

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	NAPP2035254726
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 32.37987 Longitude -103.88675  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	James Ranch Unit DI 1A	Site Type	Tank Battery
Date Release Discovered	12/3/2020	API#	(if applicable)

Unit Letter	Section	Township	Range	County
F	21	22S	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 checked="" type="checkbox"/> Condensate	Volume Released (bbls) 0.006	Volume Recovered (bbls) 0
<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)

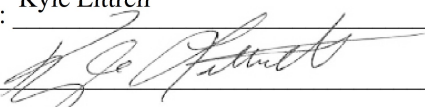
Cause of Release LO reported a small amount of condensate (approx. 0.25 gallons) came out of the top of LP flare while working at the JRU DI1A battery. The fluid quickly extinguished itself with no vegetation impacted. A third-party contractor has been retained for remediation purposes.

Incident ID	NAPP2035254726
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? A 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 Amy Ruth to Mike Bratcher; Rob Hamlet; Victoria Venegas; 'Griswold, Jim, EMNRD'; blm_nm_cfo_spill@blm.gov on Friday, December 4, 2020 2:20 PM 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: Kyle Littrell	Title: SH&E Supervisor
Signature: 	Date: 12-17-20
email: Kyle_Littrell@xtoenergy.com	Telephone: 432-221-7331
<b><u>OCD Only</u></b> Received by: _____ Date: _____	

Incident ID	NAPP2035254726
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 <b>not</b> on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

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

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

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	NAPP2035254726
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	NAPP2035254726
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: Chad Hensley Date: 06/11/2021

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: 06/11/2021

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 31, 2021

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

**RE: Closure Request  
James Ranch Unit DI 1A  
Incident Number NAPP2035254726  
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 James Ranch Unit DI 1A (Site) in Unit F, Section 21, Township 22 South, Range 30 East, in Eddy County, New Mexico (Figure 1). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a small condensate fire at the Site. Based on the site assessment activities and laboratory analytical results from the soil sampling events, XTO is submitting this Closure Request, and requesting no further action (NFA) for Incident Number NAPP2035254726.

## **RELEASE BACKGROUND**

On December 3, 2020, a small amount of condensate released from the top of the low-pressure flare and quickly extinguished itself. Approximately of 0.006 barrels (bbls) of condensate were released onto the well pad. XTO reported the release immediately to the New Mexico Oil Conservation Division (NMOCD) and subsequently submitted a Release Notification Form C-141 on December 17, 2020. The release was assigned Incident Number NAPP2035254726.

## **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 322252103541401, located approximately 1.04 miles northwest of the Site. The groundwater well was most recently measured in February 1959 has a reported depth to groundwater of 73 feet bgs and a total depth of 129 feet bgs. Ground surface elevation at the groundwater well location is 3,070 feet above mean sea level (amsl), which is approximately 97 feet lower in



elevation than the Site. The next closest permitted groundwater well with depth to groundwater data is NMOSE well C-03015, located approximately 2.66 miles southeast of the Site. The groundwater well has a reported depth to groundwater of 262 feet bgs and a total depth of 1,316 feet bgs. Ground surface elevation at the groundwater well location is 3,285 feet amsl, which is approximately 118 feet higher in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1. The referenced well records are included in Attachment 1. There are no regional or Site-specific hydrological conditions, such as shallow surface water, karst features, wetlands, or vegetation that suggest the Site is conducive to shallow groundwater.

The closest continuously flowing or significant watercourse to the Site is an intermittent stream, located approximately 600 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 located in a 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
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

## **SITE ASSESSMENT ACTIVITIES**

On January 15, 2021, WSP personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. WSP personnel collected two preliminary assessment soil samples (SS01 and SS02) within the release extent from a depth of 0.3 feet bgs to assess for the presence or absence of impacted soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2.

On March 3, 2021, WSP personnel returned to the Site to complete additional soil assessment activities. Boreholes BH01 and BH02 were advanced via hand auger to a depth of 4 feet bgs within the release extent. Delineation soil samples were collected from each borehole from depths of 2 feet bgs and 4 feet bgs. Soil from the boreholes was field screened for volatile aromatic

District II  
Page 3

hydrocarbons and chloride utilizing PID and Hach® chloride QuanTab® test strips, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Attachment 2. The borehole soil sample locations are depicted on Figure 3. Photographic documentation was conducted during the Site visits. A photographic log is included in Attachment 3.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were 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.

### SOIL ANALYTICAL RESULTS

Laboratory analytical results for preliminary soil samples SS01 and SS02 and delineation soil samples from boreholes BH01 and BH02 indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Attachment 4.

### CLOSURE REQUEST

Site assessment activities were conducted at the Site to assess for the presence or absence of impacted soil resulting from the December 3, 2020 condensate fire. Laboratory analytical results for the soil samples collected within the release extent, indicated that benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Based on the soil sample analytical results, no impacted soil was identified, and no further remediation was required. As such, XTO respectfully requests no further action for Incident Number NAPP2035254726.

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, appearing to read 'Spencer Lo'.

Spencer Lo  
Staff Geologist

A handwritten signature in black ink, appearing to read 'Ashley L. Ager'.

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



District II  
Page 4

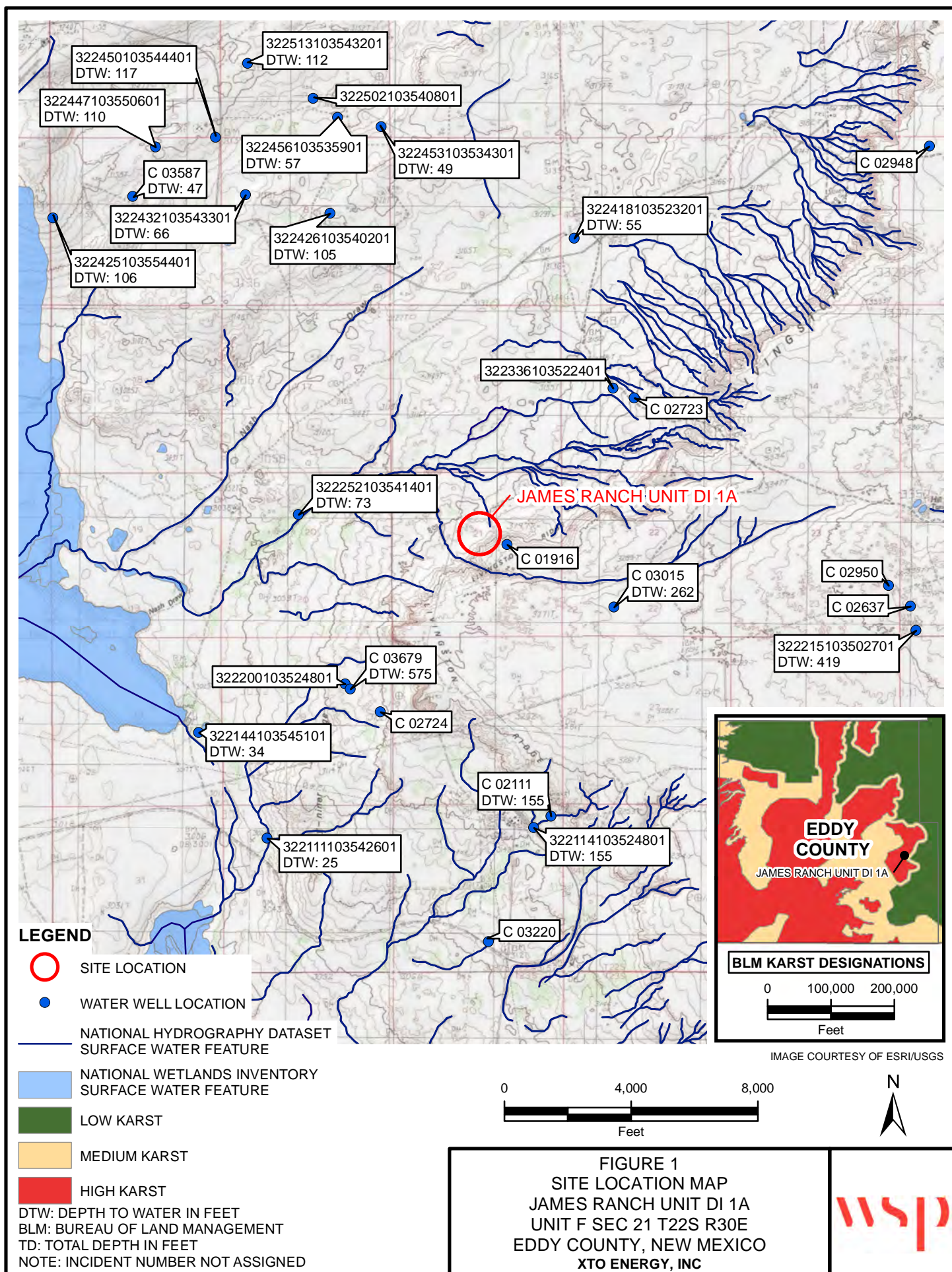
cc: Kyle Littrell, XTO  
Bureau of Land Management

Attachments:

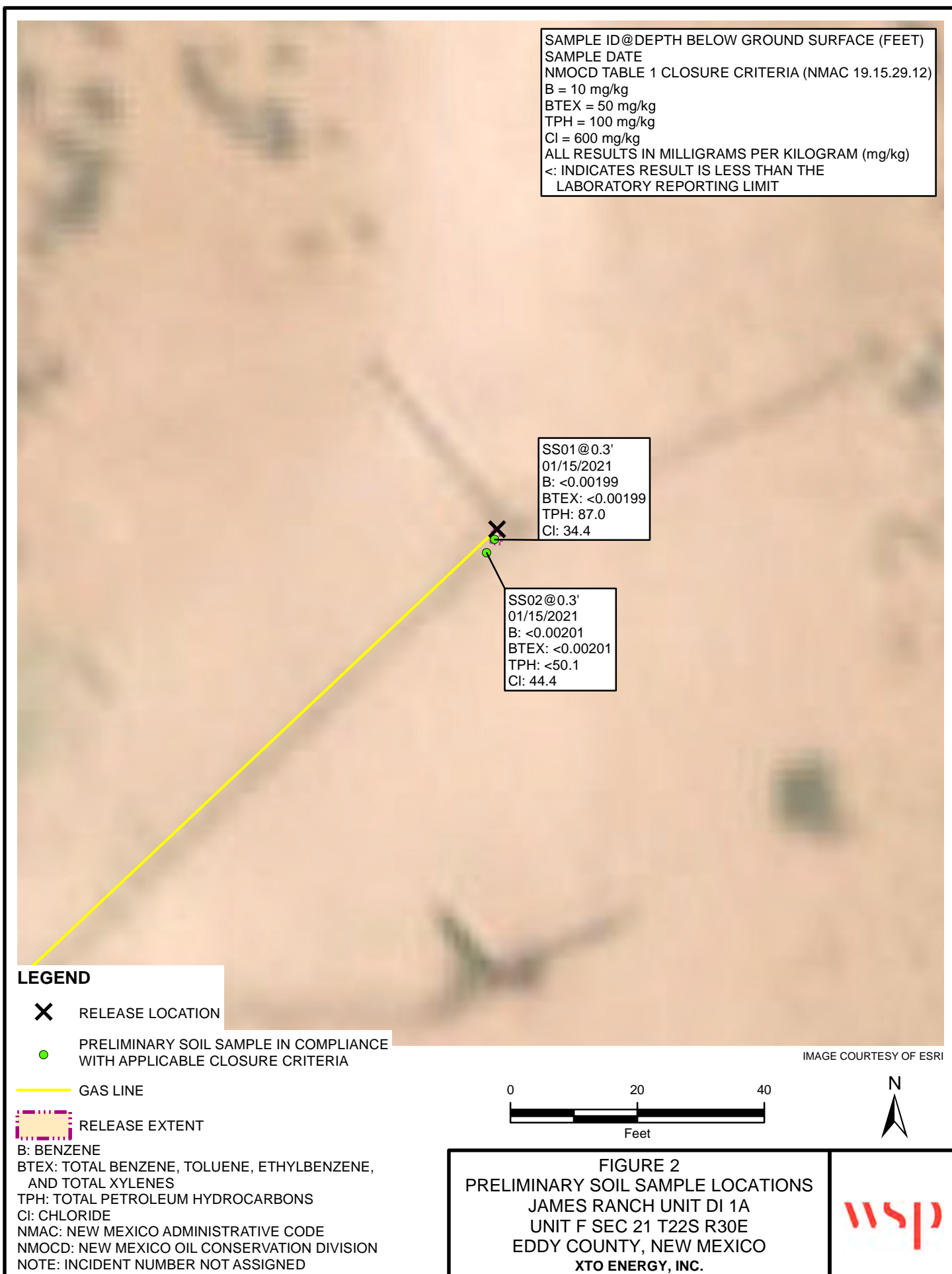
Figure 1 Site Location Map  
Figure 2 Preliminary Soil Sample Locations  
Figure 3 Delineation Soil Sample Locations  
Table 1 Soil Analytical Results  
Attachment 1 Referenced Well Records  
Attachment 2 Lithologic/Sampling Log  
Attachment 3 Photographic Log  
Attachment 4 Laboratory Analytical Reports

FIGURES

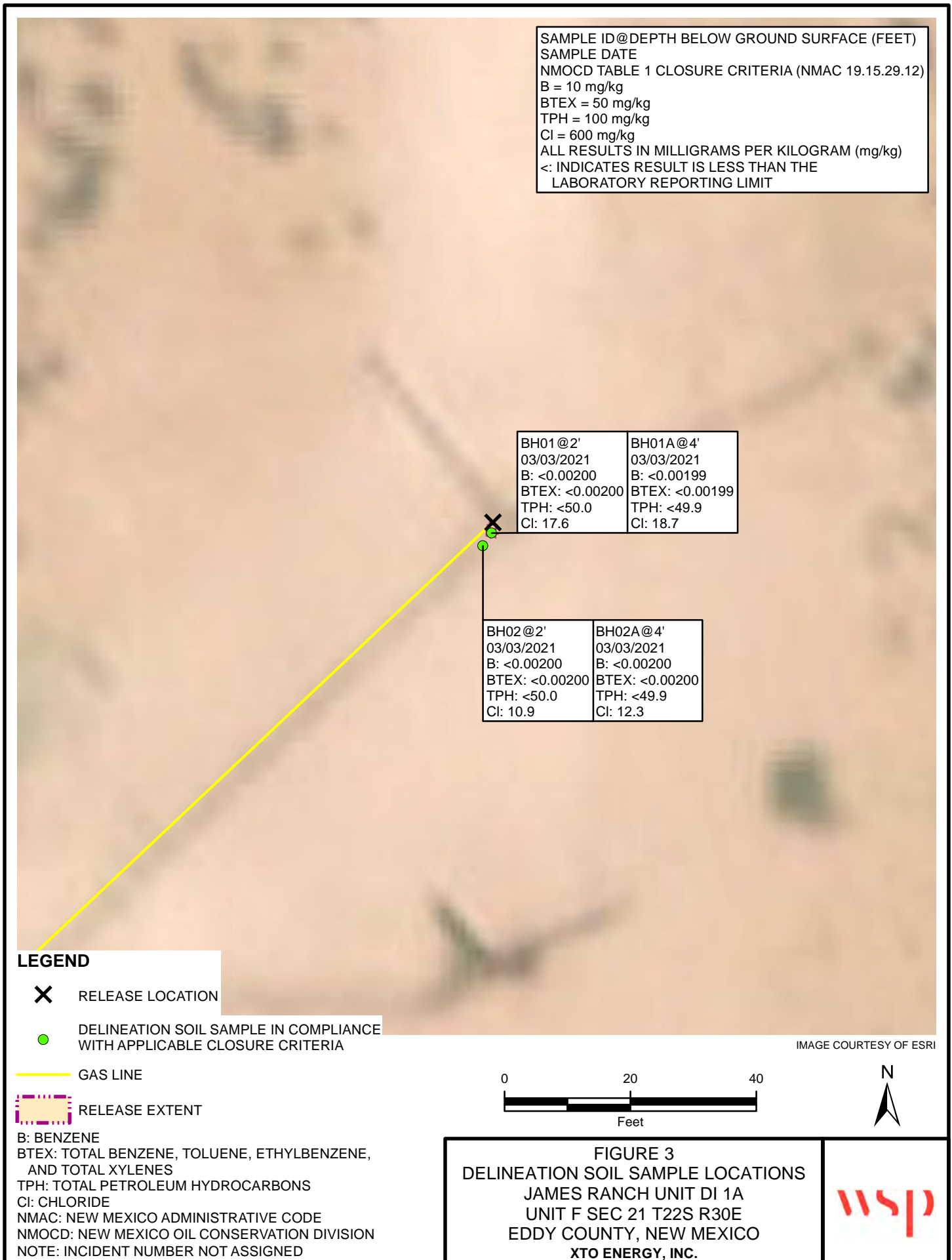




P:\XTO Energy\GIS\MXD\012921002\_JAMES RANCH UNIT DI 1A\012921002\_FIG01\_SL\_RECEPTOR\_2021.mxd







TABLES

Table 1

**Soil Analytical Results**  
**James Ranch Unit DI 1A**  
**Incident Number NAPP2035254726**  
**Eddy County, New Mexico**

Sample ID	Sample Date	Sample Depth (ft bgs)	Benzene (mg/kg)	BTEX (mg/kg)	TPH-GRO (mg/kg)	TPH-DRO (mg/kg)	TPH-ORO (mg/kg)	Total GRO+DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
<b>NMOCD Table 1 Closure Criteria (NMAC 19.15.29)</b>			10	50	NE	NE	NE	NE	<b>100</b>	<b>600</b>
<b>Surface Samples</b>										
SS01	01/15/2021	0.3	<0.00199	<0.00199	<50.3	87.0	<50.3	87.0	87.0	34.4
SS02	01/15/2021	0.3	<0.00201	<0.00201	<50.1	<50.1	<50.1	<50.1	<50.1	44.4
<b>Delineation Samples</b>										
BH01	03/03/2021	2	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	17.6
BH01A	03/03/2021	4	<0.00199	<0.00199	<49.9	<49.9	<49.9	<49.9	<49.9	18.7
BH02	03/03/2021	2	<0.00200	<0.00200	<50.0	<50.0	<50.0	<50.0	<50.0	10.9
BH02A	03/03/2021	4	<0.00200	<0.00200	<49.9	<49.9	<49.9	<49.9	<49.9	12.3

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

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

NE - Not Established

ATTACHMENT 1: REFERENCED WELL RECORD

# USGS 322252103541401 22S.30E.20.12310

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°22'52", Longitude 103°54'14" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 129 feet

Land surface altitude: 3,065 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

#### AVAILABLE DATA:

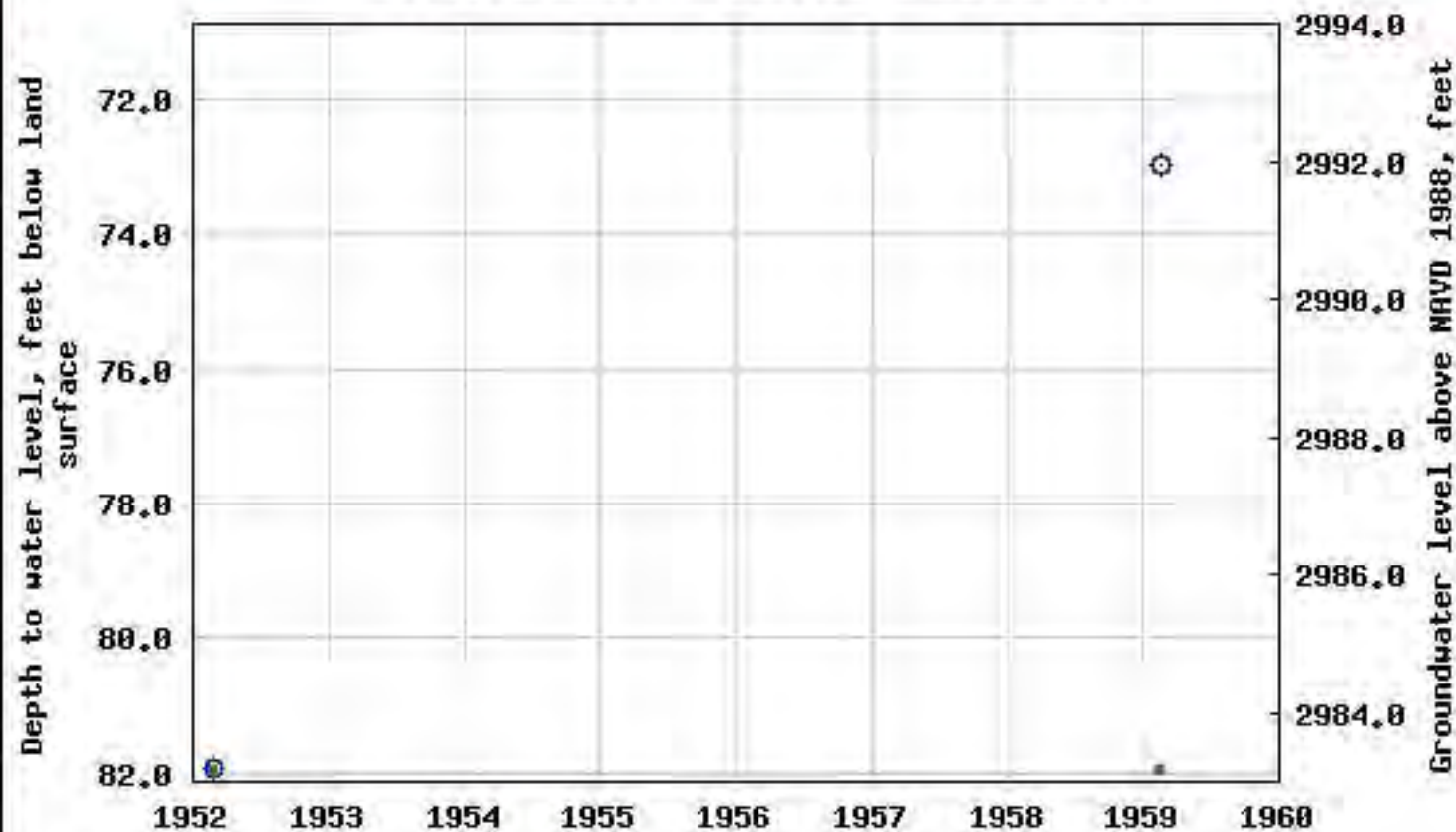
Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1952-02-26	1959-02-19	6
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322252103541401 22S.30E.20.12310



# USGS 322111103542601 22S.30E.32.11144

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°21'11", Longitude 103°54'26" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 107 feet

Land surface altitude: 3,022 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

#### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1959-02-19	1998-02-02	21
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

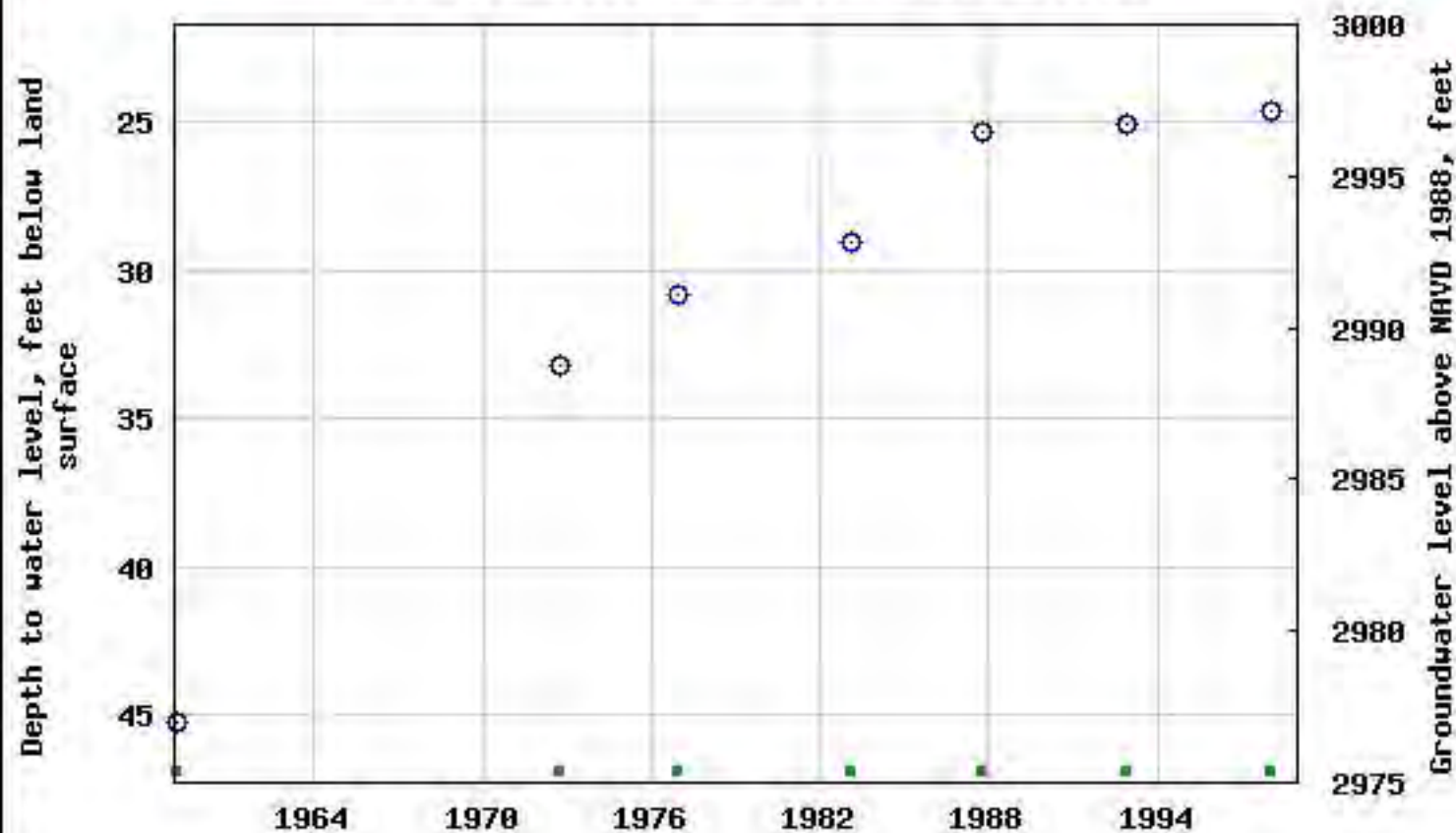
#### OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

---

## USGS 322111103542601 22S.30E.32.11144





**USGS 322114103524801 22S.30E.33.212243****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°21'14", Longitude 103°52'48" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 248 feet

Land surface altitude: 3,163 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

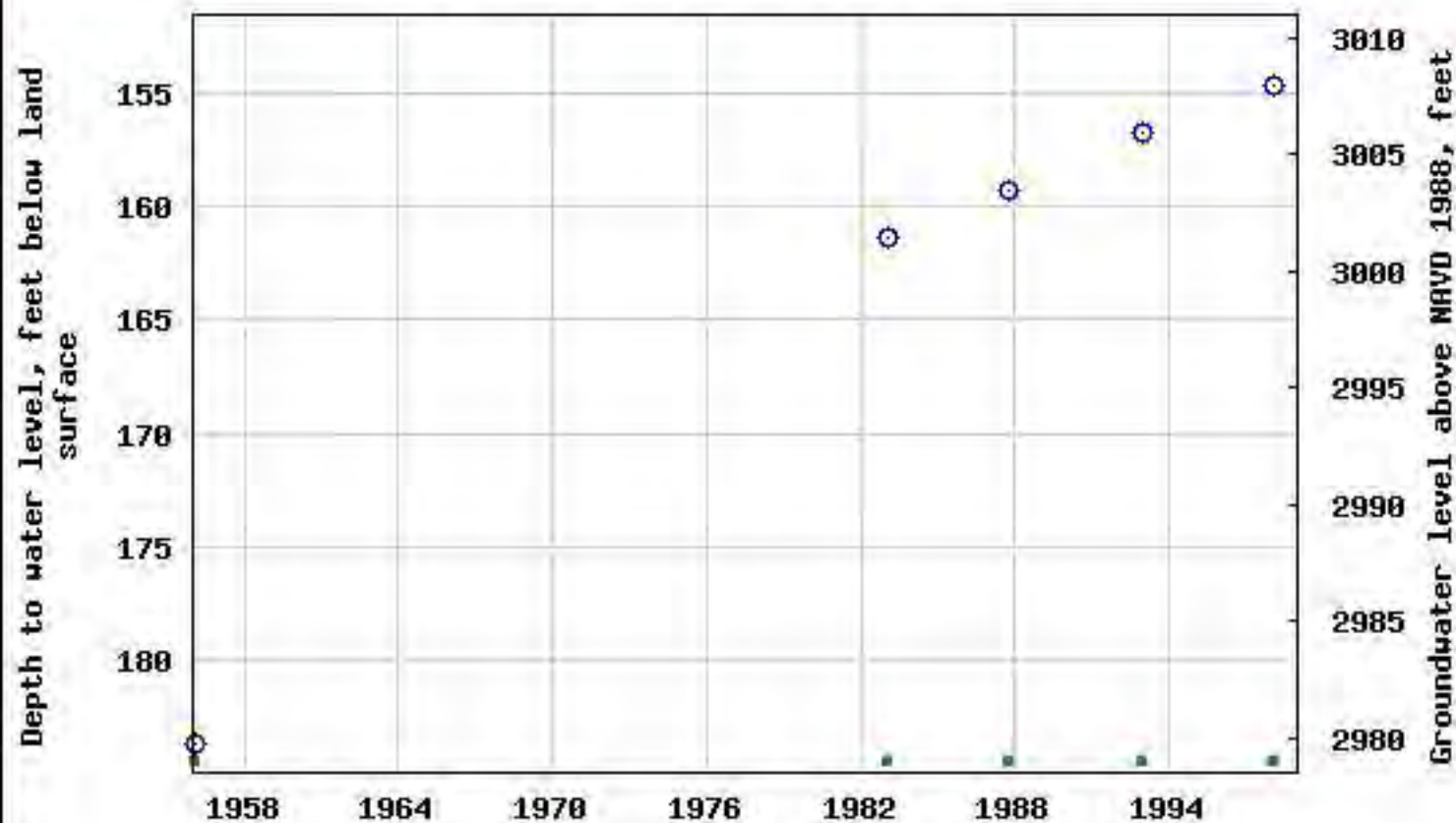
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#">Field groundwater-level measurements</a>	1956-02-25	1998-02-02	15
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322114103524801 22S.30E.33.212243



**USGS 322144103545101 22S.30E.30.234431****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°21'44", Longitude 103°54'51" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 75 feet

Land surface altitude: 3,021 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

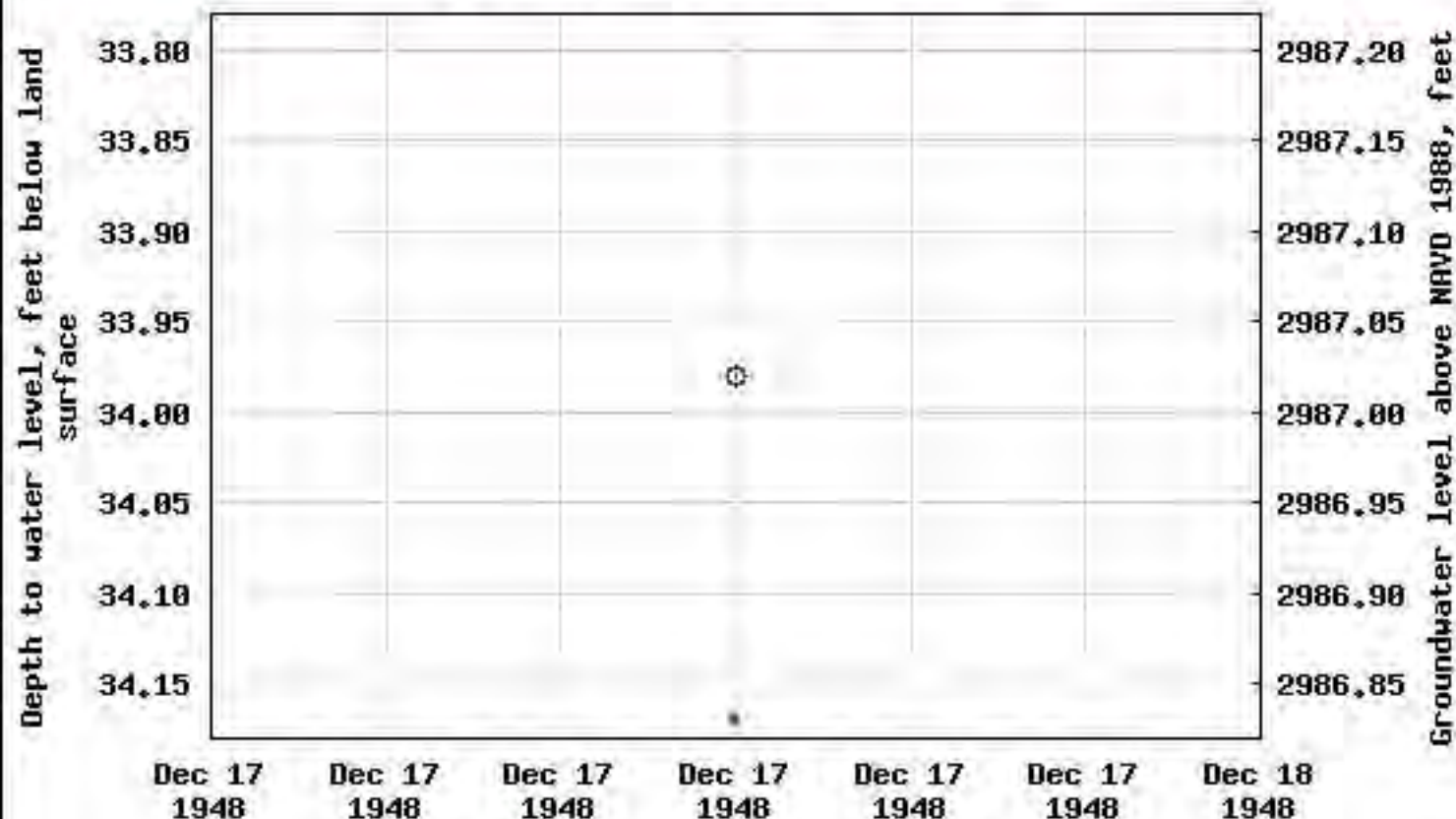
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#">Field groundwater-level measurements</a>	1948-12-17	1948-12-17	3
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

USGS 322144103545101 22S.30E.30.234431



# USGS 322215103502701 22S.30E.24.3334 P-14

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°22'15", Longitude 103°50'27" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,360 feet above NGVD29.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

#### AVAILABLE DATA:

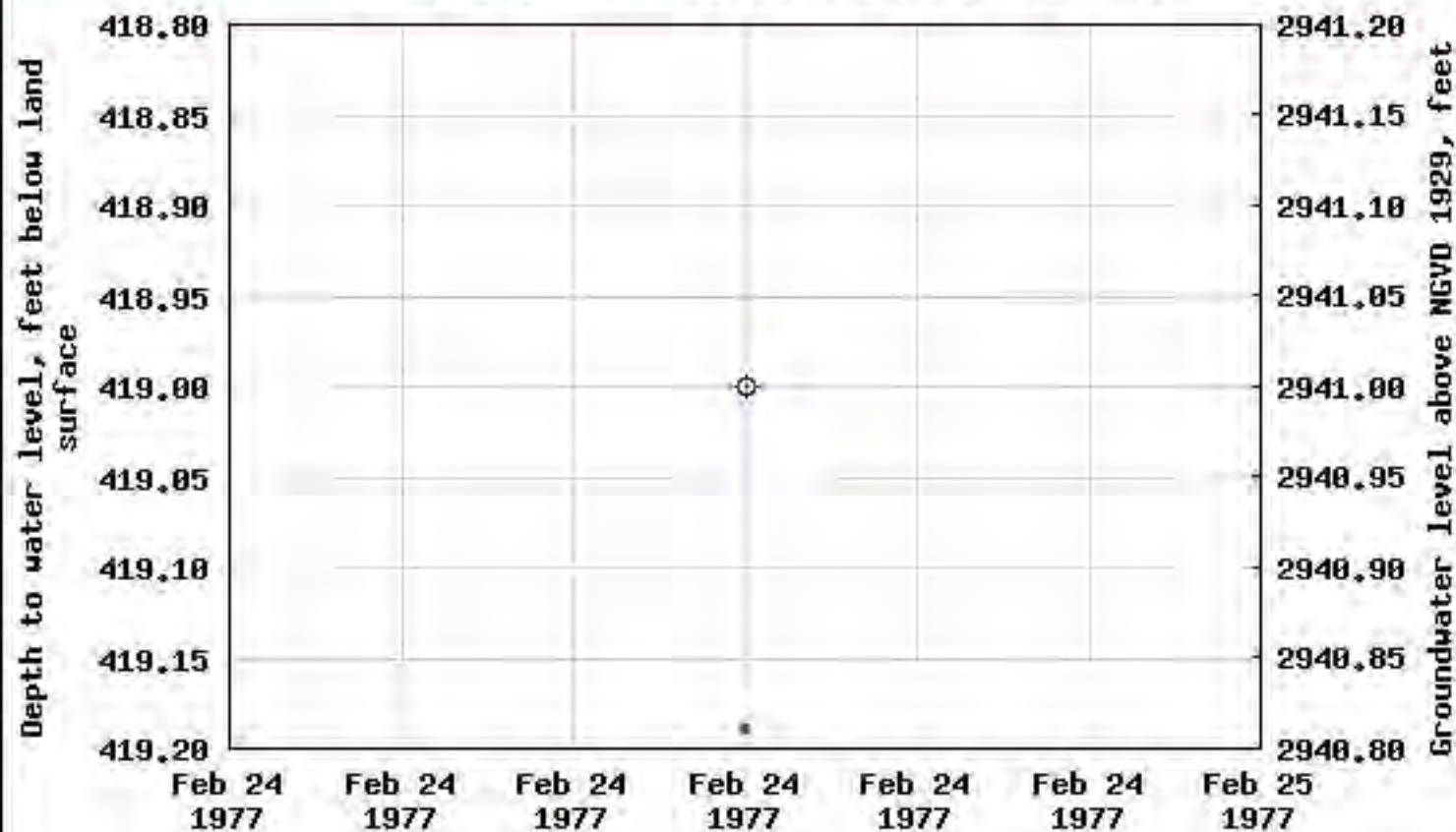
Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1977-02-24	1977-02-24	3
<a href="#">Field/Lab water-quality samples</a>	1977-02-24	1977-03-14	2
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322215103502701 22S.30E.24.3334 P-14



**USGS 322418103523201 22S.30E.10.31131****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°24'18", Longitude 103°52'32" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 77 feet

Land surface altitude: 3,133 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

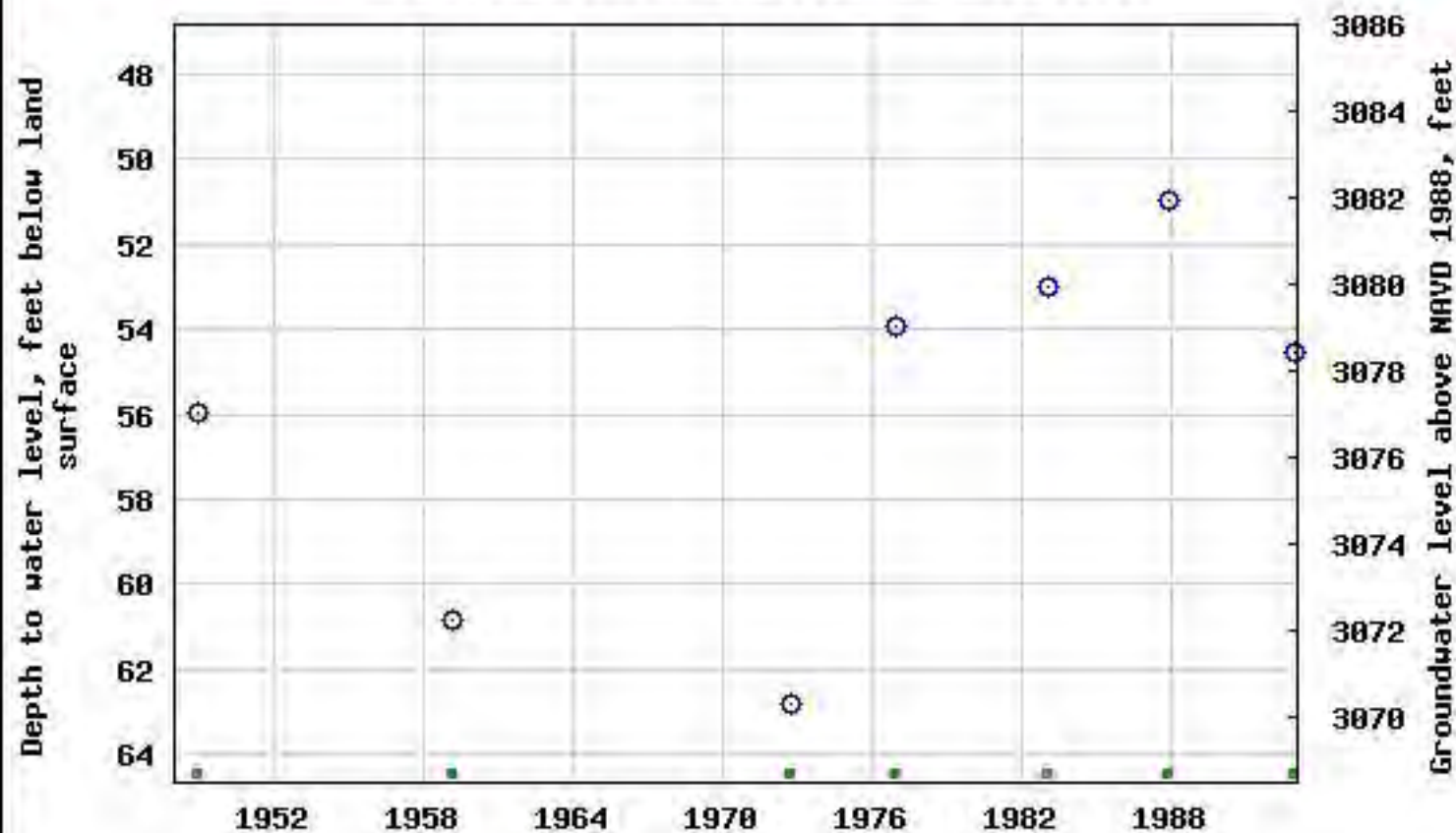
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#"><b>Field groundwater-level measurements</b></a>	1948-12-23	1992-12-08	21
<a href="#"><b>Field/Lab water-quality samples</b></a>	1972-09-12	1972-09-12	1
<a href="#"><b>Revisions</b></a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322418103523201 22S.30E.10.31131





# USGS 322425103554401 22S.29E.12.24444

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°24'25", Longitude 103°55'44" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 250 feet

Land surface altitude: 3,168 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

#### AVAILABLE DATA:

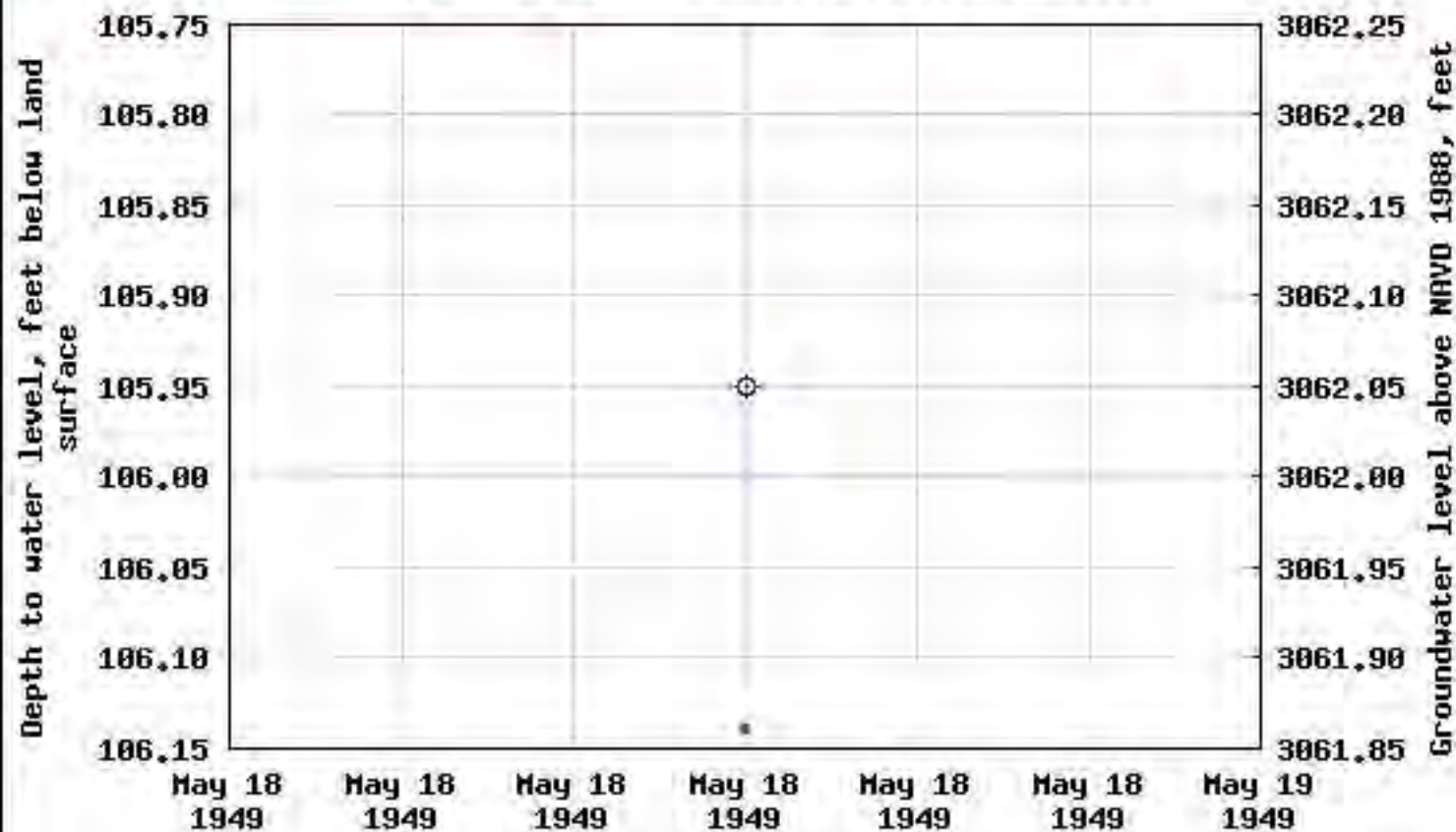
Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1949-05-18	1949-05-18	3
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322425103554401 22S.29E.12.24444



# USGS 322426103540201 22S.30E.08.23311

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°24'26", Longitude 103°54'02" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 181 feet

Land surface altitude: 3,152 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

#### AVAILABLE DATA:

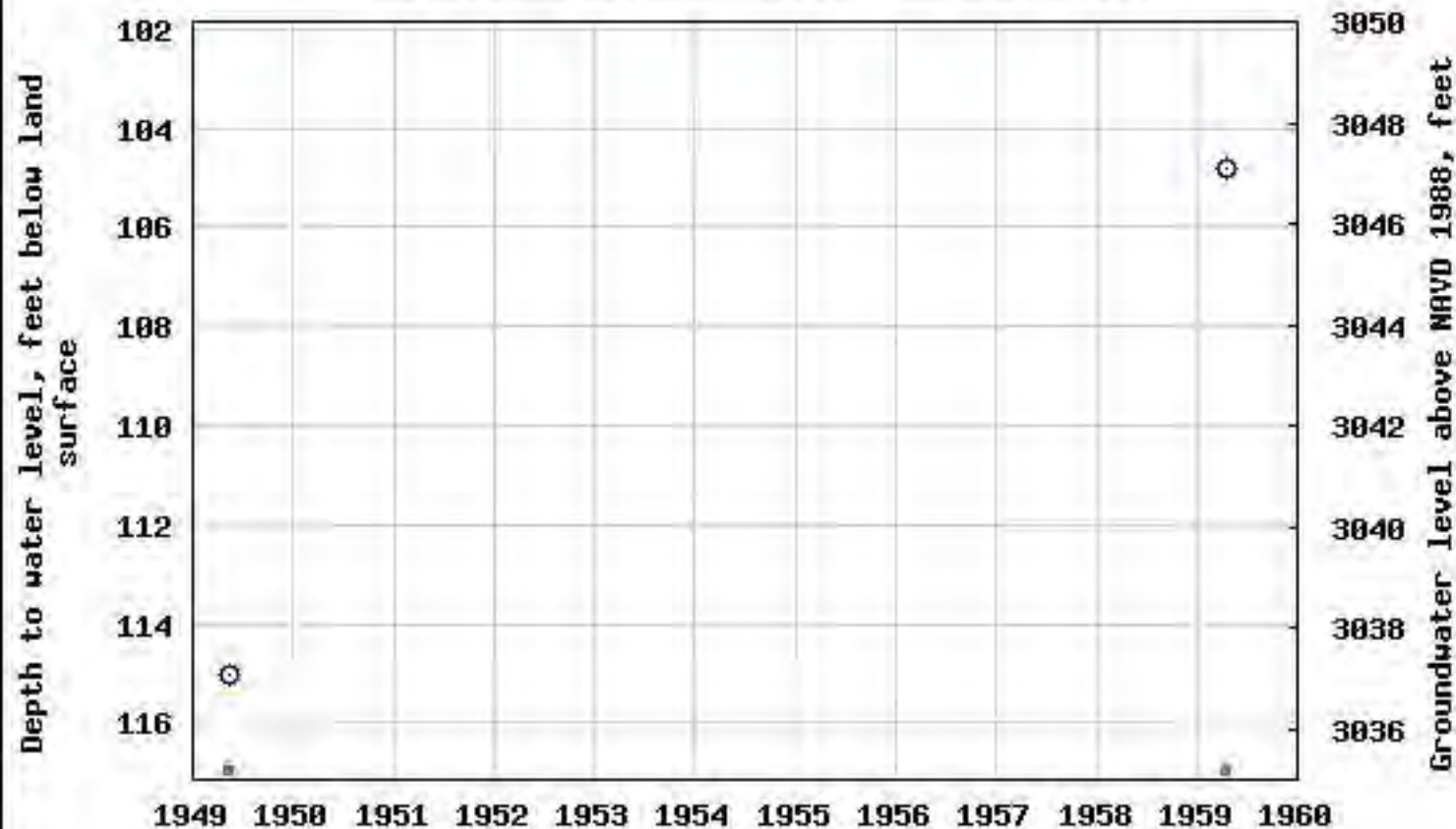
Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1949-05-18	1959-04-14	6
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data Inquiries](#)

## USGS 322426103540201 22S.30E.08.23311



**USGS 322432103543301 22S.30E.07.242224****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°24'32", Longitude 103°54'33" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 176 feet

Land surface altitude: 3,128 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

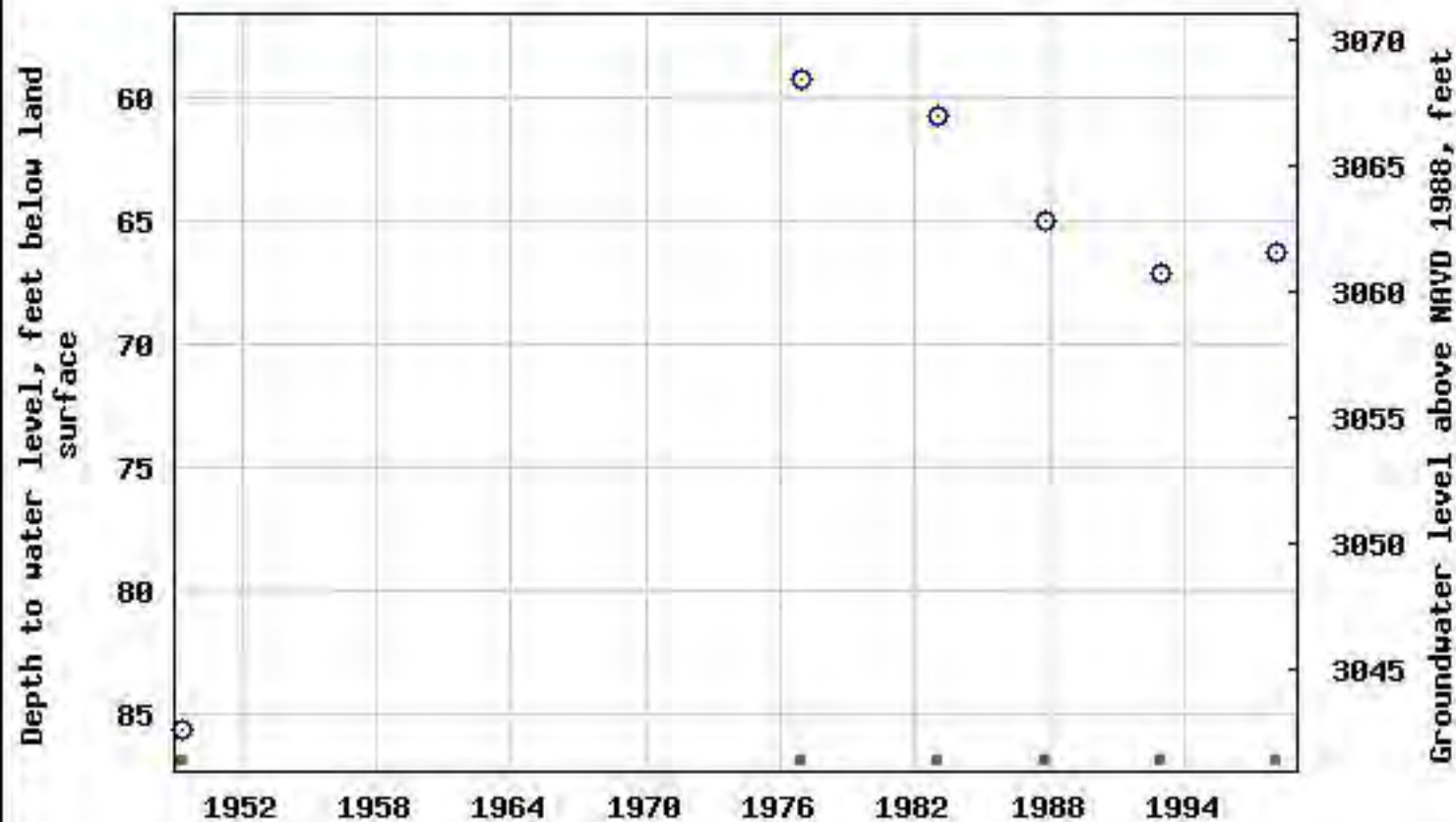
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#">Field groundwater-level measurements</a>	1949-05-18	1998-01-28	18
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322432103543301 22S.30E.07.242224



# USGS 322447103550601 22S.30E.06.344434

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°24'47", Longitude 103°55'06" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,152 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

#### AVAILABLE DATA:

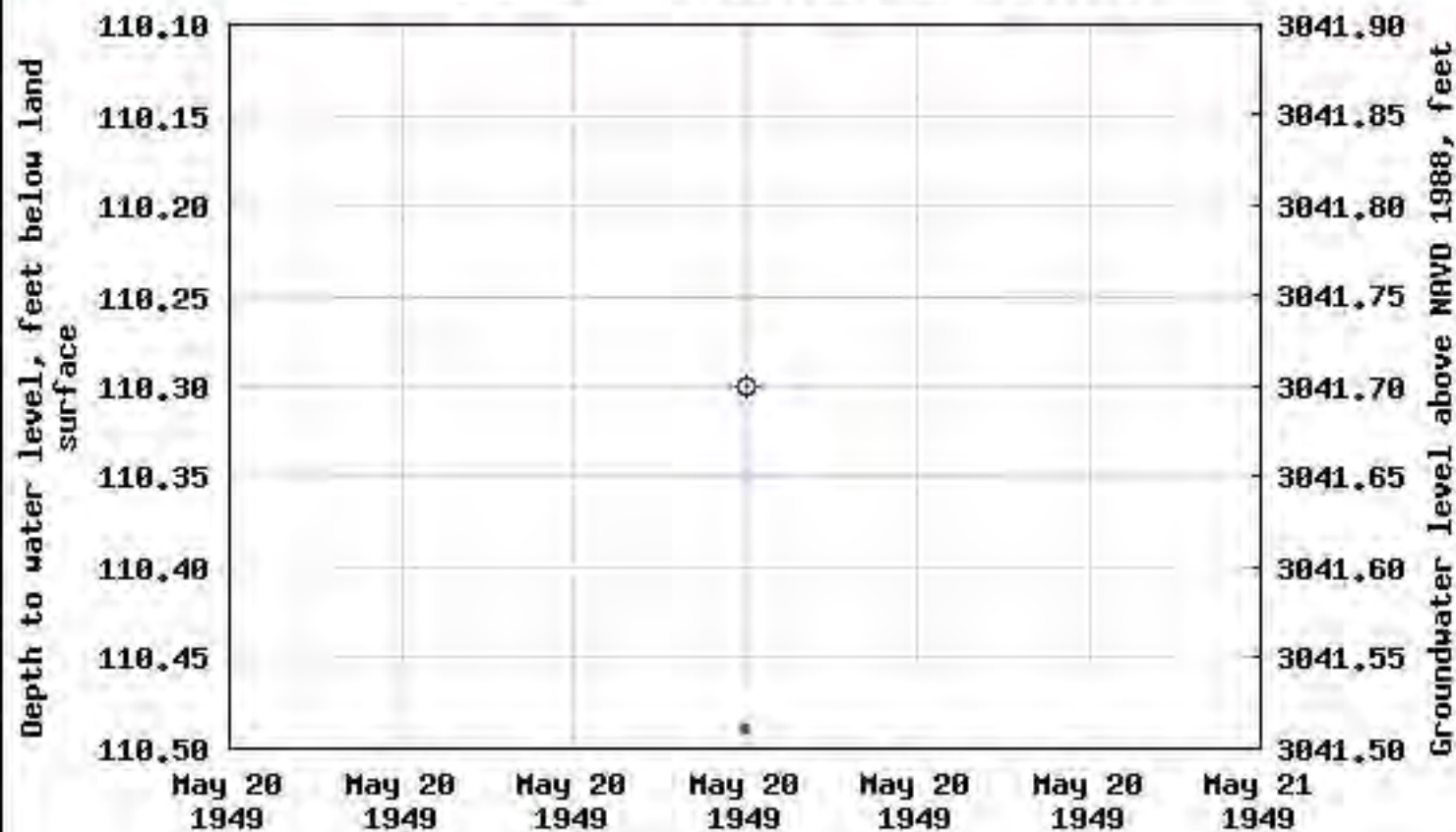
Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1949-05-20	1949-05-20	3
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322447103550601 22S.30E.06.344434





**USGS 322450103544401 22S.30E.06.444222****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°24'50", Longitude 103°54'44" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,139 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

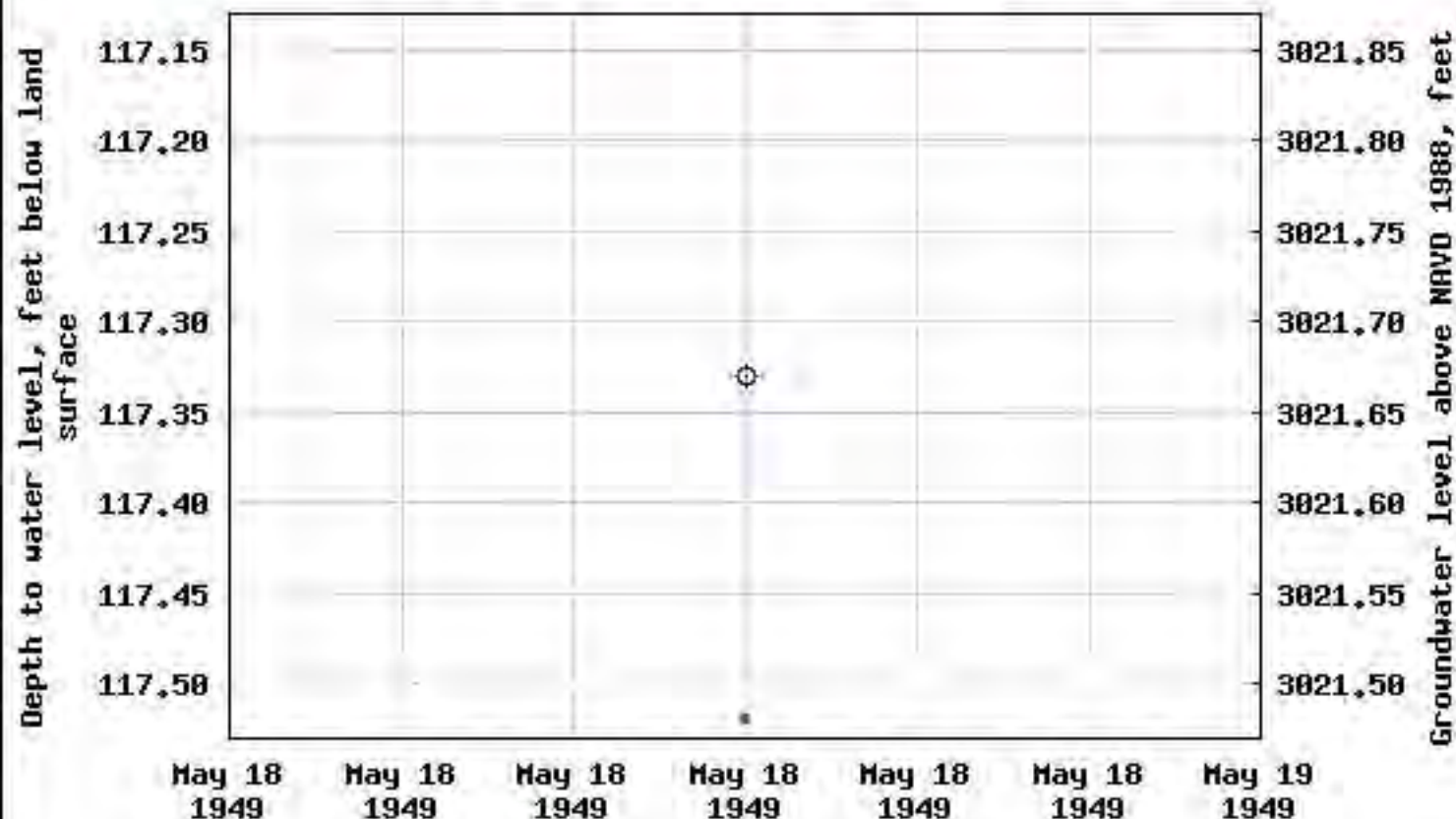
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#"><u>Field groundwater-level measurements</u></a>	1949-05-18	1949-05-18	3
<a href="#"><u>Field/Lab water-quality samples</u></a>	1972-09-19	1972-09-19	1
<a href="#"><u>Revisions</u></a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

USGS 322450103544401 22S.30E.06.444222



**USGS 322453103534301 22S.30E.05.44143****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°24'53", Longitude 103°53'43" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,122 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

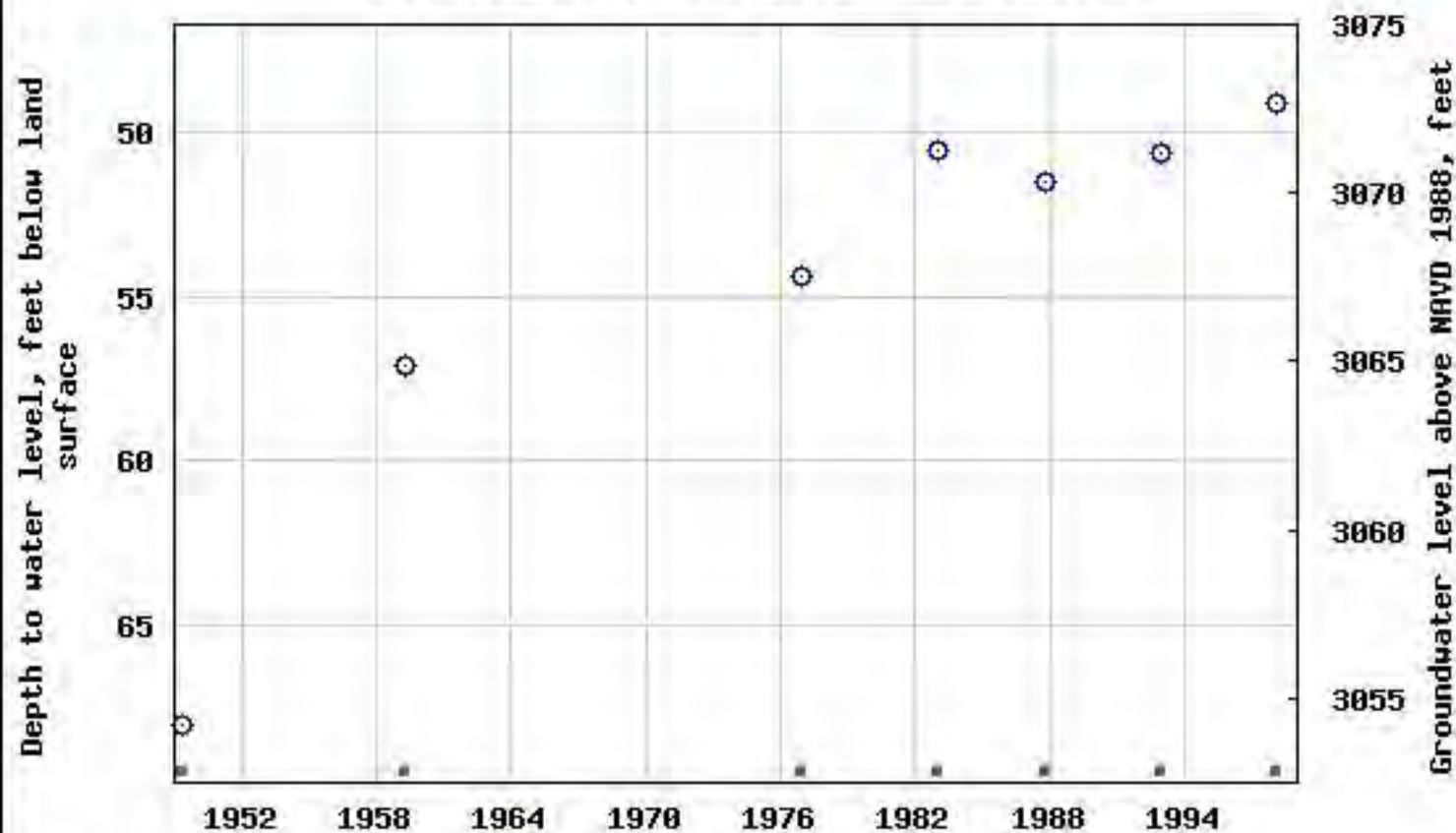
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#">Field groundwater-level measurements</a>	1949-05-19	1998-01-28	21
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322453103534301 22S.30E.05.44143



**USGS 322456103535901 22S.30E.05.43114****Available data for this site****Well Site****DESCRIPTION:**

Latitude 32°24'56", Longitude 103°53'59" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: 225 feet

Land surface altitude: 3,117 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

**AVAILABLE DATA:**

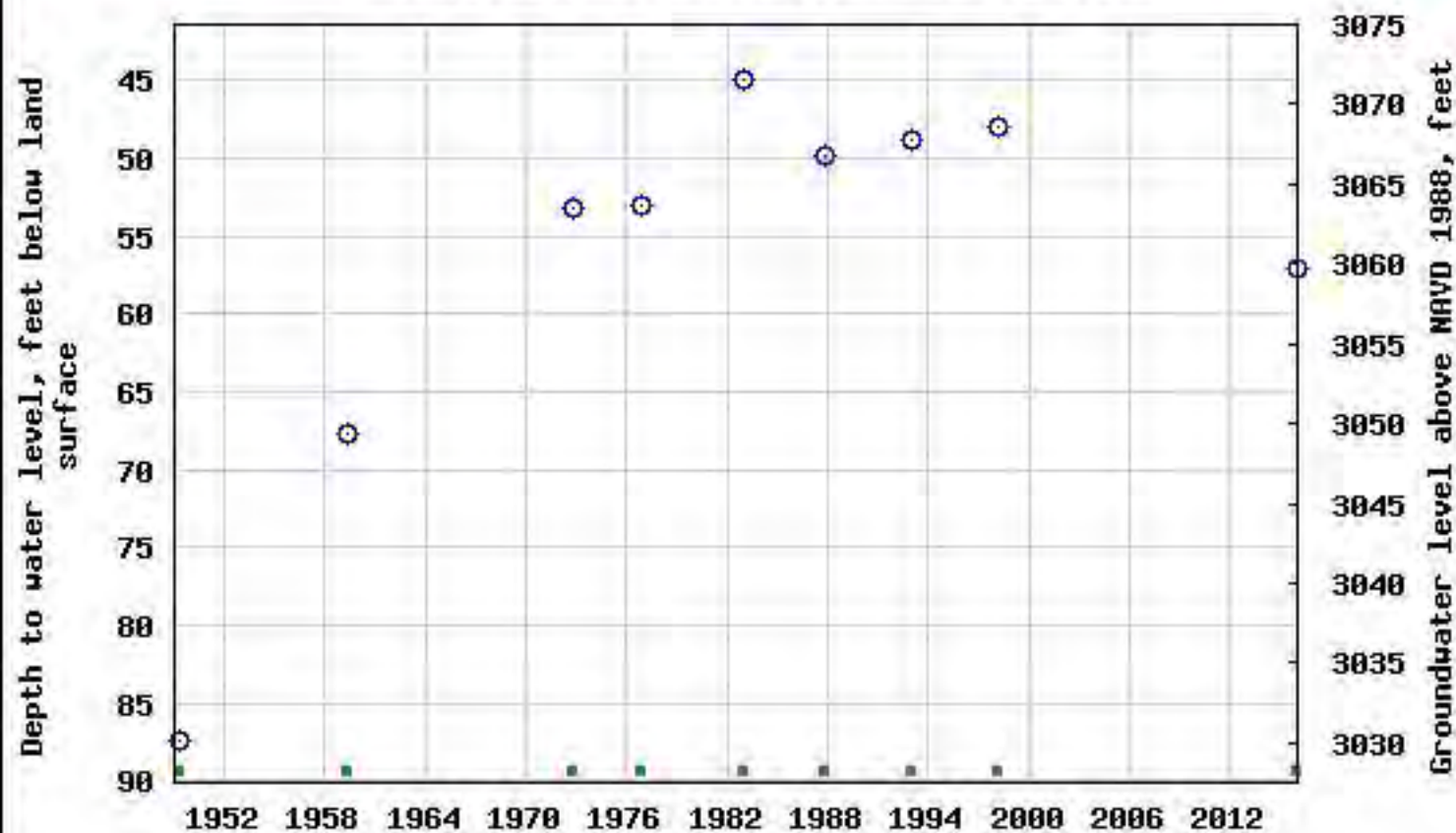
<b>Data Type</b>	<b>Begin Date</b>	<b>End Date</b>	<b>Count</b>
<a href="#">Field groundwater-level measurements</a>	1949-05-18	2015-12-17	27
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

**OPERATION:**

Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

## USGS 322456103535901 22S.30E.05.43114



# USGS 322513103543201 22S.30E.05.13333

## Available data for this site

### Well Site

#### DESCRIPTION:

Latitude 32°25'13", Longitude 103°54'32" NAD27

Eddy County, New Mexico , Hydrologic Unit 13060011

Well depth: not determined.

Land surface altitude: 3,160 feet above NAVD88.

Well completed in "Other aquifers" (N9999OTHER) national aquifer.

Well completed in "Rustler Formation" (312RSLR) local aquifer

#### AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
<a href="#">Field groundwater-level measurements</a>	1949-05-18	1949-05-18	3
<a href="#">Revisions</a>	Unavailable (site:0) (timeseries:0)		

#### OPERATION:

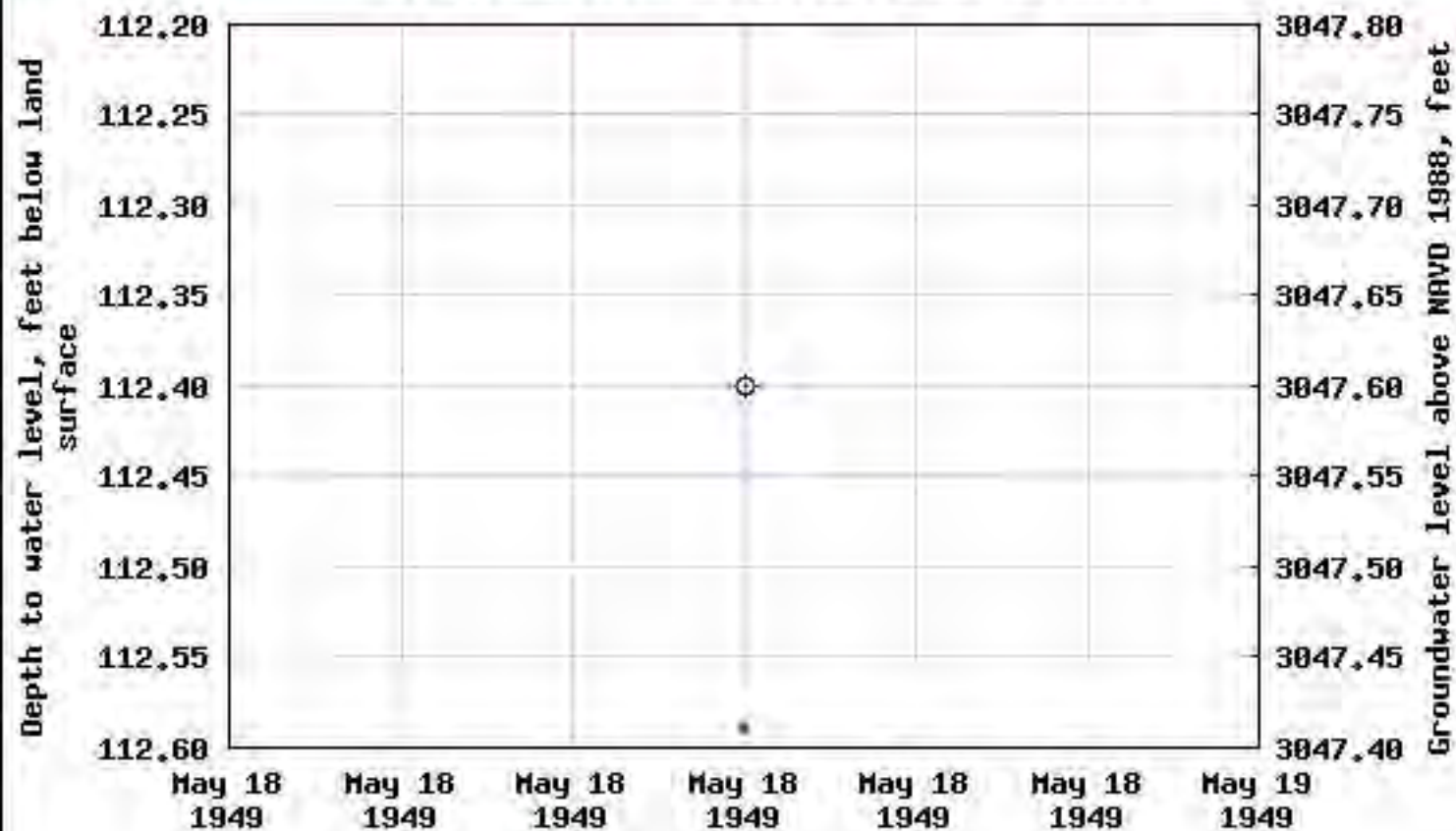
Record for this site is maintained by the USGS New Mexico Water Science Center

Email questions about this site to [New Mexico Water Science Center Water-Data  
Inquiries](#)

---



## USGS 322513103543201 22S.30E.05.13333





# New Mexico Office of the State Engineer

## Point of Diversion Summary

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

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	02111	2	2	2	33	22S	30E	605505	3580336*

**Driller License:** **Driller Company:**  
**Driller Name:** WINSTON BROS.  
**Drill Start Date:** **Drill Finish Date:** 11/30/1962 **Plug Date:**  
**Log File Date:** **PCW Rcv Date:** **Source:** Shallow  
**Pump Type:** **Pipe Discharge Size:** **Estimated Yield:** 29 GPM  
**Casing Size:** 8.75 **Depth Well:** 248 feet **Depth Water:** 155 feet

**Meter Number:** 552 **Meter Make:** SENSUS  
**Meter Serial Number:** 1480245 **Meter Multiplier:** 100.0000  
**Number of Dials:** 5 **Meter Type:** Diversion  
**Unit of Measure:** Gallons **Return Flow Percent:**  
**Usage Multiplier:** **Reading Frequency:**

### Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
12/31/1998	1999	3519	A	ms		0
06/30/1999	1999	10119	A	ms		2.025
09/30/1999	1999	17046	A	ms		2.126
01/12/2000	1999	23122	A	ms		1.865
03/31/2000	2000	29277	A	mb		1.889
06/30/2000	2000	38063	A	RPT		2.696
09/30/2000	2000	45705	A	RPT		2.345
12/31/2000	2000	53709	A	RPT		2.456
03/31/2001	2001	61935	A	RPT		2.524
06/30/2001	2001	63804	A	RPT		0.574
10/01/2001	2001	63804	A	RPT		0
01/01/2002	2001	3924	R	RPT	Meter Rollover	12.312
04/23/2002	2002	12315	A	RPT		2.575
07/01/2002	2002	12571	A	rm		0.079
01/01/2003	2002	14740	A	RPT		0.666
01/01/2004	2003	14740	A	ab		0
04/01/2004	2004	14740	A	RPT		0
10/30/2004	2004	14740	A	RPT		0
03/31/2005	2005	14740	A	RPT		0
10/30/2005	2005	14740	A	RPT		0
12/31/2005	2005	14740	A	RPT		0
07/07/2006	2006	14740	A	tw		0
11/01/2006	2006	14740	A	RPT		0
06/30/2007	2007	14740	A	RPT		0
09/30/2007	2007	14740	A	RPT		0

12/31/2007	2007	14740	A	RPT	0
03/31/2008	2008	14740	A	RPT	0
06/30/2008	2008	14740	A	RPT	0
09/30/2008	2008	14740	A	RPT	0
12/31/2008	2008	14740	A	RPT	0
03/31/2009	2009	14740	A	RPT	0
06/30/2009	2009	14740	A	RPT	0
09/30/2009	2009	14740	A	RPT	0
03/31/2010	2010	14740	A	tw	0
07/09/2010	2010	14740	A	RPT	0
10/01/2010	2010	14740	A	RPT	0
12/31/2010	2010	14740	A	RPT	0
03/30/2011	2011	14740	A	tw	0
06/30/2011	2011	14740	A	RPT	0
01/09/2012	2011	14740	A	RPT	0
03/31/2012	2012	14740	A	RPT	0
07/03/2012	2012	14740	A	RPT	0
01/10/2013	2012	14740	A	RPT	0
04/08/2013	2013	14740	A	RPT	0
07/11/2013	2013	14740	A	RPT	0

x

**YTD Meter Amounts:	Year	Amount
	1999	6.016
	2000	9.386
	2001	15.410
	2002	3.320
	2003	0
	2004	0
	2005	0
	2006	0
	2007	0
	2008	0
	2009	0
	2010	0
	2011	0
	2012	0
	2013	0

x

\*UTM location was derived from PLSS - see Help


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.

POINT OF DIVERSION SUMMARY



# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
C	03015	1	4	3	22	22S	30E	606099	3582353* 
<hr/>									
Driller License: 331		Driller Company:				SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.			
Driller Name:									
Drill Start Date: 01/21/2004		Drill Finish Date:				01/25/2004		Plug Date:	
Log File Date: 03/04/2004		PCW Rcv Date:						Source: Artesian	
Pump Type:		Pipe Discharge Size:				Estimated Yield:			
Casing Size: 6.00		Depth Well:				1316 feet		Depth Water: 262 feet	
<hr/>									
Water Bearing Stratifications:					Top	Bottom	Description		
					362	385	Other/Unknown		
<hr/>									
Casing Perforations:					Top	Bottom			
					261	386			

\*UTM location was derived from PLSS - see Help


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.

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)			
<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
C	03587 POD1	1	4	3	29	23S	29E	593338	3570754 

---

x

<b>Driller License:</b>	1348	<b>Driller Company:</b>	TAYLOR WATER WELL SERVICE	
<b>Driller Name:</b>	TAYLOR, CLINTON E. (LD)			
<b>Drill Start Date:</b>	04/13/2013	<b>Drill Finish Date:</b>	04/14/2013	<b>Plug Date:</b>
<b>Log File Date:</b>	05/07/2013	<b>PCW Rcv Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b> 1 GPM
<b>Casing Size:</b>	4.00	<b>Depth Well:</b>	99 feet	<b>Depth Water:</b> 44 feet

---

x

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	98	99	Limestone/Dolomite/Chalk

---

x

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	89	99

---

x


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.

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)			
<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
C	03587 POD2	1	2	4	19	23S	29E	592213	3572706 

---

x

<b>Driller License:</b>	1348	<b>Driller Company:</b>	TAYLOR WATER WELL SERVICE	
<b>Driller Name:</b>	TAYLOR, CLINTON E. (LD)			
<b>Drill Start Date:</b>	04/11/2013	<b>Drill Finish Date:</b>	04/13/2013	<b>Plug Date:</b>
<b>Log File Date:</b>	05/07/2013	<b>PCW Rcv Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b> 20 GPM
<b>Casing Size:</b>	4.00	<b>Depth Well:</b>	77 feet	<b>Depth Water:</b> 16 feet

---

x

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	61	65	Sandstone/Gravel/Conglomerate

---

x

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	61	71

---

x


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.

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)	
<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
C	03587 POD3	2	4	1	07	22S	29E	601447	3586271 

---

x

<b>Driller License:</b>	1348	<b>Driller Company:</b>	TAYLOR WATER WELL SERVICE	
<b>Driller Name:</b>	TAYLOR, CLINTON E. (LD)			
<b>Drill Start Date:</b>	04/04/2013	<b>Drill Finish Date:</b>	04/04/2013	<b>Plug Date:</b>
<b>Log File Date:</b>	05/07/2013	<b>PCW Rcv Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b> 3 GPM
<b>Casing Size:</b>	2.00	<b>Depth Well:</b>	80 feet	<b>Depth Water:</b> 47 feet

---

x

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	65	80	Other/Unknown

---

x

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	65	80

---

x

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.


POINT OF DIVERSION SUMMARY





# New Mexico Office of the State Engineer

## Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 03587 POD4	2	4	4	14	22S	29E	599006	3583977 
x									
<b>Driller License:</b>		1348		<b>Driller Company:</b>			TAYLOR WATER WELL SERVICE		
<b>Driller Name:</b>		TAYLOR, CLINTON E. (LD)							
<b>Drill Start Date:</b>		04/01/2013		<b>Drill Finish Date:</b>			04/02/2013		<b>Plug Date:</b>
<b>Log File Date:</b>		05/07/2013		<b>PCW Rcv Date:</b>			<b>Source:</b>		
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>			<b>Estimated Yield:</b> 5 GPM				
<b>Casing Size:</b>		2.00		<b>Depth Well:</b>			79 feet		<b>Depth Water:</b> 57 feet
x									
<b>Casing Perforations:</b>				<b>Top</b>	<b>Bottom</b>				
				59	79				
x									

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.

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)

<b>Well Tag</b>	<b>POD Number</b>	<b>Q64</b>	<b>Q16</b>	<b>Q4</b>	<b>Sec</b>	<b>Tws</b>	<b>Rng</b>	<b>X</b>	<b>Y</b>
C	03679 POD1	1	4	2	14	24S	33E	603567	3581547 

<b>Driller License:</b>	1654	<b>Driller Company:</b>	NOT WORKING FOR HIRE--SIRMAN DRILLING AND CONSTRUCT	
<b>Driller Name:</b>				
<b>Drill Start Date:</b>	10/23/2013	<b>Drill Finish Date:</b>	10/29/2013	<b>Plug Date:</b>
<b>Log File Date:</b>	11/07/2013	<b>PCW Rcv Date:</b>		<b>Source:</b> Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b> 20 GPM
<b>Casing Size:</b>	6.00	<b>Depth Well:</b>	700 feet	<b>Depth Water:</b> 575 feet

<b>Water Bearing Stratifications:</b>	<b>Top</b>	<b>Bottom</b>	<b>Description</b>
	565	665	Sandstone/Gravel/Conglomerate

<b>Casing Perforations:</b>	<b>Top</b>	<b>Bottom</b>
	560	620
	660	700

<b>Meter Number:</b>	16576	<b>Meter Make:</b>	MASTERMETER
<b>Meter Serial Number:</b>	8112524	<b>Meter Multiplier:</b>	100.0000
<b>Number of Dials:</b>	6	<b>Meter Type:</b>	Diversion
<b>Unit of Measure:</b>	Gallons	<b>Return Flow Percent:</b>	
<b>Usage Multiplier:</b>		<b>Reading Frequency:</b>	

### Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount Online
03/01/2014	2014	29030	A	RPT		0
07/01/2014	2014	49261	A	RPT		6.209
10/01/2014	2014	68901	A	RPT		6.027
12/31/2014	2014	84036	A	RPT		4.645
02/01/2015	2015	89806	A	RPT		1.771
03/02/2015	2015	92350	A	RPT		0.781
04/01/2015	2015	96582	A	RPT		1.299
04/30/2015	2015	104711	A	RPT		2.495
05/31/2015	2015	111086	A	RPT		1.956
07/01/2015	2015	118700	A	RPT		2.337
08/01/2015	2015	123816	A	RPT		1.570
08/31/2015	2015	130025	A	RPT		1.905
10/01/2015	2015	135622	A	RPT		1.718

<b>**YTD Meter Amounts:</b>	<b>Year</b>	<b>Amount</b>
	2014	16.881
	2015	15.832

---


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.

---

POINT OF DIVERSION SUMMARY

ATTACHMENT 2: LITHOLOGIC/SAMPLING LOG


[illegible]


 <b>WSP USA</b> 508 West Stevens Street Carlsbad, New Mexico 88220								BH or PH Name: BH02		Date: 3/3/2021	
								Site Name: James Ranch Unit DI 1A			
								RP or Incident Number:			
								LTE Job Number: TE012921002			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>								Logged By: SL		Method: Hand Auger	
Lat/Long: 32.379685, -103.885749				Field Screening: Chloride, PID				Hole Diameter: 4"		Total Depth: 4'	
Comments: TD @ 4', chloride field screening values include 60% error factor											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithology/Remarks			
						0		0-4' Sandy clay, m-f grained, well sorted, brown, no odor, no stain, low plasticity, non cohesive, dry  -3' gypsum inclusions			
						1					
D	<186	0.8	N	BH02	2'	2	SP-SC				
						3					
D	<186	0.2	N	BH02A	4'	4					
						5		TD @ 4'			
						6					
						7					
						8					
						9					
						10					
						11					
						12					

ATTACHMENT 3: PHOTOGRAPHIC LOG



**PHOTOGRAPHIC LOG****XTO Energy, Inc.****James Ranch Unit DI 1A  
Eddy County, New Mexico****TE012921002**

<b>Photo No.</b>	<b>Date</b>	
1	January 15, 2021 – March 3, 2021	
Northern view of flare release area.		

<b>Photo No.</b>	<b>Date</b>	
2	January 15, 2021 – March 3, 2021	
Western view of flare release area.		

**PHOTOGRAPHIC LOG****XTO Energy, Inc.****James Ranch Unit DI 1A  
Eddy County, New Mexico****TE012921002**

<b>Photo No.</b>	<b>Date</b>	
3	January 15, 2021 – March 3, 2021	
Northern view of borehole BH01.		

<b>Photo No.</b>	<b>Date</b>	
4	January 15, 2021 – March 3, 2021	
Northwestern view of BH01.		

ATTACHMENT 4: LABORATORY ANALYTICAL RESULTS

## Certificate of Analysis Summary 684890

WSP USA, Dallas, TX

Project Name: JRU 01 AL Tank Battery

Project Id: 1082151001

Contact: Dan Moir

Project Location:

Date Received in Lab: Fri 01.15.2021 12:40

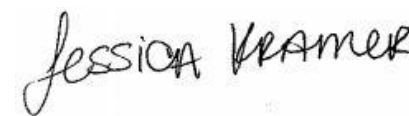
Report Date: 01.19.2021 07:51

Project Manager: Jessica Kramer

<b>Analysis Requested</b>	<b>Lab Id:</b>	684890-001	684890-002				
	<b>Field Id:</b>	SS01	SS02				
	<b>Depth:</b>	0.3- ft	0.3- ft				
	<b>Matrix:</b>	SOIL	SOIL				
	<b>Sampled:</b>	01.15.2021 11:23	01.15.2021 11:26				
<b>BTEX by EPA 8021B</b>	<b>Extracted:</b>	01.15.2021 13:00	01.15.2021 13:00				
	<b>Analyzed:</b>	01.16.2021 00:41	01.16.2021 01:04				
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL				
Benzene		<0.00199 0.00199	<0.00201 0.00201				
Toluene		<0.00199 0.00199	<0.00201 0.00201				
Ethylbenzene		<0.00199 0.00199	<0.00201 0.00201				
m,p-Xylenes		<0.00398 0.00398	<0.00402 0.00402				
o-Xylene		<0.00199 0.00199	<0.00201 0.00201				
Total Xylenes		<0.00199 0.00199	<0.00201 0.00201				
Total BTEX		<0.00199 0.00199	<0.00201 0.00201				
<b>Chloride by EPA 300</b>	<b>Extracted:</b>	01.15.2021 15:00	01.15.2021 15:00				
	<b>Analyzed:</b>	01.15.2021 21:31	01.15.2021 21:36				
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL				
Chloride		34.4 10.0	44.4 10.1				
<b>TPH by SW8015 Mod</b>	<b>Extracted:</b>	** ** *	01.15.2021 16:00				
	<b>Analyzed:</b>	01.15.2021 19:24	01.15.2021 19:44				
	<b>Units/RL:</b>	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		<50.3 50.3	<50.1 50.1				
Diesel Range Organics (DRO)		87.0 50.3	<50.1 50.1				
Motor Oil Range Hydrocarbons (MRO)		<50.3 50.3	<50.1 50.1				
Total GRO-DRO		87.0 50.3	<50.1 50.1				
Total TPH		87.0 50.3	<50.1 50.1				

BRL - Below Reporting Limit

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







# Analytical Report 684890

for

**WSP USA**

**Project Manager: Dan Moir**

**JRU 01 AL Tank Battery**

**1082151001**

**01.19.2021**

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 (T104704219-20-24)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.19.2021

Project Manager: **Dan Moir**

**WSP USA**

2777 N. Stemmons Freeway, Suite 1600

Dallas, TX 75207

Reference: Eurofins Xenco, LLC Report No(s): **684890**

**JRU 01 AL Tank Battery**

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) 684890. 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. 684890 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,

A handwritten signature in black ink that reads "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



## Sample Cross Reference 684890

**WSP USA, Dallas, TX**

JRU 01 AL Tank Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	01.15.2021 11:23	0.3 ft	684890-001
SS02	S	01.15.2021 11:26	0.3 ft	684890-002





## CASE NARRATIVE

**Client Name:** WSP USA

**Project Name:** JRU 01 AL Tank Battery

Project ID: 1082151001  
Work Order Number(s): 684890

Report Date: 01.19.2021  
Date Received: 01.15.2021

---

**Sample receipt non conformances and comments:**

---

**Sample receipt non conformances and comments per sample:**

None



# Certificate of Analytical Results 684890

## WSP USA, Dallas, TX

JRU 01 AL Tank Battery

Sample Id: **SS01**  
Lab Sample Id: 684890-001

Matrix: Soil  
Date Collected: 01.15.2021 11:23

Date Received: 01.15.2021 12:40  
Sample Depth: 0.3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.15.2021 15:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3148036

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	34.4	10.0	mg/kg	01.18.2021 10:45		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: CAC

Analyst: CAC

Date Prep: 01.15.2021 12:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3148053

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.3	50.3	mg/kg	01.15.2021 19:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	87.0	50.3	mg/kg	01.15.2021 19:24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.3	50.3	mg/kg	01.15.2021 19:24	U	1
Total GRO-DRO	PHC628	87.0	50.3	mg/kg	01.15.2021 19:24		1
Total TPH	PHC635	87.0	50.3	mg/kg	01.15.2021 19:24		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	01.15.2021 19:24	
o-Terphenyl	84-15-1	118	%	70-135	01.15.2021 19:24	



# Certificate of Analytical Results 684890

## WSP USA, Dallas, TX

JRU 01 AL Tank Battery

Sample Id: **SS01**  
Lab Sample Id: 684890-001

Matrix: Soil  
Date Collected: 01.15.2021 11:23

Date Received: 01.15.2021 12:40  
Sample Depth: 0.3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.15.2021 13:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3148046

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.16.2021 00:41	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.16.2021 00:41	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.16.2021 00:41	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.16.2021 00:41	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.16.2021 00:41	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.16.2021 00:41	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.16.2021 00:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	95	%	70-130	01.16.2021 00:41	
1,4-Difluorobenzene	540-36-3	101	%	70-130	01.16.2021 00:41	



# Certificate of Analytical Results 684890

## WSP USA, Dallas, TX

JRU 01 AL Tank Battery

Sample Id: **SS02**  
Lab Sample Id: 684890-002

Matrix: Soil  
Date Collected: 01.15.2021 11:26

Date Received: 01.15.2021 12:40  
Sample Depth: 0.3 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.15.2021 15:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3148036

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	44.4	10.1	mg/kg	01.18.2021 10:51		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: CAC

Analyst: CAC

Date Prep: 01.15.2021 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3148053

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<50.1	50.1	mg/kg	01.15.2021 19:44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<50.1	50.1	mg/kg	01.15.2021 19:44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<50.1	50.1	mg/kg	01.15.2021 19:44	U	1
Total GRO-DRO	PHC628	<50.1	50.1	mg/kg	01.15.2021 19:44	U	1
Total TPH	PHC635	<50.1	50.1	mg/kg	01.15.2021 19:44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	112	%	70-135	01.15.2021 19:44	
o-Terphenyl	84-15-1	108	%	70-135	01.15.2021 19:44	



# Certificate of Analytical Results 684890

## WSP USA, Dallas, TX

JRU 01 AL Tank Battery

Sample Id: **SS02**  
Lab Sample Id: 684890-002

Matrix: Soil  
Date Collected: 01.15.2021 11:26

Date Received: 01.15.2021 12:40  
Sample Depth: 0.3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.15.2021 13:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3148046

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.16.2021 01:04	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.16.2021 01:04	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.16.2021 01:04	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.16.2021 01:04	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.16.2021 01:04	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.16.2021 01:04	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.16.2021 01:04	U	1
<b>Surrogate</b>	<b>Cas Number</b>	<b>% Recovery</b>	<b>Units</b>	<b>Limits</b>	<b>Analysis Date</b>	<b>Flag</b>	
4-Bromofluorobenzene	460-00-4	89	%	70-130	01.16.2021 01:04		
1,4-Difluorobenzene	540-36-3	100	%	70-130	01.16.2021 01:04		

## 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



**WSP USA**  
JRU 01 AL Tank Battery

**Analytical Method: Chloride by EPA 300**

Seq Number: 3148036

MB Sample Id: 7719346-1-BLK

Matrix: Solid

LCS Sample Id: 7719346-1-BKS

Prep Method: E300P

Date Prep: 01.15.2021

LCSD Sample Id: 7719346-1-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	200	212	106	203	102	90-110	4	20	mg/kg	01.15.2021 18:57	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3148036

Parent Sample Id: 684808-015

Matrix: Soil

MS Sample Id: 684808-015 S

Prep Method: E300P

Date Prep: 01.15.2021

MSD Sample Id: 684808-015 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	1530	200	1730	100	1730	101	90-110	0	20	mg/kg	01.15.2021 19:14	

**Analytical Method: Chloride by EPA 300**

Seq Number: 3148036

Parent Sample Id: 684808-025

Matrix: Soil

MS Sample Id: 684808-025 S

Prep Method: E300P

Date Prep: 01.15.2021

MSD Sample Id: 684808-025 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	690	202	874	91	894	103	90-110	2	20	mg/kg	01.15.2021 20:34	

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3148053

MB Sample Id: 7719351-1-BLK

Matrix: Solid

LCS Sample Id: 7719351-1-BKS

Prep Method: SW8015P

Date Prep: 01.15.2021

LCSD Sample Id: 7719351-1-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	983	98	934	93	70-135	5	35	mg/kg	01.15.2021 13:39	
Diesel Range Organics (DRO)	<50.0	1000	1030	103	916	92	70-135	12	35	mg/kg	01.15.2021 13:39	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		91		113		70-135	%	01.15.2021 13:39
o-Terphenyl	93		101		87		70-135	%	01.15.2021 13:39

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3148053

Matrix: Solid

MB Sample Id: 7719351-1-BLK

Prep Method: SW8015P

Date Prep: 01.15.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<50.0	mg/kg	01.15.2021 13:18	

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 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



**WSP USA**  
JR01 AL Tank Battery

**Analytical Method: TPH by SW8015 Mod**

Seq Number: 3148053

Parent Sample Id: 684808-015

Matrix: Soil

MS Sample Id: 684808-015 S

Prep Method: SW8015P

Date Prep: 01.15.2021

MSD Sample Id: 684808-015 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)	<50.1	1000	1200	120	1120	112	70-135	7	35	mg/kg	01.15.2021 14:39	
Diesel Range Organics (DRO)	<50.1	1000	1120	112	1080	108	70-135	4	35	mg/kg	01.15.2021 14:39	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		115		70-135	%	01.15.2021 14:39
o-Terphenyl	108		104		70-135	%	01.15.2021 14:39

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3148046

MB Sample Id: 7719357-1-BLK

Matrix: Solid

LCS Sample Id: 7719357-1-BKS

Prep Method: SW5035A

Date Prep: 01.15.2021

LCSD Sample Id: 7719357-1-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	0.110	110	0.104	104	70-130	6	35	mg/kg	01.15.2021 14:05	
Toluene	<0.00200	0.100	0.106	106	0.102	102	70-130	4	35	mg/kg	01.15.2021 14:05	
Ethylbenzene	<0.00200	0.100	0.0989	99	0.0955	96	71-129	3	35	mg/kg	01.15.2021 14:05	
m,p-Xylenes	<0.00400	0.200	0.203	102	0.196	98	70-135	4	35	mg/kg	01.15.2021 14:05	
o-Xylene	<0.00200	0.100	0.0987	99	0.0950	95	71-133	4	35	mg/kg	01.15.2021 14:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	98		94		95		70-130	%	01.15.2021 14:05
4-Bromofluorobenzene	88		85		84		70-130	%	01.15.2021 14:05

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3148046

Parent Sample Id: 684657-001

Matrix: Soil

MS Sample Id: 684657-001 S

Prep Method: SW5035A

Date Prep: 01.15.2021

MSD Sample Id: 684657-001 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	0.123	122	70-130	7	35	mg/kg	01.15.2021 14:50	
Toluene	<0.00201	0.100	0.105	105	0.112	111	70-130	6	35	mg/kg	01.15.2021 14:50	
Ethylbenzene	0.00489	0.100	0.0822	77	0.0947	89	71-129	14	35	mg/kg	01.15.2021 14:50	
m,p-Xylenes	0.0106	0.201	0.171	80	0.196	92	70-135	14	35	mg/kg	01.15.2021 14:50	
o-Xylene	0.00853	0.100	0.0841	76	0.0977	88	71-133	15	35	mg/kg	01.15.2021 14:50	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	94		93		70-130	%	01.15.2021 14:50
4-Bromofluorobenzene	89		82		70-130	%	01.15.2021 14:50

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 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



Work Order No. 1084890

100

Page 1 of 1

<b>Project Name:</b>	JRU D1 A1 Tank Building	<b>Turn Around</b>	<b>ANALYSIS REQUEST</b>							<b>Work Order Notes</b>	
<b>Project Number:</b>	In# M400263554726	<b>Routine</b>									
<b>P.O. Number:</b>	CC# 1682151001	<b>Rush:</b>									
<b>Sampler's Name:</b>	Jeremy Hill	<b>Due Date:</b>									



[illegible]

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

**TCLP / SPLP 6010:** 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

1631 / 245.1 / 7470 / 7471 : Hg

Xenoco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		01/15/21 12:40			
		2			
		4			
		6			

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: WSP USA

Date/ Time Received: 01.15.2021 12.40.00 PM

Work Order #: 684890

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)?	.8
#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
#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

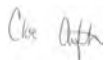
Samples received in bulk containers.

**\* 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: 01.15.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.18.2021





## Environment Testing America

### ANALYTICAL REPORT

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

Laboratory Job ID: 890-260-1

Laboratory Sample Delivery Group: TE012921002

Client Project/Site: James Ranch Unit DI 1A

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:  
3/11/2021 5:43:39 PM

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

#### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:

[www.eurofinsus.com/Env](http://www.eurofinsus.com/Env)

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

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

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Laboratory Job ID: 890-260-1  
SDG: TE012921002

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Client Sample Results . . . . .	5
Surrogate Summary . . . . .	8
QC Sample Results . . . . .	9
QC Association Summary . . . . .	14
Lab Chronicle . . . . .	17
Certification Summary . . . . .	18
Method Summary . . . . .	19
Sample Summary . . . . .	20
Chain of Custody . . . . .	21
Receipt Checklists . . . . .	22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

## Definitions/Glossary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Qualifiers

## Subcontract

Qualifier	Qualifier Description
F	RPD exceeded lab control limits.
U	Analyte was not detected.
X	MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference

## Glossary

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

Case Narrative

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Job ID: 890-260-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative  
890-260-1

Receipt

The samples were received on 3/4/2021 3:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

Receipt Exceptions

The following samples analyzed for method BTEX8021 were received and analyzed from an unpreserved bulk soil jar: BH01 (890-260-1), BH01 A (890-260-2), BH02 (890-260-3) and BH02 A (890-260-4).

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

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Client Sample ID: BH01

Lab Sample ID: 890-260-1

Date Collected: 03/03/21 11:00

Matrix: Solid

Date Received: 03/04/21 15:30

## Method: BTEX 8021 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:12	1
m,p-Xylenes	<0.00399	U	0.00399		mg/kg		03/09/21 16:00	03/10/21 08:12	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:12	1
Toluene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:12	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:12	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	94		70 - 130	03/09/21 16:00	03/10/21 08:12	1
4-Bromofluorobenzene	96		70 - 130	03/09/21 16:00	03/10/21 08:12	1

## Method: CHLORIDE E300 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.6		4.99		mg/kg		03/07/21 16:10	03/08/21 08:24	1

## Method: TPH 8015\_NM\_MOD - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Total TPH	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 06:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 135	03/10/21 17:00	03/11/21 06:15	1
o-Terphenyl	95		70 - 135	03/10/21 17:00	03/11/21 06:15	1

Client Sample ID: BH01 A

Lab Sample ID: 890-260-2

Date Collected: 03/03/21 11:15

Matrix: Solid

Date Received: 03/04/21 15:30

## Method: BTEX 8021 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/kg		03/09/21 16:00	03/10/21 08:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/kg		03/09/21 16:00	03/10/21 08:33	1
m,p-Xylenes	<0.00398	U	0.00398		mg/kg		03/09/21 16:00	03/10/21 08:33	1
o-Xylene	<0.00199	U	0.00199		mg/kg		03/09/21 16:00	03/10/21 08:33	1
Toluene	<0.00199	U	0.00199		mg/kg		03/09/21 16:00	03/10/21 08:33	1
Total BTEX	<0.00199	U	0.00199		mg/kg		03/09/21 16:00	03/10/21 08:33	1
Total Xylenes	<0.00199	U	0.00199		mg/kg		03/09/21 16:00	03/10/21 08:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	94		70 - 130	03/09/21 16:00	03/10/21 08:33	1
4-Bromofluorobenzene	97		70 - 130	03/09/21 16:00	03/10/21 08:33	1

## Method: CHLORIDE E300 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.7		4.96		mg/kg		03/07/21 16:10	03/08/21 08:31	1

## Method: TPH 8015\_NM\_MOD - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 05:34	1

Eurofins Carlsbad

## Client Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Client Sample ID: BH01 A

Lab Sample ID: 890-260-2

Date Collected: 03/03/21 11:15

Matrix: Solid

Date Received: 03/04/21 15:30

## Method: TPH 8015\_NM\_MOD - General Subcontract Method (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 05:34	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 05:34	1
Total TPH	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 05:34	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 135				03/10/21 17:00	03/11/21 05:34	1
o-Terphenyl	84		70 - 135				03/10/21 17:00	03/11/21 05:34	1

Client Sample ID: BH02

Lab Sample ID: 890-260-3

Date Collected: 03/03/21 11:30

Matrix: Solid

Date Received: 03/04/21 15:30

## Method: BTEX 8021 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:53	1
m,p-Xylenes	<0.00400	U	0.00400		mg/kg		03/09/21 16:00	03/10/21 08:53	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:53	1
Toluene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:53	1
Total BTEX	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:53	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 08:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	91		70 - 130				03/09/21 16:00	03/10/21 08:53	1
4-Bromofluorobenzene	101		70 - 130				03/09/21 16:00	03/10/21 08:53	1

## Method: CHLORIDE E300 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10.9		4.95		mg/kg		03/07/21 16:10	03/07/21 20:46	1

## Method: TPH 8015\_NM\_MOD - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 05:55	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 05:55	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 05:55	1
Total TPH	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 05:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 135				03/10/21 17:00	03/11/21 05:55	1
o-Terphenyl	80		70 - 135				03/10/21 17:00	03/11/21 05:55	1

Client Sample ID: BH02 A

Lab Sample ID: 890-260-4

Date Collected: 03/03/21 11:45

Matrix: Solid

Date Received: 03/04/21 15:30

## Method: BTEX 8021 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 09:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 09:14	1
m,p-Xylenes	<0.00399	U	0.00399		mg/kg		03/09/21 16:00	03/10/21 09:14	1
o-Xylene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 09:14	1
Toluene	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 09:14	1

Eurofins Carlsbad



## Client Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Client Sample ID: BH02 A

Lab Sample ID: 890-260-4

Date Collected: 03/03/21 11:45

Matrix: Solid

Date Received: 03/04/21 15:30

## Method: BTEX 8021 - General Subcontract Method (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 09:14	1
Total Xylenes	<0.00200	U	0.00200		mg/kg		03/09/21 16:00	03/10/21 09:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene	93		70 - 130				03/09/21 16:00	03/10/21 09:14	1
4-Bromofluorobenzene	97		70 - 130				03/09/21 16:00	03/10/21 09:14	1

## Method: CHLORIDE E300 - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12.3		5.03		mg/kg		03/07/21 16:10	03/08/21 08:38	1

## Method: TPH 8015\_NM\_MOD - General Subcontract Method

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Gasoline Range Hydrocarbons (GRO)	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Motor Oil Range Hydrocarbons (MRO)	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Total TPH	<49.9	U	49.9		mg/kg		03/10/21 17:00	03/11/21 06:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 135				03/10/21 17:00	03/11/21 06:15	1
o-Terphenyl	78		70 - 135				03/10/21 17:00	03/11/21 06:15	1

Eurofins Carlsbad

# Surrogate Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Method: BTEX 8021 - General Subcontract Method

Matrix: SOIL

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (70-130)
690554-005 S	Matrix Spike	105
690554-005 SD	Matrix Spike Duplicate	109
7722919-1-BKS	Lab Control Sample	106
7722919-1-BLK	Method Blank	91
7722919-1-BSD	Lab Control Sample Dup	110

### Surrogate Legend

BFB = 4-Bromofluorobenzene

## Method: BTEX 8021 - General Subcontract Method

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (70-130)	DFBZ (70-130)
890-260-1	BH01	96	94
890-260-2	BH01 A	97	94
890-260-3	BH02	101	91
890-260-4	BH02 A	97	93

### Surrogate Legend

BFB = 4-Bromofluorobenzene

DFBZ = 1,4-Difluorobenzene

## Method: TPH 8015\_NM\_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)
890-260-1	BH01	108	95
890-260-2	BH01 A	92	84
890-260-3	BH02	83	80
890-260-4	BH02 A	82	78

### Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Method: BTEX 8021 - General Subcontract Method

Lab Sample ID: 7722919-1-BLK

Matrix: SOIL

Analysis Batch: 3153059

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153059\_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<.002	U	.002		mg/kg		03/09/21 16:00	03/10/21 05:49	1
Ethylbenzene	<.002	U	.002		mg/kg		03/09/21 16:00	03/10/21 05:49	1
m,p-Xylenes	<.004	U	.004		mg/kg		03/09/21 16:00	03/10/21 05:49	1
o-Xylene	<.002	U	.002		mg/kg		03/09/21 16:00	03/10/21 05:49	1
Toluene	<.002	U	.002		mg/kg		03/09/21 16:00	03/10/21 05:49	1

Surrogate	BLANK %Recovery	BLANK Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	91		70 - 130	03/09/21 16:00	03/10/21 05:49	1

Lab Sample ID: 7722919-1-BKS

Matrix: SOIL

Analysis Batch: 3153059

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153059\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	.1	0.107		mg/kg		107	70 - 130
Ethylbenzene	.1	0.0967		mg/kg		97	71 - 129
m,p-Xylenes	.2	0.199		mg/kg		100	70 - 135
o-Xylene	.1	0.103		mg/kg		103	71 - 133
Toluene	.1	0.0984		mg/kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	106		70 - 130

Lab Sample ID: 7722919-1-BSD

Matrix: SOIL

Analysis Batch: 3153059

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153059\_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	.1	0.108		mg/kg		108	70 - 130	1	35
Ethylbenzene	.1	0.103		mg/kg		103	71 - 129	6	35
m,p-Xylenes	.2	0.213		mg/kg		107	70 - 135	7	35
o-Xylene	.1	0.110		mg/kg		110	71 - 133	7	35
Toluene	.1	0.102		mg/kg		102	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	110		70 - 130

Lab Sample ID: 690554-005 S

Matrix: SOIL

Analysis Batch: 3153059

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153059\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<.00199		.1	0.0899		mg/kg		90	70 - 130
Ethylbenzene	<.00199		.1	0.0846		mg/kg		85	71 - 129
m,p-Xylenes	<.00398		.2	0.174		mg/kg		87	70 - 135
o-Xylene	<.00199		.1	0.0899		mg/kg		90	71 - 133
Toluene	<.00199		.1	0.0843		mg/kg		84	70 - 130

Eurofins Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Method: BTEX 8021 - General Subcontract Method (Continued)

Lab Sample ID: 690554-005 S

Matrix: SOIL

Analysis Batch: 3153059

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153059\_P

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	105		70 - 130

Lab Sample ID: 690554-005 SD

Matrix: SOIL

Analysis Batch: 3153059

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153059\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<.00199		.0994	0.0614	X F	mg/kg		62	70 - 130	38	35
Ethylbenzene	<.00199		.0994	0.0628	X	mg/kg		63	71 - 129	30	35
m,p-Xylenes	<.00398		.199	0.132	X	mg/kg		66	70 - 135	27	35
o-Xylene	<.00199		.0994	0.0701		mg/kg		71	71 - 133	25	35
Toluene	<.00199		.0994	0.0601	X	mg/kg		60	70 - 130	34	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene	109		70 - 130

## Method: CHLORIDE E300 - General Subcontract Method

Lab Sample ID: 7722690-1-BLK

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5	U	5		mg/kg		03/07/21 16:10	03/07/21 17:27	1

Lab Sample ID: 7722690-1-BKS

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	250	255		mg/kg		102	80 - 120

Lab Sample ID: 7722690-1-BSD

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	250	254		mg/kg		102	80 - 120	0	20

Lab Sample ID: 689502-003 S

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	679		249	883	X	mg/kg		82	80 - 120

Eurofins Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Method: CHLORIDE E300 - General Subcontract Method (Continued)

Lab Sample ID: 689502-003 SD

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	679		249	884	X	mg/kg		82	80 - 120	0	20

Lab Sample ID: 690554-005 S

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	36.9		250	310		mg/kg		109	80 - 120		

Lab Sample ID: 690554-005 SD

Matrix: SOIL

Analysis Batch: 3152792

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3152792\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	36.9		250	310		mg/kg		109	80 - 120	0	20

## Method: TPH 8015\_NM\_MOD - General Subcontract Method

Lab Sample ID: 7723045-1-BLK

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153290\_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1
Gasoline Range Hydrocarbons (GRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1
Motor Oil Range Hydrocarbons (MRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1

Lab Sample ID: 7723045-1-BKS

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153290\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO)	1000	1000		mg/kg		100	70 - 135		
Gasoline Range Hydrocarbons (GRO)	1000	1080		mg/kg		108	70 - 135		

Lab Sample ID: 7723045-1-BSD

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153290\_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	1000	1030		mg/kg		103	70 - 135	3	20
Gasoline Range Hydrocarbons (GRO)	1000	1090		mg/kg		109	70 - 135	1	20

Lab Sample ID: 691112-001 S

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153290\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Diesel Range Organics (DRO)	<50		996	947		mg/kg		95	70 - 135		

Eurofins Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Method: TPH 8015\_NM\_MOD - General Subcontract Method (Continued)

Lab Sample ID: 691112-001 S

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153290\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Hydrocarbons (GRO)	<50		996	1020		mg/kg		102	70 - 135

Lab Sample ID: 691112-001 SD

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153290\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	<50		999	970		mg/kg		97	70 - 135	2	20
Gasoline Range Hydrocarbons (GRO)	<50		999	1040		mg/kg		104	70 - 135	2	20

Lab Sample ID: 7723047-1-BLK

Matrix: SOIL

Analysis Batch: 3153292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153292\_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1
Gasoline Range Hydrocarbons (GRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1
Motor Oil Range Hydrocarbons (MRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1

Lab Sample ID: 7723047-1-BKS

Matrix: SOIL

Analysis Batch: 3153292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153292\_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	1000	1070		mg/kg		107	70 - 135
Gasoline Range Hydrocarbons (GRO)	1000	1150		mg/kg		115	70 - 135

Lab Sample ID: 7723047-1-BSD

Matrix: SOIL

Analysis Batch: 3153292

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153292\_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	1000	921		mg/kg		92	70 - 135	15	20
Gasoline Range Hydrocarbons (GRO)	1000	1040		mg/kg		104	70 - 135	10	20

Lab Sample ID: 691123-001 S

Matrix: SOIL

Analysis Batch: 3153292

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153292\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	<49.9		997	906		mg/kg		91	70 - 135
Gasoline Range Hydrocarbons (GRO)	<49.9		997	1020		mg/kg		102	70 - 135

Eurofins Carlsbad

## QC Sample Results

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Method: TPH 8015\_NM\_MOD - General Subcontract Method (Continued)

Lab Sample ID: 691123-001 SD

Matrix: SOIL

Analysis Batch: 3153292

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153292\_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	<49.9		998	911		mg/kg		91	70 - 135	1	20
Gasoline Range Hydrocarbons (GRO)	<49.9		998	1030		mg/kg		103	70 - 135	1	20

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Subcontract

## Analysis Batch: 3152792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-1	BH01	Total/NA	Solid	CHLORIDE E300	3152792_P
890-260-2	BH01 A	Total/NA	Solid	CHLORIDE E300	3152792_P
890-260-3	BH02	Total/NA	Solid	CHLORIDE E300	3152792_P
890-260-4	BH02 A	Total/NA	Solid	CHLORIDE E300	3152792_P
7722690-1-BLK	Method Blank	Total/NA	SOIL	CHLORIDE E300	3152792_P
7722690-1-BKS	Lab Control Sample	Total/NA	SOIL	CHLORIDE E300	3152792_P
7722690-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	CHLORIDE E300	3152792_P
689502-003 S	Matrix Spike	Total/NA	SOIL	CHLORIDE E300	3152792_P
689502-003 SD	Matrix Spike Duplicate	Total/NA	SOIL	CHLORIDE E300	3152792_P
690554-005 S	Matrix Spike	Total/NA	SOIL	CHLORIDE E300	3152792_P
690554-005 SD	Matrix Spike Duplicate	Total/NA	SOIL	CHLORIDE E300	3152792_P

## Analysis Batch: 3153059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-1	BH01	Total/NA	Solid	BTEX 8021	3153059_P
890-260-2	BH01 A	Total/NA	Solid	BTEX 8021	3153059_P
890-260-3	BH02	Total/NA	Solid	BTEX 8021	3153059_P
890-260-4	BH02 A	Total/NA	Solid	BTEX 8021	3153059_P
7722919-1-BLK	Method Blank	Total/NA	SOIL	BTEX 8021	3153059_P
7722919-1-BKS	Lab Control Sample	Total/NA	SOIL	BTEX 8021	3153059_P
7722919-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	BTEX 8021	3153059_P
690554-005 S	Matrix Spike	Total/NA	SOIL	BTEX 8021	3153059_P
690554-005 SD	Matrix Spike Duplicate	Total/NA	SOIL	BTEX 8021	3153059_P

## Analysis Batch: 3153290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-1	BH01	Total/NA	Solid	TPH	3153290_P
7723045-1-BLK	Method Blank	Total/NA	SOIL	8015_NM_MOD TPH	3153290_P
7723045-1-BKS	Lab Control Sample	Total/NA	SOIL	8015_NM_MOD TPH	3153290_P
7723045-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	8015_NM_MOD TPH	3153290_P
691112-001 S	Matrix Spike	Total/NA	SOIL	8015_NM_MOD TPH	3153290_P
691112-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	8015_NM_MOD TPH	3153290_P

## Analysis Batch: 3153292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-2	BH01 A	Total/NA	Solid	TPH	3153292_P
890-260-3	BH02	Total/NA	Solid	8015_NM_MOD TPH	3153292_P
890-260-4	BH02 A	Total/NA	Solid	8015_NM_MOD TPH	3153292_P
7723047-1-BLK	Method Blank	Total/NA	SOIL	8015_NM_MOD TPH	3153292_P
7723047-1-BKS	Lab Control Sample	Total/NA	SOIL	8015_NM_MOD TPH	3153292_P
7723047-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	8015_NM_MOD TPH	3153292_P

Eurofins Carlsbad



## QC Association Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Subcontract (Continued)

## Analysis Batch: 3153292 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
691123-001 S	Matrix Spike	Total/NA	SOIL	TPH	3153292_P
691123-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	8015_NM_MOD TPH 8015_NM_MOD	3153292_P

## Prep Batch: 3152792\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-1	BH01	Total/NA	Solid	E300P	
890-260-2	BH01 A	Total/NA	Solid	E300P	
890-260-3	BH02	Total/NA	Solid	E300P	
890-260-4	BH02 A	Total/NA	Solid	E300P	
7722690-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7722690-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7722690-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	
689502-003 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
689502-003 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	
690554-005 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
690554-005 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	

## Prep Batch: 3153059\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-1	BH01	Total/NA	Solid	SW5035A	
890-260-2	BH01 A	Total/NA	Solid	SW5035A	
890-260-3	BH02	Total/NA	Solid	SW5035A	
890-260-4	BH02 A	Total/NA	Solid	SW5035A	
7722919-1-BLK	Method Blank	Total/NA	SOIL	SW5035A	
7722919-1-BKS	Lab Control Sample	Total/NA	SOIL	SW5035A	
7722919-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	SW5035A	
690554-005 S	Matrix Spike	Total/NA	SOIL	SW5035A	
690554-005 SD	Matrix Spike Duplicate	Total/NA	SOIL	SW5035A	

## Prep Batch: 3153290\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-1	BH01	Total/NA	Solid	SW8015P	
7723045-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723045-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723045-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	
691112-001 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
691112-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	

## Prep Batch: 3153292\_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-2	BH01 A	Total/NA	Solid	SW8015P	

Eurofins Carlsbad

## QC Association Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

## Subcontract (Continued)

## Prep Batch: 3153292\_P (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-260-3	BH02	Total/NA	Solid	SW8015P	
890-260-4	BH02 A	Total/NA	Solid	SW8015P	
7723047-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723047-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723047-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	
691123-001 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
691123-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	

Eurofins Carlsbad

## Lab Chronicle

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Client Sample ID: BH01

Lab Sample ID: 890-260-1

Date Collected: 03/03/21 11:00

Matrix: Solid

Date Received: 03/04/21 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SW5035A		1	3153059_P	03/09/21 16:00		XM
Total/NA	Analysis	BTEX 8021		1	3153059	03/10/21 08:12	KTL	XM
Total/NA	Prep	E300P		1	3152792_P	03/07/21 16:10		XM
Total/NA	Analysis	CHLORIDE E300		1	3152792	03/08/21 08:24	SPC	XM
Total/NA	Prep	SW8015P		1	3153290_P	03/10/21 17:00		XM
Total/NA	Analysis	TPH 8015_NM_MOD		1	3153290	03/11/21 06:15	ARM	XM

Client Sample ID: BH01 A

Lab Sample ID: 890-260-2

Date Collected: 03/03/21 11:15

Matrix: Solid

Date Received: 03/04/21 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SW5035A		1	3153059_P	03/09/21 16:00		XM
Total/NA	Analysis	BTEX 8021		1	3153059	03/10/21 08:33	KTL	XM
Total/NA	Prep	E300P		1	3152792_P	03/07/21 16:10		XM
Total/NA	Analysis	CHLORIDE E300		1	3152792	03/08/21 08:31	SPC	XM
Total/NA	Prep	SW8015P		1	3153292_P	03/10/21 17:00		XM
Total/NA	Analysis	TPH 8015_NM_MOD		1	3153292	03/11/21 05:34	ARM	XM

Client Sample ID: BH02

Lab Sample ID: 890-260-3

Date Collected: 03/03/21 11:30

Matrix: Solid

Date Received: 03/04/21 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SW5035A		1	3153059_P	03/09/21 16:00		XM
Total/NA	Analysis	BTEX 8021		1	3153059	03/10/21 08:53	KTL	XM
Total/NA	Prep	E300P		1	3152792_P	03/07/21 16:10		XM
Total/NA	Analysis	CHLORIDE E300		1	3152792	03/07/21 20:46	SPC	XM
Total/NA	Prep	SW8015P		1	3153292_P	03/10/21 17:00		XM
Total/NA	Analysis	TPH 8015_NM_MOD		1	3153292	03/11/21 05:55	ARM	XM

Client Sample ID: BH02 A

Lab Sample ID: 890-260-4

Date Collected: 03/03/21 11:45

Matrix: Solid

Date Received: 03/04/21 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SW5035A		1	3153059_P	03/09/21 16:00		XM
Total/NA	Analysis	BTEX 8021		1	3153059	03/10/21 09:14	KTL	XM
Total/NA	Prep	E300P		1	3152792_P	03/07/21 16:10		XM
Total/NA	Analysis	CHLORIDE E300		1	3152792	03/08/21 08:38	SPC	XM
Total/NA	Prep	SW8015P		1	3153292_P	03/10/21 17:00		XM
Total/NA	Analysis	TPH 8015_NM_MOD		1	3153292	03/11/21 06:15	ARM	XM

## Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

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

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

## Method Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Method	Method Description	Protocol	Laboratory
Subcontract	BTEX 8021	None	XM
Subcontract	CHLORIDE E300	None	XM
Subcontract	TPH 8015_NM_MOD	None	XM

**Protocol References:**

None = None

**Laboratory References:**

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

Sample Summary

Client: WSP USA Inc.  
Project/Site: James Ranch Unit DI 1A

Job ID: 890-260-1  
SDG: TE012921002

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-260-1	BH01	Solid	03/03/21 11:00	03/04/21 15:30	
890-260-2	BH01 A	Solid	03/03/21 11:15	03/04/21 15:30	
890-260-3	BH02	Solid	03/03/21 11:30	03/04/21 15:30	
890-260-4	BH02 A	Solid	03/03/21 11:45	03/04/21 15:30	

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



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)555-3443 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)

## Chain of Custody

Work Order No: \_\_\_\_\_

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	Kyle Littlell
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.Lo@wsp.com Kyle.Kennedy@wsp.com Dan.Moir@wsp.com

<b>Program:</b> <input checked="" type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RC <input type="checkbox"/> Superfund <input type="checkbox"/> <b>State of Project:</b> 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: _____		<b>Work Order Comments</b>
--	--	----------------------------

Project Name:	James Ranch Unit D1 1A	Turn Around	
Project Number:	TE012921002	Routine	<input checked="" type="checkbox"/>
P.O. Number:		Rush:	
Sampler's Name:	Spencer Lo	Due Date:	

<b>SAMPLE RECEIPT</b>	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Temperature (°C):	1.2/1.0	Thermometer ID	7-NM-007	
Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	-0.2	
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Total Containers:	0	
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A			

<b>Number of Containers</b>
TPH (EPA 8015)
BTEX (EPA 0=8021)
Chloride (EPA 300.0)



890-260 Chain of Custody

<b>Work Order Notes</b> Cost Center: 1082151001 AFE: DD 2017 02051 CAP.CMP.01 TAT starts the day received by the lab, if received by 4:30pm
--

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 0=8021)	Chloride (EPA 300.0)	Sample Comments
BH01	S	3/3/2021	1100	2'	1	X	X	X	
BH01A	S	3/3/2021	1115	4'	1	X	X	X	
BH02	S	3/3/2021	1130	2'	1	X	X	X	
BH02A	S	3/3/2021	1145	4'	1	X	X	X	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3.4.21 1530			

## Login Sample Receipt Checklist

Client: WSP USA Inc.

Job Number: 890-260-1

SDG Number: TE012921002

Login Number: 260

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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



**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 24919

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  24919
	Action Type:  [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	6/11/2021