	12.28.2020 13:48		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:

Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	12.28.2020 18:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	12.28.2020 18:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	12.28.2020 18:16	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	12.28.2020 18:16	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	12.28.2020 18:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	12.28.2020 18:16	
o-Terphenyl	84-15-1	113	%	70-135	12.28.2020 18:16	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682309

WSP USA, Dallas, TX

PC 17 CTB

Sample Id:	**SS03A**	Matrix:	Soil	Date Received:	12.22.2020 16:00
Lab Sample Id:	682309-002	Date Collected:	12.22.2020 10:49	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.22.2020 17:30	% Moisture:	
Seq Number:	3146051			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.22.2020 20:51	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.22.2020 20:51	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.22.2020 20:51	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.22.2020 20:51	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.22.2020 20:51	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.22.2020 20:51	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.22.2020 20:51	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.22.2020 20:51	
4-Bromofluorobenzene	460-00-4	122	%	70-130	12.22.2020 20:51	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

QC Summary 682309

eurofins | Environment Testing Xenco

WSP USA

PC 17 CTB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717954-1-BLK — LCS Sample Id: 7717954-1-BKS — LCSD Sample Id: 7717954-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	260	104	90-110	0	20	mg/kg	12.28.2020 12:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682305-001 — MS Sample Id: 682305-001 S — MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	206	103	206	104	90-110	0	20	mg/kg	12.28.2020 12:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682314-001 — MS Sample Id: 682314-001 S — MSD Sample Id: 682314-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	393	200	611	109	613	110	90-110	0	20	mg/kg	12.28.2020 14:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK — LCS Sample Id: 7717990-1-BKS — LCSD Sample Id: 7717990-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	998	100	1080	108	70-135	8	35	mg/kg	12.28.2020 13:52	
Diesel Range Organics (DRO)	<50.0	1000	937	94	1060	106	70-135	12	35	mg/kg	12.28.2020 13:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		103		101		70-135	%	12.28.2020 13:52
o-Terphenyl	107		102		99		70-135	%	12.28.2020 13:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.28.2020 13:32	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

eurofins | Environment Testing Xenco

QC Summary 682309

WSP USA

PC 17 CTB

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3146194 Matrix: Soil Date Prep: 12.28.2020
Parent Sample Id: 682305-001 MS Sample Id: 682305-001 S MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1120	112	980	98	70-135	13	35	mg/kg	12.28.2020 14:55	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1130	113	70-135	12	35	mg/kg	12.28.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		102		70-135	%	12.28.2020 14:55
o-Terphenyl	106		116		70-135	%	12.28.2020 14:55

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Solid Date Prep: 12.22.2020
MB Sample Id: 7717927-1-BLK LCS Sample Id: 7717927-1-BKS LCSD Sample Id: 7717927-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0990	99	0.104	104	70-130	5	35	mg/kg	12.22.2020 15:42	
Toluene	<0.00200	0.100	0.0946	95	0.0977	98	70-130	3	35	mg/kg	12.22.2020 15:42	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.104	104	71-129	4	35	mg/kg	12.22.2020 15:42	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.212	106	70-135	4	35	mg/kg	12.22.2020 15:42	
o-Xylene	<0.00200	0.100	0.102	102	0.103	103	71-133	1	35	mg/kg	12.22.2020 15:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		99		103		70-130	%	12.22.2020 15:42
4-Bromofluorobenzene	118		105		112		70-130	%	12.22.2020 15:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Soil Date Prep: 12.22.2020
Parent Sample Id: 682137-006 MS Sample Id: 682137-006 S MSD Sample Id: 682137-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.115	115	0.116	116	70-130	1	35	mg/kg	12.22.2020 16:26	
Toluene	<0.00201	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	12.22.2020 16:26	
Ethylbenzene	<0.00201	0.100	0.113	113	0.114	114	71-129	1	35	mg/kg	12.22.2020 16:26	
m,p-Xylenes	<0.00402	0.201	0.231	115	0.232	116	70-135	0	35	mg/kg	12.22.2020 16:26	
o-Xylene	<0.00201	0.100	0.113	113	0.113	113	71-133	0	35	mg/kg	12.22.2020 16:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	12.22.2020 16:26
4-Bromofluorobenzene	110		112		70-130	%	12.22.2020 16:26

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

Work Order No: 682309

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

Project Manager:	Korey Kennedy	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; korey.kennedy@wsp.com

Work Order Comments

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

Project Name:	PC 17 CTB	Turn Around	
Project Number:	TE012920158	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Total Containers:	2

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS03	S	12/22/2020	1043	0.5'	1	X	X	X
SS03A	S	12/22/2020	1049	1'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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		Clive Cuffay	12-22-20 1600	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.22.2020 04.00.00 PM

Work Order #: 682309

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 12.22.2020

Checklist reviewed by: Jessica Kramer Date: 12.23.2020

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 682311

WSP USA, Dallas, TX

Project Name: PC 17 CTB

Project Id: TE012920158
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 12.22.2020 16:00
Report Date: 12.29.2020 11:45
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	682311-001					
	Field Id:	SS01A					
	Depth:	1- ft					
	Matrix:	SOIL					
	Sampled:	12.22.2020 11:01					
BTEX by EPA 8021B	***Extracted:***	12.22.2020 17:30					
	Analyzed:	12.22.2020 21:13					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00399 0.00399					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Chloride by EPA 300	***Extracted:***	12.28.2020 11:46					
	Analyzed:	12.28.2020 13:54					
	Units/RL:	mg/kg RL					
Chloride		339 10.0					
TPH by SW8015 Mod	***Extracted:***	12.28.2020 12:00					
	Analyzed:	12.28.2020 18:56					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3					
Diesel Range Organics (DRO)		95.5 50.3					
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3					
Total GRO-DRO		95.5 50.3					
Total TPH		95.5 50.3					

BRL - Below Reporting Limit

Jessica Kramer

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Analytical Report 682311

for

WSP USA

Project Manager: Dan Moir

PC 17 CTB

TE012920158

12.29.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.29.2020

Project Manager: **Dan Moir**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **682311**
PC 17 CTB
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 682311. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 682311 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 682311

WSP USA, Dallas, TX

PC 17 CTB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01A	S	12.22.2020 11:01	1 ft	682311-001

eurofins | Environment Testing Xenco

CASE NARRATIVE

Client Name: WSP USA

Project Name: PC 17 CTB

Project ID: *TE012920158*
Work Order Number(s): *682311*

Report Date: *12.29.2020*
Date Received: *12.22.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682311

WSP USA, Dallas, TX

PC 17 CTB

Sample Id: **SS01A** Matrix: Soil Date Received:12.22.2020 16:00

Lab Sample Id: 682311-001 Date Collected: 12.22.2020 11:01 Sample Depth: 1 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.28.2020 11:46 % Moisture:

Seq Number: 3146198 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**339**	10.0	mg/kg	12.28.2020 13:54		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:

Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	12.28.2020 18:56	U	1
Diesel Range Organics (DRO)	C10C28DRO	**95.5**	50.3	mg/kg	12.28.2020 18:56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	12.28.2020 18:56	U	1
Total GRO-DRO	PHC628	**95.5**	50.3	mg/kg	12.28.2020 18:56		1
Total TPH	PHC635	**95.5**	50.3	mg/kg	12.28.2020 18:56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	12.28.2020 18:56	
o-Terphenyl	84-15-1	110	%	70-135	12.28.2020 18:56	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682311

WSP USA, Dallas, TX

PC 17 CTB

Sample Id:	**SS01A**	Matrix:	Soil	Date Received:	12.22.2020 16:00
Lab Sample Id:	682311-001	Date Collected:	12.22.2020 11:01	Sample Depth:	1 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.22.2020 17:30	% Moisture:	
Seq Number:	3146051			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.22.2020 21:13	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.22.2020 21:13	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.22.2020 21:13	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.22.2020 21:13	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.22.2020 21:13	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.22.2020 21:13	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.22.2020 21:13	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.22.2020 21:13	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.22.2020 21:13	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

eurofins | Environment Testing Xenco

QC Summary 682311

WSP USA

PC 17 CTB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717954-1-BLK — LCS Sample Id: 7717954-1-BKS — LCSD Sample Id: 7717954-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	260	104	90-110	0	20	mg/kg	12.28.2020 12:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682305-001 — MS Sample Id: 682305-001 S — MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	206	103	206	104	90-110	0	20	mg/kg	12.28.2020 12:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682314-001 — MS Sample Id: 682314-001 S — MSD Sample Id: 682314-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	393	200	611	109	613	110	90-110	0	20	mg/kg	12.28.2020 14:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK — LCS Sample Id: 7717990-1-BKS — LCSD Sample Id: 7717990-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	998	100	1080	108	70-135	8	35	mg/kg	12.28.2020 13:52	
Diesel Range Organics (DRO)	<50.0	1000	937	94	1060	106	70-135	12	35	mg/kg	12.28.2020 13:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		103		101		70-135	%	12.28.2020 13:52
o-Terphenyl	107		102		99		70-135	%	12.28.2020 13:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.28.2020 13:32	

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

QC Summary 682311

eurofins | Environment Testing Xenco

WSP USA

PC 17 CTB

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3146194 Matrix: Soil Date Prep: 12.28.2020
Parent Sample Id: 682305-001 MS Sample Id: 682305-001 S MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1120	112	980	98	70-135	13	35	mg/kg	12.28.2020 14:55	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1130	113	70-135	12	35	mg/kg	12.28.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		102		70-135	%	12.28.2020 14:55
o-Terphenyl	106		116		70-135	%	12.28.2020 14:55

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Solid Date Prep: 12.22.2020
MB Sample Id: 7717927-1-BLK LCS Sample Id: 7717927-1-BKS LCSD Sample Id: 7717927-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0990	99	0.104	104	70-130	5	35	mg/kg	12.22.2020 15:42	
Toluene	<0.00200	0.100	0.0946	95	0.0977	98	70-130	3	35	mg/kg	12.22.2020 15:42	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.104	104	71-129	4	35	mg/kg	12.22.2020 15:42	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.212	106	70-135	4	35	mg/kg	12.22.2020 15:42	
o-Xylene	<0.00200	0.100	0.102	102	0.103	103	71-133	1	35	mg/kg	12.22.2020 15:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		99		103		70-130	%	12.22.2020 15:42
4-Bromofluorobenzene	118		105		112		70-130	%	12.22.2020 15:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Soil Date Prep: 12.22.2020
Parent Sample Id: 682137-006 MS Sample Id: 682137-006 S MSD Sample Id: 682137-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.115	115	0.116	116	70-130	1	35	mg/kg	12.22.2020 16:26	
Toluene	<0.00201	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	12.22.2020 16:26	
Ethylbenzene	<0.00201	0.100	0.113	113	0.114	114	71-129	1	35	mg/kg	12.22.2020 16:26	
m,p-Xylenes	<0.00402	0.201	0.231	115	0.232	116	70-135	0	35	mg/kg	12.22.2020 16:26	
o-Xylene	<0.00201	0.100	0.113	113	0.113	113	71-133	0	35	mg/kg	12.22.2020 16:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	12.22.2020 16:26
4-Bromofluorobenzene	110		112		70-130	%	12.22.2020 16:26

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

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

Work Order No: 682311

Page 1 of 1

Project Manager:	Korey Kennedy	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849 Email:		luis.delval@wsp.com; korey.kennedy@wsp.com

Work Order Comments

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

Project Name:	PC 17 CTB	Turn Around	
Project Number:	TE012920158	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	
Received Intact:	(Yes) No	T-NM-007	
Cooler Custody Seals:	Yes (No) N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes (No) N/A	Total Containers:	1

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)
SS01A	S	12/22/2020	1101	1'	1	X	X	X

ANALYSIS REQUEST

Work Order Notes

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

Sample Comments

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		Cue Cuffo	12-22-20 1600	2		
3				4		
5				6		

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.22.2020 04.00.00 PM

Work Order #: 682311

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 12.22.2020

Checklist reviewed by: Jessica Kramer Date: 12.23.2020

Jessica Kramer

eurofins | Environment Testing Xenco

Certificate of Analysis Summary 682313

WSP USA, Dallas, TX

Project Name: PC 17 CTB

Project Id: TE012920158
Contact: Dan Moir
Project Location:

Date Received in Lab: Tue 12.22.2020 16:00
Report Date: 12.29.2020 11:46
Project Manager: Jessica Kramer

Analysis Requested							
	Lab Id:	682313-001					
	Field Id:	SS05					
	Depth:	0.5- ft					
	Matrix:	SOIL					
	Sampled:	12.22.2020 11:59					
BTEX by EPA 8021B	***Extracted:***	12.22.2020 17:30					
	Analyzed:	12.22.2020 22:56					
	Units/RL:	mg/kg	RL				
Benzene		<0.00199	0.00199				
Toluene		<0.00199	0.00199				
Ethylbenzene		<0.00199	0.00199				
m,p-Xylenes		<0.00398	0.00398				
o-Xylene		<0.00199	0.00199				
Total Xylenes		<0.00199	0.00199				
Total BTEX		<0.00199	0.00199				
Chloride by EPA 300	***Extracted:***	12.28.2020 11:46					
	Analyzed:	12.28.2020 14:00					
	Units/RL:	mg/kg	RL				
Chloride		599	9.92				
TPH by SW8015 Mod	***Extracted:***	12.28.2020 12:00					
	Analyzed:	12.28.2020 19:16					
	Units/RL:	mg/kg	RL				
Gasoline Range Hydrocarbons (GRO)		<50.2	50.2				
Diesel Range Organics (DRO)		<50.2	50.2				
Motor Oil Range Hydrocarbons (MRO)		<50.2	50.2				
Total GRO-DRO		<50.2	50.2				
Total TPH		<50.2	50.2				

BRL - Below Reporting Limit

Jessica Kramer

eurofins | Environment Testing Xenco

Analytical Report 682313

for

WSP USA

Project Manager: Dan Moir

PC 17 CTB

TE012920158

12.29.2020

Collected By: Client

1089 N Canal Street
Carlsbad, NM 88220

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)

eurofins | Environment Testing Xenco

12.29.2020

Project Manager: **Dan Moir**
WSP USA
2777 N. Stemmons Freeway, Suite 1600
Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **682313**
PC 17 CTB
Project Address:

Dan Moir:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 682313. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 682313 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Jessica Kramer

Jessica Kramer
Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

eurofins | Environment Testing Xenco

Sample Cross Reference 682313

WSP USA, Dallas, TX

PC 17 CTB

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS05	S	12.22.2020 11:59	0.5 ft	682313-001

eurofins | Environment Testing Xenco

CASE NARRATIVE

Client Name: WSP USA

Project Name: PC 17 CTB

Project ID: *TE012920158*
Work Order Number(s): *682313*

Report Date: *12.29.2020*
Date Received: *12.22.2020*

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682313

WSP USA, Dallas, TX

PC 17 CTB

Sample Id: **SS05** Matrix: Soil Date Received:12.22.2020 16:00

Lab Sample Id: 682313-001 Date Collected: 12.22.2020 11:59 Sample Depth: 0.5 ft

Analytical Method: Chloride by EPA 300 Prep Method: E300P

Tech: MAB

Analyst: MAB Date Prep: 12.28.2020 11:46 % Moisture:

Seq Number: 3146198 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	**599**	9.92	mg/kg	12.28.2020 14:00		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P

Tech: CAC

Analyst: CAC Date Prep: 12.28.2020 12:00 % Moisture:

Seq Number: 3146194 Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.2	50.2	mg/kg	12.28.2020 19:16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.2	50.2	mg/kg	12.28.2020 19:16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.2	50.2	mg/kg	12.28.2020 19:16	U	1
Total GRO-DRO	PHC628	<50.2	50.2	mg/kg	12.28.2020 19:16	U	1
Total TPH	PHC635	<50.2	50.2	mg/kg	12.28.2020 19:16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	12.28.2020 19:16	
o-Terphenyl	84-15-1	113	%	70-135	12.28.2020 19:16	

eurofins | Environment Testing Xenco

Certificate of Analytical Results 682313

WSP USA, Dallas, TX

PC 17 CTB

Sample Id:	**SS05**	Matrix:	Soil	Date Received:	12.22.2020 16:00
Lab Sample Id:	682313-001	Date Collected:	12.22.2020 11:59	Sample Depth:	0.5 ft
Analytical Method:	BTEX by EPA 8021B			Prep Method:	SW5035A
Tech:	MAB				
Analyst:	MAB	Date Prep:	12.22.2020 17:30	% Moisture:	
Seq Number:	3146051			Basis:	Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.22.2020 22:56	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	12.22.2020 22:56	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	12.22.2020 22:56	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	12.22.2020 22:56	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	12.22.2020 22:56	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	12.22.2020 22:56	U	1
Total BTEX		<0.00199	0.00199	mg/kg	12.22.2020 22:56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	108	%	70-130	12.22.2020 22:56	
4-Bromofluorobenzene	460-00-4	121	%	70-130	12.22.2020 22:56	

eurofins | Environment Testing Xenco

Flagging Criteria

X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.

B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.

D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.

F RPD exceeded lab control limits.

J The target analyte was positively identified below the quantitation limit and above the detection limit.

U Analyte was not detected.

L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

K Sample analyzed outside of recommended hold time.

JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation

eurofins | Environment Testing Xenco

QC Summary 682313

WSP USA

PC 17 CTB

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717954-1-BLK — LCS Sample Id: 7717954-1-BKS — LCSD Sample Id: 7717954-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<10.0	250	260	104	260	104	90-110	0	20	mg/kg	12.28.2020 12:30	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682305-001 — MS Sample Id: 682305-001 S — MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<9.98	200	206	103	206	104	90-110	0	20	mg/kg	12.28.2020 12:48	

Analytical Method: Chloride by EPA 300 — Prep Method: E300P
Seq Number: 3146198 — Matrix: Soil — Date Prep: 12.28.2020
Parent Sample Id: 682314-001 — MS Sample Id: 682314-001 S — MSD Sample Id: 682314-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	393	200	611	109	613	110	90-110	0	20	mg/kg	12.28.2020 14:12	

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK — LCS Sample Id: 7717990-1-BKS — LCSD Sample Id: 7717990-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<50.0	1000	998	100	1080	108	70-135	8	35	mg/kg	12.28.2020 13:52	
Diesel Range Organics (DRO)	<50.0	1000	937	94	1060	106	70-135	12	35	mg/kg	12.28.2020 13:52	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		103		101		70-135	%	12.28.2020 13:52
o-Terphenyl	107		102		99		70-135	%	12.28.2020 13:52

Analytical Method: TPH by SW8015 Mod — Prep Method: SW8015P
Seq Number: 3146194 — Matrix: Solid — Date Prep: 12.28.2020
MB Sample Id: 7717990-1-BLK

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	12.28.2020 13:32	

MS/MSD Percent Recovery — [D] = 100*(C-A) / B — LCS = Laboratory Control Sample — MS = Matrix Spike
Relative Percent Difference — RPD = 200* | (C-E) / (C+E) | — A = Parent Result — B = Spike Added
LCS/LCSD Recovery — [D] = 100 * (C) / [B] — C = MS/LCS Result — D = MSD/LCSD % Rec
Log Difference — Log Diff. = Log(Sample Duplicate) - Log(Original Sample) — E = MSD/LCSD Result

eurofins | Environment Testing Xenco

QC Summary 682313

WSP USA

PC 17 CTB

Analytical Method: **TPH by SW8015 Mod** Prep Method: SW8015P
Seq Number: 3146194 Matrix: Soil Date Prep: 12.28.2020
Parent Sample Id: 682305-001 MS Sample Id: 682305-001 S MSD Sample Id: 682305-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<49.9	998	1120	112	980	98	70-135	13	35	mg/kg	12.28.2020 14:55	
Diesel Range Organics (DRO)	<49.9	998	1000	100	1130	113	70-135	12	35	mg/kg	12.28.2020 14:55	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	111		102		70-135	%	12.28.2020 14:55
o-Terphenyl	106		116		70-135	%	12.28.2020 14:55

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Solid Date Prep: 12.22.2020
MB Sample Id: 7717927-1-BLK LCS Sample Id: 7717927-1-BKS LCSD Sample Id: 7717927-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0990	99	0.104	104	70-130	5	35	mg/kg	12.22.2020 15:42	
Toluene	<0.00200	0.100	0.0946	95	0.0977	98	70-130	3	35	mg/kg	12.22.2020 15:42	
Ethylbenzene	<0.00200	0.100	0.0997	100	0.104	104	71-129	4	35	mg/kg	12.22.2020 15:42	
m,p-Xylenes	<0.00400	0.200	0.204	102	0.212	106	70-135	4	35	mg/kg	12.22.2020 15:42	
o-Xylene	<0.00200	0.100	0.102	102	0.103	103	71-133	1	35	mg/kg	12.22.2020 15:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	105		99		103		70-130	%	12.22.2020 15:42
4-Bromofluorobenzene	118		105		112		70-130	%	12.22.2020 15:42

Analytical Method: **BTEX by EPA 8021B** Prep Method: SW5035A
Seq Number: 3146051 Matrix: Soil Date Prep: 12.22.2020
Parent Sample Id: 682137-006 MS Sample Id: 682137-006 S MSD Sample Id: 682137-006 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.100	0.115	115	0.116	116	70-130	1	35	mg/kg	12.22.2020 16:26	
Toluene	<0.00201	0.100	0.109	109	0.109	109	70-130	0	35	mg/kg	12.22.2020 16:26	
Ethylbenzene	<0.00201	0.100	0.113	113	0.114	114	71-129	1	35	mg/kg	12.22.2020 16:26	
m,p-Xylenes	<0.00402	0.201	0.231	115	0.232	116	70-135	0	35	mg/kg	12.22.2020 16:26	
o-Xylene	<0.00201	0.100	0.113	113	0.113	113	71-133	0	35	mg/kg	12.22.2020 16:26	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	102		103		70-130	%	12.22.2020 16:26
4-Bromofluorobenzene	110		112		70-130	%	12.22.2020 16:26

MS/MSD Percent Recovery [D] = 100*(C-A) / B
Relative Percent Difference RPD = 200* | (C-E) / (C+E) |
LCS/LCSD Recovery [D] = 100 * (C) / [B]
Log Difference Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec

Chain of Custody

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: 682313

www.xenco.com Page 1 of 1

Project Manager:	Korey Kennedy	Bill to: (if different)	Kyle Littrell
Company Name:	WSP USA Inc.	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.236.3849	Email:	luis.delval@wsp.com; korey.kennedy@wsp.com

Work Order Comments

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

Project Name:	PC 17 CTB	**Turn Around**	
Project Number:	TE012920158	Routine	☒
P.O. Number:		Rush:	
Sampler's Name:	Luis Del Val	Due Date:	

SAMPLE RECEIPT	Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Temperature (°C):	1.2/1.0	Thermometer ID	T-NM-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:	1	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
SS05	S	12/22/2020	1159	0.5'	1	X	X	X	

Work Order Notes

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	[signature]	[signature]	12-22-20 1600	2			
3				4			
5				6			

Revised Date 051418 Rev. 2018.1

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 12.22.2020 04.00.00 PM

Work Order #: 682313

Acceptable Temperature Range: 0 - 6 degC
Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist		Comments
#1 *Temperature of cooler(s)?	1	
#2 *Shipping container in good condition?	**Yes**	
#3 *Samples received on ice?	**Yes**	
#4 *Custody Seals intact on shipping container/ cooler?	**Yes**	
#5 Custody Seals intact on sample bottles?	**Yes**	
#6*Custody Seals Signed and dated?	**Yes**	
#7 *Chain of Custody present?	**Yes**	
#8 Any missing/extra samples?	**No**	
#9 Chain of Custody signed when relinquished/ received?	**Yes**	
#10 Chain of Custody agrees with sample labels/matrix?	**Yes**	
#11 Container label(s) legible and intact?	**Yes**	
#12 Samples in proper container/ bottle?	**Yes**	Samples received in bulk containers.
#13 Samples properly preserved?	**Yes**	
#14 Sample container(s) intact?	**Yes**	
#15 Sufficient sample amount for indicated test(s)?	**Yes**	
#16 All samples received within hold time?	**Yes**	
#17 Subcontract of sample(s)?	**No**	
#18 Water VOC samples have zero headspace?	**N/A**	

*** Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst: PH Device/Lot#:

Checklist completed by: Cloe Clifton Date: 12.22.2020

Checklist reviewed by: Jessica Kramer Date: 12.23.2020

Jessica Kramer

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

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

CONDITIONS

Action 17659

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 17659
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NRM2033631417 PIERCE CANYON 17, thank you. This closure is approved.	6/17/2021