

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	nAPP2100546416
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 32.29229 Longitude -103.92739
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Bronco	Site Type CDP
Date Release Discovered 12/22/2020	API# (if applicable)

Unit Letter	Section	Township	Range	County
E	19	23S	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)

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

Cause of Release Mechanic noticed discolored area toward the top of the glycol contactor and a ½" ball valve dripping glycol onto the ground. The discolored area on the vessel was burnt paint above the PRV, indicating that the gas from the relief valve had caught fire and then extinguished itself after PRV reseated. A third-party contractor has been retained for remediation activities.

Form C-141

State of New Mexico
Oil Conservation Division


Page 2

Incident ID	nAPP2100546416
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Fire occurred at the facility.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Garrett Green to 'Mike Bratcher'; 'Victoria Venegas'; 'Rob Hamlet'; 'emily.hernandez@state.nm.us'; 'rmann@slo.state.nm.us' on Wednesday, December 23, 2020 10:07 AM 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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: NA	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Kyle Littrell</u> Signature:  email: <u>Kyle_Littrell@xtoenergy.com</u>	Title: <u>SH&E Supervisor</u> Date: <u>01-05-21</u> Telephone: <u>432-221-7331</u>
<u>OCD Only</u> Received by: _____ Date: _____	

Incident ID	nAPP2100546416
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?	<u>50-100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 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

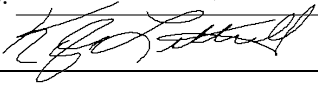
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, 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

Page 4

Incident ID	nAPP2100546416
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: 03/19/2021
email: Kyle_Littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

Incident ID	nAPP2100546416
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 19.15.29.12NMAC.

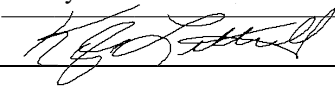
Closure Report Attachment Checklist: Each of the following items must be included in the closure report.

- ☒ 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: 03/19/2021

email: Kyle_Littrell@xtoenergy.com

Telephone: 432-221-7331

OCD Only

Received by: Chad Hensley

Date: 05/04/2021

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: 

Date: 05/04/2021

Printed Name: Chad Hensley

Title: Environmental Specialist Advanced



WSP USA

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

March 19, 2021

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

**RE: Closure Request
Bronco CDP
Incident Number nAPP2100546416
Eddy County, New Mexico**

To Whom It May Concern:

WSP USA Inc. (WSP) on behalf of XTO Energy, Inc. (XTO), presents the following Closure Request detailing site assessment and soil sampling activities at the Bronco CDP (Site) in Unit E, Section 19, Township 23 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a fire at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request, and requesting no further action (NFA) for Incident Number nAPP2100546416.

RELEASE BACKGROUND

On December 22, 2020, a mechanic identified a burnt area above the pressure relief valve (PRV) on the glycol contactor vessel. The burnt area on the vessel indicated that gas from the PRV caught fire and then extinguished itself after the PRV reseated. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on December 23, 2020 and subsequently submitted a Release Notification and Corrective Action Form C-141 (Form C-141) on January 5, 2021. The release was assigned Incident Number nAPP2100546416.

SITE CHARACTERIZATION

WSP characterized the Site according to Table 1, *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be between 50 and 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 321742103552601, located approximately 0.26 miles northeast of the Site. The groundwater well was most recently measured in May 1993 has a reported depth to groundwater of 66 feet bgs and a total depth of 100 feet bgs. Ground surface elevation at the groundwater well location is 3,034 feet above mean sea level (amsl), which is approximately 17 feet higher in elevation than



the Site. There are three additional groundwater wells within a 2-mile radius of the Site that indicate regional depth to groundwater is between 50 and 100 feet bgs. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1.

The closest continuously flowing or significant watercourse to the Site is an unnamed dry wash located approximately 0.23 miles northeast 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, or church. 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 underlain by unstable geology (high 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
- TPH: 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On February 1, 2021, WSP personnel visited the Site to evaluate the release based on information provided on the Form C-141 and visual observations. WSP personnel collected two soil samples (SS01 and SS02) from a depth of 0.5 feet bgs in the area beneath the vessel where the fire occurred to assess for the presence or absence of impacted soil. 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 release area and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was conducted during the Site visit. A photographic log is included in Attachment 2.

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

District II
Page 3**SOIL ANALYTICAL RESULTS**

Laboratory analytical results for soil samples SS01 and SS02 indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical report is included as Attachment 3.

CLOSURE REQUEST

Soil samples SS01 and SS02 were collected from the area beneath the vessel where the fire occurred to assess for the presence or absence of soil impacts resulting from the December 22, 2020 fire. Laboratory analytical results for the soil samples indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria.

Based on soil sample laboratory analytical results compliant with the Closure Criteria, no impacted soil was identified, and no excavation was warranted as a result of the fire. As such, XTO respectfully requests no further action for Incident Number nAPP2100546416. If you have any questions or comments, please do not hesitate to contact Ms. Ashley Ager at (970) 385-1096.

Sincerely,

WSP USA Inc.

A handwritten signature in black ink that reads "Kalei Jennings".

Kalei Jennings
Associate Consultant

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

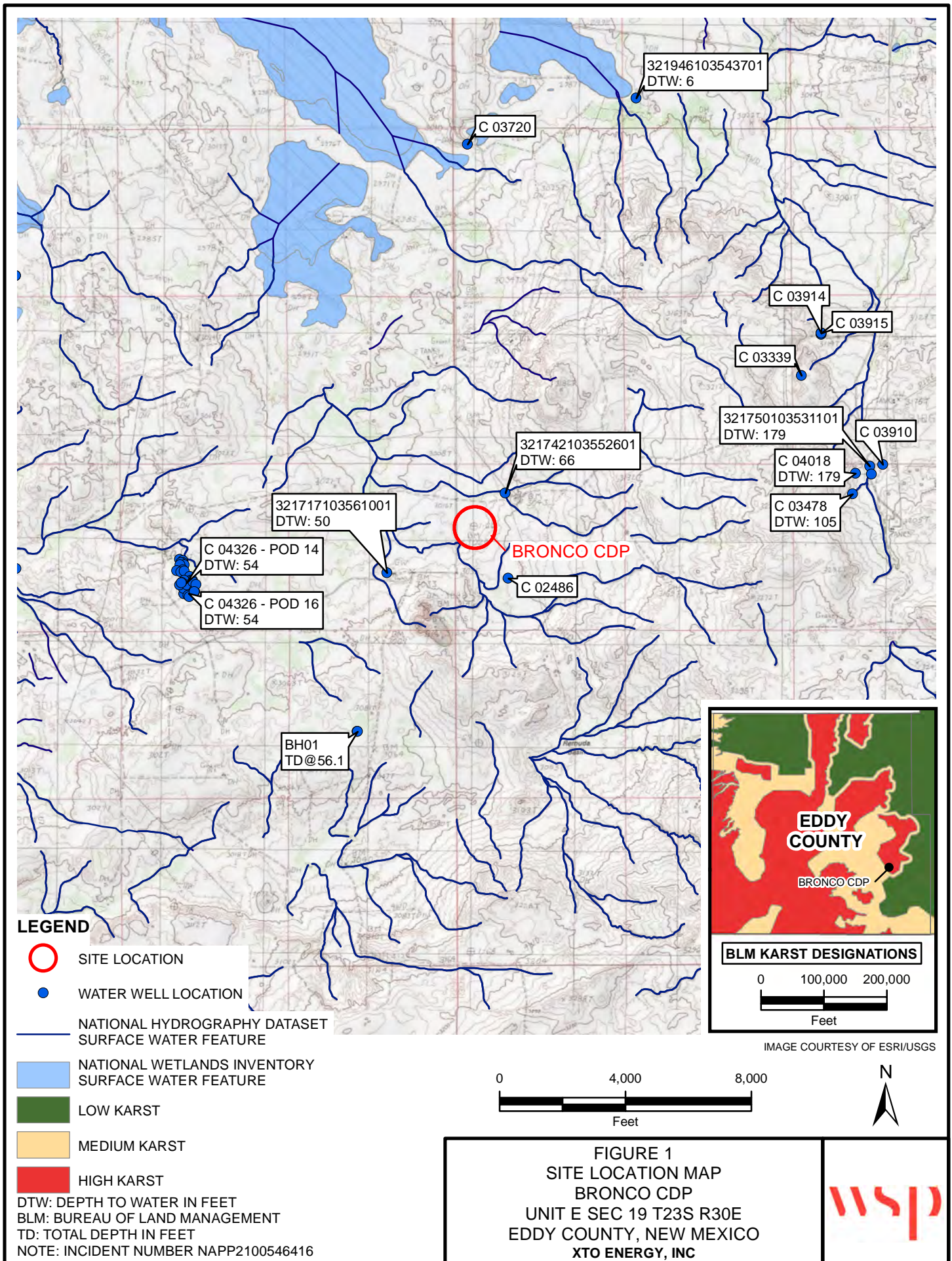
Ashley L. Ager, P.G.
Managing Director, Geologist

cc: Kyle Littrell, XTO
Ryan Mann, New Mexico State Land Office

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



SAMPLE ID@DEPTH BELOW GROUND SURFACE (FEET)
 SAMPLE DATE
 NMOCD TABLE 1 CLOSURE CRITERIA (NMAC 19.15.29.12)
 B = 10 mg/kg
 BTEX = 50 mg/kg
 TPH = 100 mg/kg
 Cl = 600 mg/kg
 ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)
 <: INDICATES RESULT IS LESS THAN THE
 LABORATORY REPORTING LIMIT

SS02@0.5'
 02/01/2021
 B: <0.00202
 BTEX: <0.00202
 TPH: <49.9
 Cl: 28.2

SS01@0.5'
 02/01/2021
 B: <0.00198
 BTEX: <0.00198
 TPH: <50.0
 Cl: 376

LEGEND

- ✕ RELEASE LOCATION
- SOIL SAMPLE IN COMPLIANCE WITH
 APPLICABLE CLOSURE CRITERIA

B: BENZENE
 BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE,
 AND TOTAL XYLENES
 TPH: TOTAL PETROLEUM HYDROCARBONS
 Cl: CHLORIDE
 NMAC: NEW MEXICO ADMINISTRATIVE CODE
 NMOCD: NEW MEXICO OIL CONSERVATION DIVISION
 NOTE: INCIDENT NUMBER NAPP2100546416

IMAGE COURTESY OF ESRI

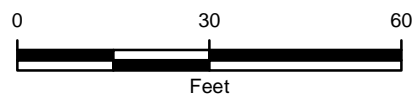


FIGURE 2
SOIL SAMPLE LOCATIONS
BRONCO CDP
UNIT E SEC 19 T23S R30E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



TABLES

Table 1

Soil Analytical Results
Bronco CDP
Incident Number nAPP2100546416
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	NE	100	600
Soil Samples										
SS01	02/01/2021	0.5	<0.00198	<0.00198	<50.0	<50.0	<50.0	<50.0	<50.0	376
SS02	02/01/2021	0.5	<0.00202	<0.00202	<49.9	<49.9	<49.9	<49.9	<49.9	28.2

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

ATTACHMENT 1: REFERENCED WELL RECORD



[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for the Nation

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

site_no list =

- 321742103552601

Minimum number of levels = 1

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

USGS 321742103552601 23S.30E.19.123421

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°17'42", Longitude 103°55'26" NAD27

Land-surface elevation 3,034 feet above NAVD88

The depth of the well is 100 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

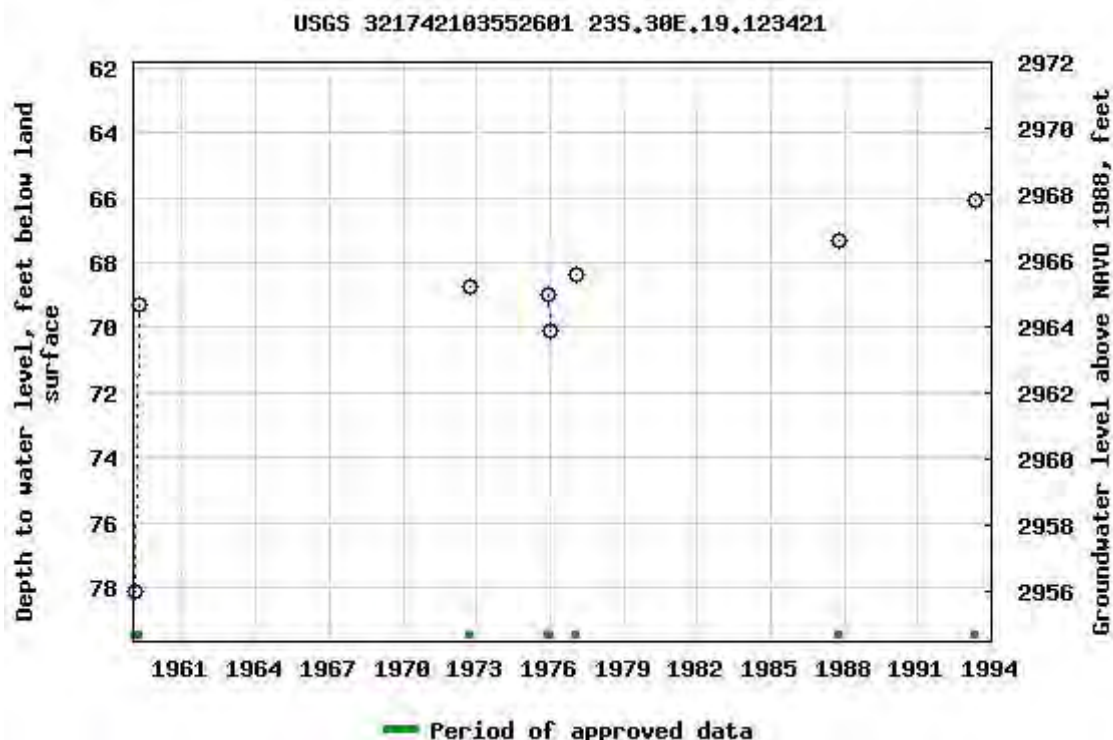
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



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

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

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

Title: Groundwater for USA: Water Levels

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

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

Page Last Modified: 2021-03-18 14:26:59 EDT

0.68 0.62 nadww01





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater Geographic Area: United States

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

Agency code = usgs

site_no list =

- 321742103552601

Minimum number of levels = 1

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

USGS 321742103552601 23S.30E.19.123421

Eddy County, New Mexico

Latitude 32°17'42", Longitude 103°55'26" NAD27

Land-surface elevation 3,034 feet above NAVD88

The depth of the well is 100 feet below land surface.

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source measurement
1959-02-06			D 62610		2954.29	NGVD29	3	Z		
1959-02-06			D 62611		2955.90	NAVD88	3	Z		
1959-02-06			D 72019	78.10			3	Z		
1959-04-07			D 62610		2963.09	NGVD29	1	Z		
1959-04-07			D 62611		2964.70	NAVD88	1	Z		
1959-04-07			D 72019	69.30			1	Z		
1972-09-20			D 62610		2963.64	NGVD29	1	Z		
1972-09-20			D 62611		2965.25	NAVD88	1	Z		
1972-09-20			D 72019	68.75			1	Z		
1975-12-09			D 62610		2963.40	NGVD29	1	Z		
1975-12-09			D 62611		2965.01	NAVD88	1	Z		
1975-12-09			D 72019	68.99			1	Z		
1976-01-15			D 62610		2962.29	NGVD29	1	Z		
1976-01-15			D 62611		2963.90	NAVD88	1	Z		
1976-01-15			D 72019	70.10			1	Z		
1977-01-19			D 62610		2963.99	NGVD29	1	Z		
1977-01-19			D 62611		2965.60	NAVD88	1	Z		

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1977-01-19			D	72019	68.40					
1987-10-14			D	62610		2965.07	NGVD29	1		Z
1987-10-14			D	62611		2966.68	NAVD88	1		Z
1987-10-14			D	72019	67.32			1		Z
1993-05-06			D	62610		2966.29	NGVD29	1		S
1993-05-06			D	62611		2967.90	NAVD88	1		S
1993-05-06			D	72019	66.10			1		S

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Status	3	Above
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#) [FOIA](#) [Privacy](#) [Policies and Notices](#)

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

Title: Groundwater for USA: Water Levels

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

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

Page Last Modified: 2021-03-18 14:53:00 EDT

0.35 0.31 nadww01





[USGS Home](#)
[Contact USGS](#)
[Search USGS](#)

National Water Information System: Web Interface

USGS Water Resources

Data Category:


Groundwater

Geographic Area:

United States

GO

Click to hide News Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#) 

Groundwater levels for the Nation

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

site_no list =

- 321717103561001

Minimum number of levels = 1

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

USGS 321717103561001 23S.29E.24.41321

Available data for this site

Groundwater: Field measurements

GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°17'17", Longitude 103°56'10" NAD27

Land-surface elevation 3,034 feet above NAVD88

This well is completed in the Other aquifers (N9999OTHER) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

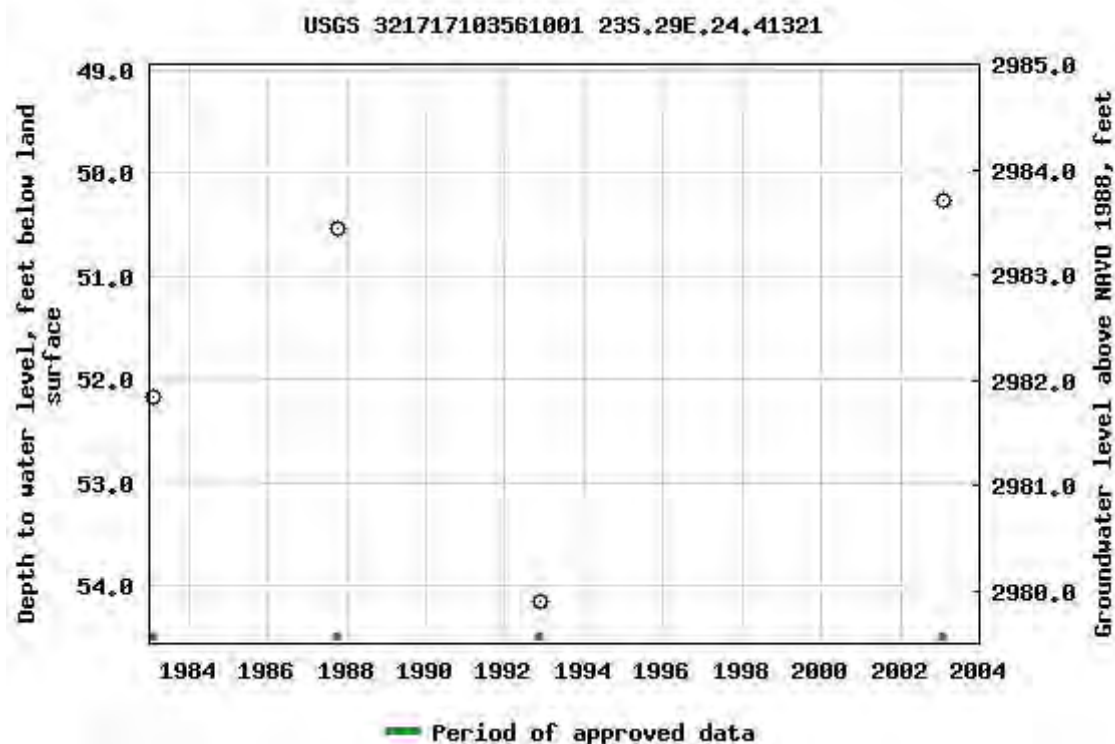
Output formats

[Table of data](#)

[Tab-separated data](#)

[Graph of data](#)

[Reselect period](#)



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

[Download a presentation-quality graph](#)

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

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

Title: Groundwater for USA: Water Levels

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

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

Page Last Modified: 2021-03-18 14:54:25 EDT

0.73 0.62 nadww01





USGS Home
Contact USGS
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:
Groundwater

Geographic Area:
United States

GO

Click to hideNews Bulletins

- [Introducing The Next Generation of USGS Water Data for the Nation](#)
- [Full News](#)

Groundwater levels for the Nation

* IMPORTANT: [Next Generation Station Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321717103561001

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321717103561001 23S.29E.24.41321

Eddy County, New Mexico
Latitude 32°17'17", Longitude 103°56'10" NAD27
Land-surface elevation 3,034 feet above NAVD88
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1983-02-02			D	62610	2980.24	NGVD29	1		Z	
1983-02-02			D	62611	2981.83	NAVD88	1		Z	
1983-02-02			D	72019	52.17		1		Z	
1987-10-14			D	62610	2981.87	NGVD29	1		Z	
1987-10-14			D	62611	2983.46	NAVD88	1		Z	
1987-10-14			D	72019	50.54		1		Z	
1992-11-16			D	62610	2978.27	NGVD29	1		S	
1992-11-16			D	62611	2979.86	NAVD88	1		S	
1992-11-16			D	72019	54.14		1		S	
2003-01-29			D	62610	2982.15	NGVD29	1		S	USGS
2003-01-29			D	62611	2983.74	NAVD88	1		S	USGS
2003-01-29			D	72019	50.26		1		S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

[News](#)

[Accessibility](#)

[FOIA](#)

[Privacy](#)

[Policies and Notices](#)

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

Title: Groundwater for USA: Water Levels

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



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


Page Last Modified: 2021-03-18 14:54:48 EDT

0.36 0.31 nadww01



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	Tw	Rng	X	Y
NA	C 04326 POD14	4	2	3	23	23S	29E	598191	3572765 

Driller License: 1664 **Driller Company:** CASCADE DRILLING, LP

Driller Name: CAIN, SHAWN N.NJR.L.NER

Drill Start Date: 05/11/2019 **Drill Finish Date:** 05/11/2019 **Plug Date:**

Log File Date: 08/28/2019 **PCW Rev Date:** **Source:** Shallow

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

Casing Size: 2.06 **Depth Well:** 58 feet **Depth Water:** 54 feet

Water Bearing Stratifications:	Top	Bottom	Description
	45	54	Shale/Mudstone/Siltstone

Casing Perforations:	Top	Bottom
	48	58

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.


3/18/21 12:56 PM

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	Tw	Rng	X	Y
NA	C 04326 POD16	2	4	3	23	23S	29E	598209	3572664 

Driller License: 1664 **Driller Company:** CASCADE DRILLING, LP

Driller Name: CAIN, SHAWN N.NJR.L.NER

Drill Start Date: 05/14/2019 **Drill Finish Date:** 05/14/2019 **Plug Date:**

Log File Date: 08/28/2019 **PCW Rev Date:** **Source:** Shallow

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

Casing Size: 2.07 **Depth Well:** 64 feet **Depth Water:** 54 feet

Water Bearing Stratifications:	Top	Bottom	Description
	52	60	Limestone/Dolomite/Chalk

Casing Perforations:	Top	Bottom
	54	64

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/18/21 12:56 PM

POINT OF DIVERSION SUMMARY


ATTACHMENT 2: PHOTOGRAPHIC LOG



PHOTOGRAPHIC LOG

XTO Energy, Inc.	Bronco CDP Eddy County, New Mexico	[Project No.] TE012921014
------------------	---------------------------------------	------------------------------

Photo No.	Date	
1	February 1, 2021	
View of release on pad facing South.		 A photograph showing industrial equipment on a gravel pad. In the foreground, there is a large, horizontal, light-colored metal pipe with a flange. To the right, there is a large, vertical, light-colored metal tank or vessel. The ground is covered in gravel, and there are shadows cast by the equipment. In the background, other industrial structures and a yellow ladder are visible.

Photo No.	Date	
2	February 1, 2021	
View of location of soil sample.		 A close-up photograph of industrial equipment. In the foreground, there is a large, horizontal, light-colored metal pipe with a flange. To the right, there is a large, vertical, light-colored metal tank or vessel. The ground is covered in gravel, and there are shadows cast by the equipment. In the background, other industrial structures and a yellow ladder are visible.

ATTACHMENT 3: LABORATORY ANALYTICAL RESULTS



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-111-1
Client Project/Site: Bronco
Revision: 1

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

Attn: Dan Moir

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

Authorized for release by:
3/3/2021 10:09:56 AM

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

LINKS

Review your project
results through
TotalAccess

Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: WSP USA Inc.
Project/Site: Bronco

Laboratory Job ID: 890-111-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18

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

Definitions/Glossary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Qualifiers

GC VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Eurofins Xenco, Carlsbad

Case Narrative

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Job ID: 890-111-1**Laboratory: Eurofins Xenco, Carlsbad****Narrative****Job Narrative
890-111-1****Receipt**

The samples were received on 2/1/2021 1:07 PM; the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 890-99 and analytical batch 890-107 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Subcontract Lab non-Sister Lab

See attached subcontract report.

Client Sample Results

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Client Sample ID: SS01

Lab Sample ID: 890-111-1

Date Collected: 02/01/21 10:05

Matrix: Solid

Date Received: 02/01/21 13:07

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		02/01/21 16:19	02/03/21 04:28	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/01/21 16:19	02/03/21 04:28	1
Toluene	<0.00198	U	0.00198	mg/Kg		02/01/21 16:19	02/03/21 04:28	1
Total BTEX	<0.00198	U	0.00198	mg/Kg		02/01/21 16:19	02/03/21 04:28	1
Xylenes, Total	<0.00198	U	0.00198	mg/Kg		02/01/21 16:19	02/03/21 04:28	1
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg		02/01/21 16:19	02/03/21 04:28	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		02/01/21 16:19	02/03/21 04:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	98		70 - 130	02/01/21 16:19	02/03/21 04:28	1
4-Bromofluorobenzene (Surr)	103		70 - 130	02/01/21 16:19	02/03/21 04:28	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	376		50.4	mg/Kg			02/02/21 12:38	5

Method: SW8015_MOD - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0		50.0		mg/kg		02/06/21 09:00	02/06/21 18:05	1
Gasoline Range Hydrocarbons (GRO)	<50.0		50.0		mg/kg		02/06/21 09:00	02/06/21 18:05	1
Motor Oil Range Hydrocarbons (MRO)	<50.0		50.0		mg/kg		02/06/21 09:00	02/06/21 18:05	1
Total TPH	<50.0		50.0		mg/kg		02/06/21 09:00	02/06/21 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 135	02/06/21 09:00	02/06/21 18:05	1
o-Terphenyl	94		70 - 135	02/06/21 09:00	02/06/21 18:05	1

Client Sample ID: SS02

Lab Sample ID: 890-111-2

Date Collected: 02/01/21 10:15

Matrix: Solid

Date Received: 02/01/21 13:07

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		02/01/21 16:19	02/03/21 04:51	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/01/21 16:19	02/03/21 04:51	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/01/21 16:19	02/03/21 04:51	1
Total BTEX	<0.00202	U	0.00202	mg/Kg		02/01/21 16:19	02/03/21 04:51	1
Xylenes, Total	<0.00202	U	0.00202	mg/Kg		02/01/21 16:19	02/03/21 04:51	1
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg		02/01/21 16:19	02/03/21 04:51	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/01/21 16:19	02/03/21 04:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	101		70 - 130	02/01/21 16:19	02/03/21 04:51	1
4-Bromofluorobenzene (Surr)	111		70 - 130	02/01/21 16:19	02/03/21 04:51	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.2		10.1	mg/Kg			02/02/21 12:44	1

Method: SW8015_MOD - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9		49.9		mg/kg		02/06/21 09:00	02/06/21 18:26	1

Eurofins Xenco, Carlsbad

Client Sample Results

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Client Sample ID: SS02

Lab Sample ID: 890-111-2

Date Collected: 02/01/21 10:15

Matrix: Solid

Date Received: 02/01/21 13:07

Method: SW8015_MOD - General Subcontract Method (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons (GRO)	<49.9		49.9		mg/kg		02/06/21 09:00	02/06/21 18:26	1
Motor Oil Range Hydrocarbons (MRO)	<49.9		49.9		mg/kg		02/06/21 09:00	02/06/21 18:26	1
Total TPH	<49.9		49.9		mg/kg		02/06/21 09:00	02/06/21 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 135	02/06/21 09:00	02/06/21 18:26	1
o-Terphenyl	106		70 - 135	02/06/21 09:00	02/06/21 18:26	1

Eurofins Xenco, Carlsbad

Surrogate Summary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	DFBZ1 (70-130)	BFB1 (70-130)
890-107-A-3-B MS	Matrix Spike	96	95
890-107-A-3-C MSD	Matrix Spike Duplicate	97	94
890-111-1	SS01	98	103
890-111-2	SS02	101	111
LCS 890-89/2-A	Lab Control Sample	93	98
LCSD 890-89/3-A	Lab Control Sample Dup	96	94
MB 890-89/1-A	Method Blank	99	99
Surrogate Legend			
DFBZ = 1,4-Difluorobenzene			
BFB = 4-Bromofluorobenzene (Surr)			

Method: SW8015_MOD - General Subcontract Method

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO (70-135)	OTPH (70-135)
890-111-1	SS01	82	94
890-111-2	SS02	100	106
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 890-89/1-A

Matrix: Solid

Analysis Batch: 113

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 89

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/01/21 16:19	02/02/21 19:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/01/21 16:19	02/02/21 19:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/01/21 16:19	02/02/21 19:48	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		02/01/21 16:19	02/02/21 19:48	1
Xylenes, Total	<0.00200	U	0.00200	mg/Kg		02/01/21 16:19	02/02/21 19:48	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		02/01/21 16:19	02/02/21 19:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/01/21 16:19	02/02/21 19:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	99		70 - 130	02/01/21 16:19	02/02/21 19:48	1
4-Bromofluorobenzene (Surr)	99		70 - 130	02/01/21 16:19	02/02/21 19:48	1

Lab Sample ID: LCS 890-89/2-A

Matrix: Solid

Analysis Batch: 113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 89

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.100	0.09618		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09901		mg/Kg		99	71 - 129
Toluene	0.100	0.09831		mg/Kg		98	70 - 130
m,p-Xylenes	0.200	0.2015		mg/Kg		101	70 - 135
o-Xylene	0.100	0.1002		mg/Kg		100	71 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,4-Difluorobenzene	93		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130

Lab Sample ID: LCSD 890-89/3-A

Matrix: Solid

Analysis Batch: 113

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 89

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.100	0.09257		mg/Kg		93	70 - 130	4	35
Ethylbenzene	0.100	0.09159		mg/Kg		92	71 - 129	8	35
Toluene	0.100	0.09376		mg/Kg		94	70 - 130	5	35
m,p-Xylenes	0.200	0.1857		mg/Kg		93	70 - 135	8	35
o-Xylene	0.100	0.09487		mg/Kg		95	71 - 133	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,4-Difluorobenzene	96		70 - 130
4-Bromofluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-107-A-3-B MS

Matrix: Solid

Analysis Batch: 113

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 89

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.00199	U	0.100	0.1116		mg/Kg		111	70 - 130

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

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

Lab Sample ID: 890-107-A-3-B MS

Matrix: Solid

Analysis Batch: 113

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 89

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	<0.00199	U	0.100	0.09961		mg/Kg		100	71 - 129
Toluene	<0.00199	U	0.100	0.1061		mg/Kg		106	70 - 130
m,p-Xylenes	<0.00398	U	0.200	0.2002		mg/Kg		100	70 - 135
o-Xylene	<0.00199	U	0.100	0.1010		mg/Kg		101	71 - 133
Surrogate	MS %Recovery	MS Qualifier	Limits						
1,4-Difluorobenzene	96		70 - 130						
4-Bromofluorobenzene (Surr)	95		70 - 130						

Lab Sample ID: 890-107-A-3-C MSD

Matrix: Solid

Analysis Batch: 113

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 89

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.1117		mg/Kg		112	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.0994	0.09919		mg/Kg		100	71 - 129	0	35
Toluene	<0.00199	U	0.0994	0.1062		mg/Kg		107	70 - 130	0	35
m,p-Xylenes	<0.00398	U	0.199	0.1974		mg/Kg		99	70 - 135	1	35
o-Xylene	<0.00199	U	0.0994	0.1013		mg/Kg		102	71 - 133	0	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,4-Difluorobenzene	97		70 - 130								
4-Bromofluorobenzene (Surr)	94		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 890-99/11-A

Matrix: Solid

Analysis Batch: 107

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96	mg/Kg			02/02/21 10:11	1

Lab Sample ID: LCS 890-99/12-A

Matrix: Solid

Analysis Batch: 107

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	202	202.4		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 890-99/13-A

Matrix: Solid

Analysis Batch: 107

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	199	194.1		mg/Kg		98	90 - 110	4	20

Eurofins Xenco, Carlsbad

QC Sample Results

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-110-A-3-I MS

Matrix: Solid

Analysis Batch: 107

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2580		101	2811	4	mg/Kg		230	90 - 110

Lab Sample ID: 890-110-A-3-J MSD

Matrix: Solid

Analysis Batch: 107

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	2580		101	2752	4	mg/Kg		171	90 - 110	2	20

Method: SW8015_MOD - General Subcontract Method

Lab Sample ID: 7721014-1-BLK

Matrix: SOIL

Analysis Batch: 3150326

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3150326_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	U		50		mg/kg		02/06/21 09:00	02/06/21 12:07	1
Gasoline Range Hydrocarbons (GRO)	U		50		mg/kg		02/06/21 09:00	02/06/21 12:07	1
Motor Oil Range Hydrocarbons (MRO)	U		50		mg/kg		02/06/21 09:00	02/06/21 12:07	1

Lab Sample ID: 7721014-1-BKS

Matrix: SOIL

Analysis Batch: 3150326

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3150326_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	1000	1020		mg/kg		102	70 - 135
Gasoline Range Hydrocarbons (GRO)	1000	1090		mg/kg		109	70 - 135

Lab Sample ID: 7721014-1-BSD

Matrix: SOIL

Analysis Batch: 3150326

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3150326_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	1000	950		mg/kg		95	70 - 135	7	20
Gasoline Range Hydrocarbons (GRO)	1000	1020		mg/kg		102	70 - 135	7	20

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

GC VOA

Prep Batch: 89

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-111-1	SS01	Total/NA	Solid	5030C	
890-111-2	SS02	Total/NA	Solid	5030C	
MB 890-89/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 890-89/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCSD 890-89/3-A	Lab Control Sample Dup	Total/NA	Solid	5030C	
890-107-A-3-B MS	Matrix Spike	Total/NA	Solid	5030C	
890-107-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5030C	

Analysis Batch: 113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-111-1	SS01	Total/NA	Solid	8021B	89
890-111-2	SS02	Total/NA	Solid	8021B	89
MB 890-89/1-A	Method Blank	Total/NA	Solid	8021B	89
LCS 890-89/2-A	Lab Control Sample	Total/NA	Solid	8021B	89
LCSD 890-89/3-A	Lab Control Sample Dup	Total/NA	Solid	8021B	89
890-107-A-3-B MS	Matrix Spike	Total/NA	Solid	8021B	89
890-107-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	89

HPLC/IC

Leach Batch: 99

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-111-1	SS01	Soluble	Solid	DI Leach	
890-111-2	SS02	Soluble	Solid	DI Leach	
MB 890-99/11-A	Method Blank	Soluble	Solid	DI Leach	
LCS 890-99/12-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 890-99/13-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-110-A-3-I MS	Matrix Spike	Soluble	Solid	DI Leach	
890-110-A-3-J MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-111-1	SS01	Soluble	Solid	300.0	99
890-111-2	SS02	Soluble	Solid	300.0	99
MB 890-99/11-A	Method Blank	Soluble	Solid	300.0	99
LCS 890-99/12-A	Lab Control Sample	Soluble	Solid	300.0	99
LCSD 890-99/13-A	Lab Control Sample Dup	Soluble	Solid	300.0	99
890-110-A-3-I MS	Matrix Spike	Soluble	Solid	300.0	99
890-110-A-3-J MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	99

Subcontract

Analysis Batch: 3150326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-111-1	SS01	Total/NA	Solid	SW8015_MOD	3150326_P
890-111-2	SS02	Total/NA	Solid	SW8015_MOD	3150326_P
7721014-1-BLK	Method Blank	Total/NA	SOIL	SW8015_MOD	3150326_P
7721014-1-BKS	Lab Control Sample	Total/NA	SOIL	SW8015_MOD	3150326_P
7721014-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	SW8015_MOD	3150326_P

Eurofins Xenco, Carlsbad

QC Association Summary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Subcontract**Prep Batch: 3150326_P**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-111-1	SS01	Total/NA	Solid	SW8015P	
890-111-2	SS02	Total/NA	Solid	SW8015P	
7721014-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7721014-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7721014-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	

Eurofins Xenco, Carlsbad

Lab Chronicle

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Client Sample ID: SS01

Lab Sample ID: 890-111-1

Date Collected: 02/01/21 10:05

Matrix: Solid

Date Received: 02/01/21 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			89	02/01/21 16:19	MC	XC
Total/NA	Analysis	8021B		1	113	02/03/21 04:28	MC	XC
Soluble	Leach	DI Leach			99	02/01/21 17:00	MC	XC
Soluble	Analysis	300.0		5	107	02/02/21 12:38	MC	XC
Total/NA	Prep	SW8015P		1	3150326_P	02/06/21 09:00		XM
Total/NA	Analysis	SW8015_MOD		1	3150326	02/06/21 18:05	ARM	XM

Client Sample ID: SS02

Lab Sample ID: 890-111-2

Date Collected: 02/01/21 10:15

Matrix: Solid

Date Received: 02/01/21 13:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030C			89	02/01/21 16:19	MC	XC
Total/NA	Analysis	8021B		1	113	02/03/21 04:51	MC	XC
Soluble	Leach	DI Leach			99	02/01/21 17:00	MC	XC
Soluble	Analysis	300.0		1	107	02/02/21 12:44	MC	XC
Total/NA	Prep	SW8015P		1	3150326_P	02/06/21 09:00		XM
Total/NA	Analysis	SW8015_MOD		1	3150326	02/06/21 18:26	ARM	XM

Laboratory References:

XC = Eurofins Xenco, Carlsbad, 1089 N Canal St., Carlsbad, NM 88220, TEL (575)988-3199

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

Eurofins Xenco, Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Laboratory: Eurofins Xenco, Carlsbad

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

Authority	Program	Identification Number	Expiration Date
Louisiana	NELAP	05092	06-30-21

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

Analysis Method	Prep Method	Matrix	Analyte
8021B	5030C	Solid	Total BTEX

Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

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

Eurofins Xenco, Carlsbad

Method Summary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	XC
300.0	Anions, Ion Chromatography	MCAWW	XC
Subcontract	General Subcontract Method	None	XM
5030C	Purge and Trap	SW846	XC
DI Leach	Deionized Water Leaching Procedure	ASTM	XC

Protocol References:

ASTM = ASTM International

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

None = None

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

Laboratory References:

XC = Eurofins Xenco, Carlsbad, 1089 N Canal St., Carlsbad, NM 88220, TEL (575)988-3199

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

Eurofins Xenco, Carlsbad

Sample Summary

Client: WSP USA Inc.
Project/Site: Bronco

Job ID: 890-111-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-111-1	SS01	Solid	02/01/21 10:05	02/01/21 13:07	
890-111-2	SS02	Solid	02/01/21 10:15	02/01/21 13:07	

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



Houston, TX (281) 240-4200 Dallas, TX (214) 902-0330 San Antonio, TX (210) 508-3334
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-1111
Hobbs, NM (575-392-7550)

Chain of Custody

Work Order No: 111

Page 1 on
www.xenco.com

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Litrell
Company Name:	WSP	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 East Green Street
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	(303) 887-2946	Email:	Spencer.Lit@wsp.com, Kalel.Jennings@wsp.com, Dan.Moir@wsp.com

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

Project Name:	Bronco	Turn Around	ANALYSIS REQUEST						Work Order Notes
Project Number:	TE012921014	Routine <input checked="" type="checkbox"/>							Cost Center: 2096331001
P.O. Number:		Rush:							Spill Date: 12/22/2020
Sampler's Name:	Spencer Lo	Due Date:							

SAMPLE RECEIPT		Temp Blank:		Yes	No	Well Ice:	Yes	No
Temperature (°C):	2412.2					Thermometer ID		
Received intact:	Yes	No				FRM007		
Cooler Custody Seals:	Yes	No				Correction Factor:	-0.2	
Sample Custody Seals:	Yes	No				Total Containers:	2	

Number of Containers


(EPA 8015)

(EPA 0=8021)

(EPA 300.0)

TAT starts the day received by the lab. If received by 4:30pm

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number	TPH (E)	BTEX (E)	Chloride	Sample Comments
SS01	S	2/1/2021	1005	0.5'	1	X	X	X	
SS02	S	2/1/2021	1015	0.5'	1	X	X	X	





890-111 Chain of Custody



030-117 Chain of Custody

Total	200.7 / 6010	200.8 / 6020:	Circle Method(s) and Metal(s) to be analyzed
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
TCLP / SPLP 6010:	8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xeno, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xeno 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 Xeno. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xeno, 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
		2/1/21 13:07			

Revised Date 05/14/18 Rev 2018

Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-111-1

SDG Number:

Login Number: 111

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

District I

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

District II

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

District III

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

District IV

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

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

CONDITIONS

Action 21424

CONDITIONS OF APPROVAL

Operator: XTO ENERGY, INC Building #5	6401 Holiday Hill Road Midland, TX79707	OGRID: 5380	Action Number: 21424	Action Type: C-141
OCD Reviewer chensley		Condition None		