



# SITE CHARACTERIZATION AND REMEDIATION PLAN

*Prepared For:*

*Devon Energy Production Company, LP*

*5315 Buena Vista Dr.*

*Carlsbad, NM 88220*

*Site Information:*

**Tomcat 21 Federal 1**

**Incident Number NRM2003860041**

*Unit F, Section 21, Township 23 South, Range 32 East*

*Lea County, New Mexico*

*(32.291623°, -103.682619°)*

Carlsbad • Houston • Midland • San Antonio • Lubbock • Hobbs • Lafayette

## SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Devon Energy Production Company, LP (Devon), presents the following Site Characterization and Remediation Plan (SCRP) detailing delineation soil sampling activities, associated with an inadvertent release of produced water at the Tomcat 21 Federal 1 (Site). Based on laboratory analytical results, Devon proposes this SCR, which summarizes initial response efforts, sampling activities and details remediation objectives to rectify environmental impacts at the Site.

## SITE BACKGROUND

On January 24, 2020, a poly flowline failure resulted in approximately 47.875 barrels (bbls) of produced water to be released onto an adjacent pasture easement west of the Site well pad. A vacuum truck was immediately dispatched and recovered approximately 40 bbls of fluid. Devon immediately notified the New Mexico Oil and Conservation Division (NMOCD) via email on January 25, 2020, and reported the release on a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD on February 5, 2020, and was subsequently assigned Incident Number NRM2003860041.

A Characterization Variance Request (CVR) proposing to remediate to Table I depth to groundwater (DTW) standards of 51-100 feet bgs, based on recent, regional DTW data, was submitted by Etech on October 1, 2024, and subsequently approved the same day.

## SITE CHARACTERIZATION AND PROPOSED CLOSURE CRITERIA

As previously described on the CVR, the Site was characterized according to Table I in 19.15.29.12 of the New Mexico Administrative Code (NMAC) considering depth to groundwater and the proximity to:

- Any continuously flowing watercourse or any other significant watercourse;
- Any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- An occupied permanent residence, school, hospital, institution or church;
- A spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Any freshwater well or spring;
- Incorporated municipal boundaries or a defined municipal fresh water well field covered under a municipal ordinance;
- A wetland;
- A subsurface mine;
- An unstable area (i.e. high karst potential); and
- A 100-year floodplain.

All potential receptors are not within the established buffers in NMAC 19.15.29.12. Receptor details and sources used to determine the site characterization are included in **Figure 1A**, **Figure 1B**, and **Figure 1C** in **Appendix A**. All referenced boring and/or well records are included in **Appendix B**.

Based on the results from the desktop review detailed in the CVR, the following closure criteria was applied and approved by the NMOCD:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria <sup>†</sup>
Chloride	Environmental Protection Agency (EPA) 300.0	10,000 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	EPA 8015 M/D	2,500 mg/kg
TPH-Gasoline Range Organics (GRO)+ TPH-Deisel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg
Benzene	EPA 8021B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8260B	50 mg/kg

<sup>†</sup>The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13

## DELINEATION SOIL SAMPLING ACTIVITIES

On July 30, 2024, and July 31, 2024, Etech evaluated the Site based on information provided on the Form C-141 and mapped the release extent, hereafter referred to as the Area of Concern (AOC), estimated by apparent vegetative stress via handheld Global Positioning System (GPS). Eight delineation locations (BH01 through BH08) were advanced via hand auger within and around the AOC to assess the presence or absence of residual soil impacts associated with the AOC. Delineation activities were driven in accordance with Site Closure Criteria by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips or until refusal, whichever was encountered first. A minimum of two soil samples were collected from each delineation soil sampling location, representing the highest observed field screening concentrations and the greatest depth. Field screening results and soil descriptions are included on soil sampling logs shown in **Appendix C**. The delineation soil sample locations are shown in **Figure 2** in **Appendix A**. Photographic documentation of delineation activities is included in **Appendix D**.

Delineation soil samples were placed directly into lab provided pre-cleaned glass jars, packaged with minimal void space, labeled, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures, to Envirotech, Inc. Laboratories (Envirotech) in Farmington, New Mexico, for analysis of COCs.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for soil samples assisting with lateral delineation (BH03 to BH07) were compliant with the Site Closure Criteria and/or reclamation standard.

Laboratory analytical results for all soil samples indicated BTEX and TPH concentrations were compliant with the Site Closure Criteria and/or reclamation standard.

Laboratory analytical results for the remaining samples collected within the AOC (BH01, BH02, and BH08) indicated that chloride concentrations exceeded the NMOCDC reclamation standard requirement of 600 milligram per kilogram (mg/kg) within the top four feet. Residual impacts, defined by the reclamation standard, are characterized by chloride concentrations ranging from 797 mg/kg to 2,020 mg/kg.

Laboratory analytical results are summarized in Table 1 included in **Appendix E**. The executed chain-of-custody form and laboratory reports are provided in **Appendix F**.

## PROPOSED REMEDIATION WORK PLAN

Based on the delineation soil sampling results, the following conclusions regarding the inadvertent release are presented:

- Laboratory analytical results indicated chloride concentrations exceeding the reclamation standard appear to exist in the proximity of sample locations BH01 and BH02, specifically in the top four feet bgs.
- Based on laboratory analytical results of delineation soil samples surrounding the AOC, residual impacts appear to be sufficiently delineated laterally and horizontally according to Site Closure Criteria and/or reclamation standard.

Based on the conclusions presented above, Devon proposes the following remedial corrective actions:

- Impacted soil will be excavated within the top four feet of areas in the pasture containing COCs exceeding the reclamation standard. The excavation will be advanced vertically and laterally until the applicable Site Closure Criteria is met. Based on current delineation soil sampling results, approximately 530 square feet and 79 CY are anticipated to be excavated within BH01 and BH02. The proposed excavation extent can be referenced on **Figure 3 in Appendix A**.
- Following removal of soil impacts, 5-point confirmation soil samples will be collected from the excavation and analyzed for referenced COCs by an accredited laboratory, as previously described.
- Access for remediation or disturbance that occurs offsite requires BLM approval. Devon will prepare and submit documentation for proposed work areas before initiating corrective actions which includes but it not limited to.
  - Cultural and/or Biological Surveys
- Once remediation is complete and receipt of soil confirmation results indicates soil concentrations exceeding the reclamation standard has been removed, Devon will backfill the excavation with clean, locally sourced soil and restored to "as close to its original state as possible" and re-seed the total disturbed area with the appropriate BLM seed mix according to BLM guidelines.

## PROPOSED SCHEDULE

Upon the notice of NMOCD approval of this SCRP, Devon will begin the proposed remediation activities outlined above and provide a report detailing completed remediation activities for Incident Number NRM2003860041.

If you have any questions or comments, please do not hesitate to contact Erick Herrera at (432) 305-6416 or [erick@etechnv.com](mailto:erick@etechnv.com) or Joseph S. Hernandez at (432) 305-6413 or [joseph@etechnv.com](mailto:joseph@etechnv.com). **Appendix G** provides correspondence email notification receipts associated with the subject release. The CVR and approved email receipt is provided in **Appendix H**.

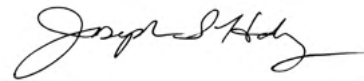


Sincerely,

Etech Environmental and Safety Solutions, Inc.



Erick Herrera  
Project Geologist



Joseph S. Hernandez  
Senior Managing Geologist

cc: Jim Raley, Devon  
New Mexico Oil Conservation Division  
Bureau of Land Management

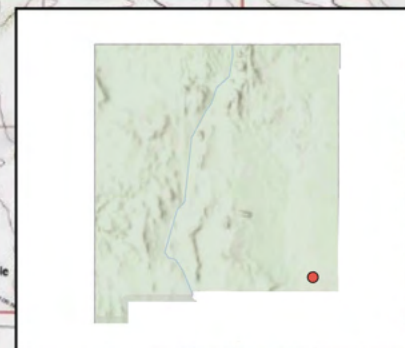
**Appendices:**

- Appendix A:** Figure 1: Site Map
  - Figure 1A: Site Characterization Map – Groundwater
  - Figure 1B: Site Characterization Map – Surficial Receptors
  - Figure 1C: Site Characterization Map – Subsurface Receptors
- Appendix B:** Referenced Well Records
- Appendix C:** Soil Sampling Logs
- Appendix D:** Photographic Log
- Appendix E:** Tables
- Appendix F:** Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix G:** Correspondence & Notifications
- Appendix H:** Approved Characterization Variance Request

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# APPENDIX A

## Figures



## Site Location Map



A horizontal number line is shown with tick marks at 0, 2,000, and 4,000. The word "Feet" is written at the right end of the line. A rectangular region is shaded between the 1,000 and 3,000 marks.



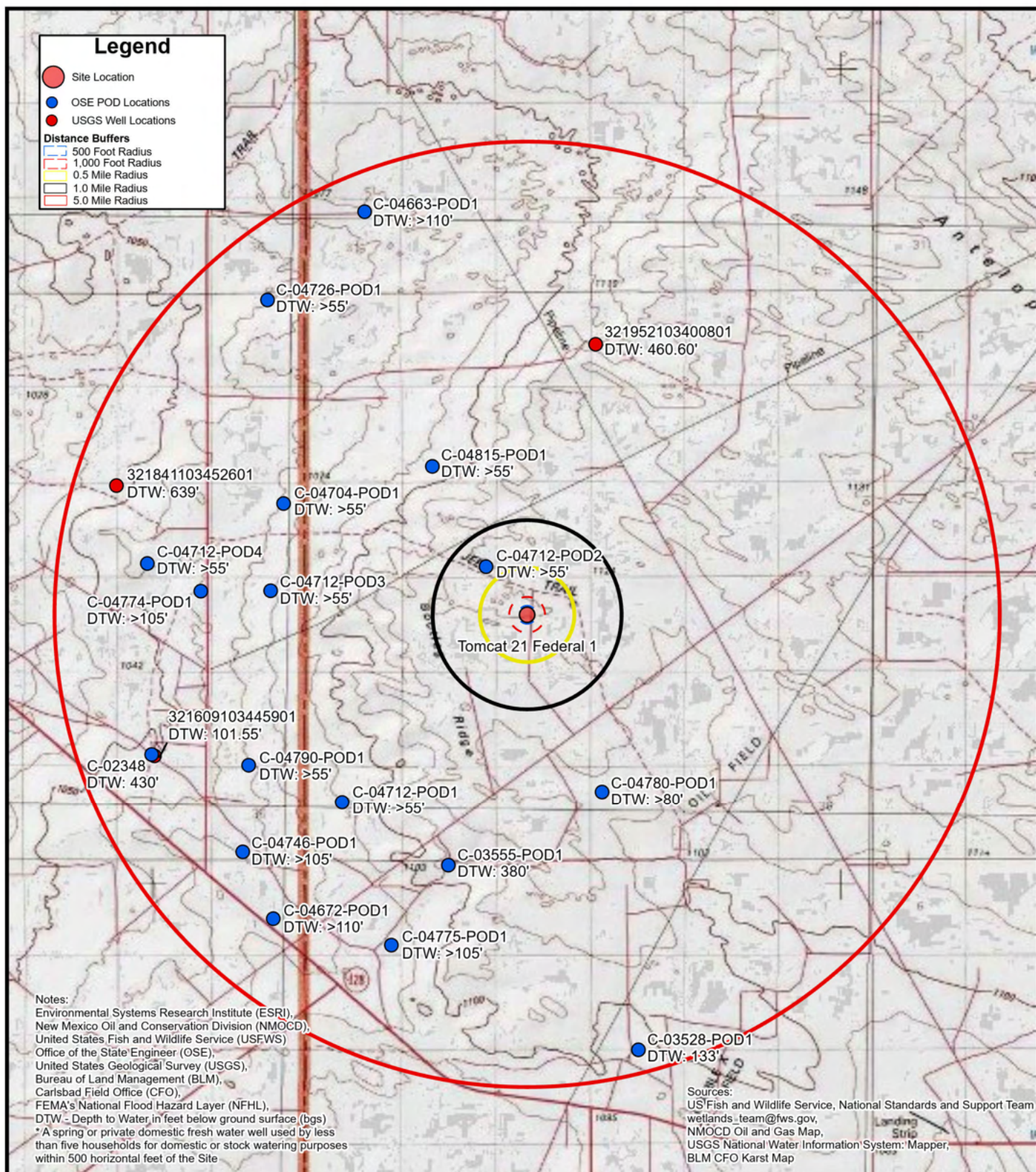


FIGURE 1A  
Site Characterization Map  
Groundwater

Devon Energy Production Company, LP  
Tomcat 21 Federal 1  
Unit F Sec 21 T23S R32E  
Lea County, New Mexico



0 5,000 10,000 Feet



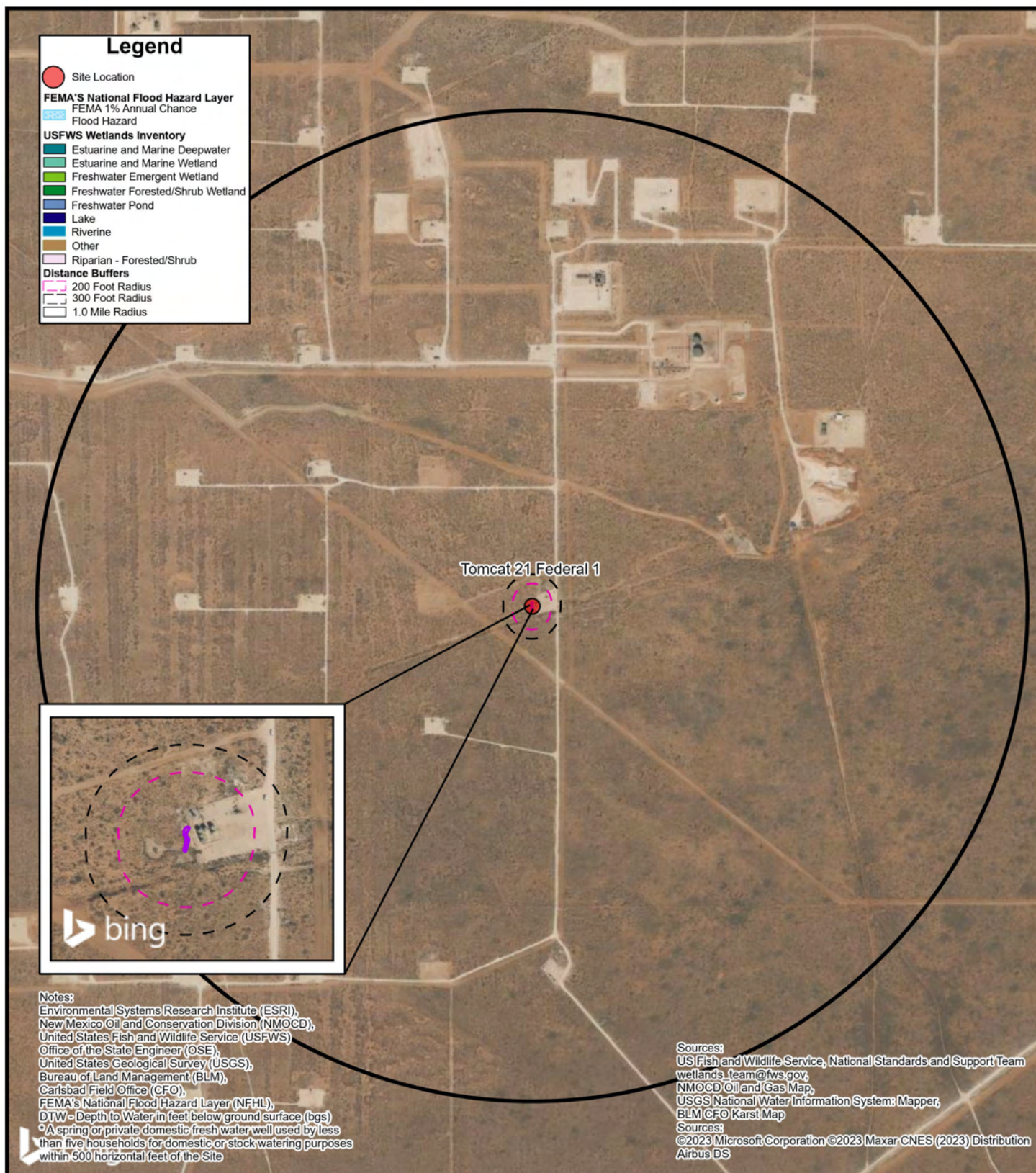
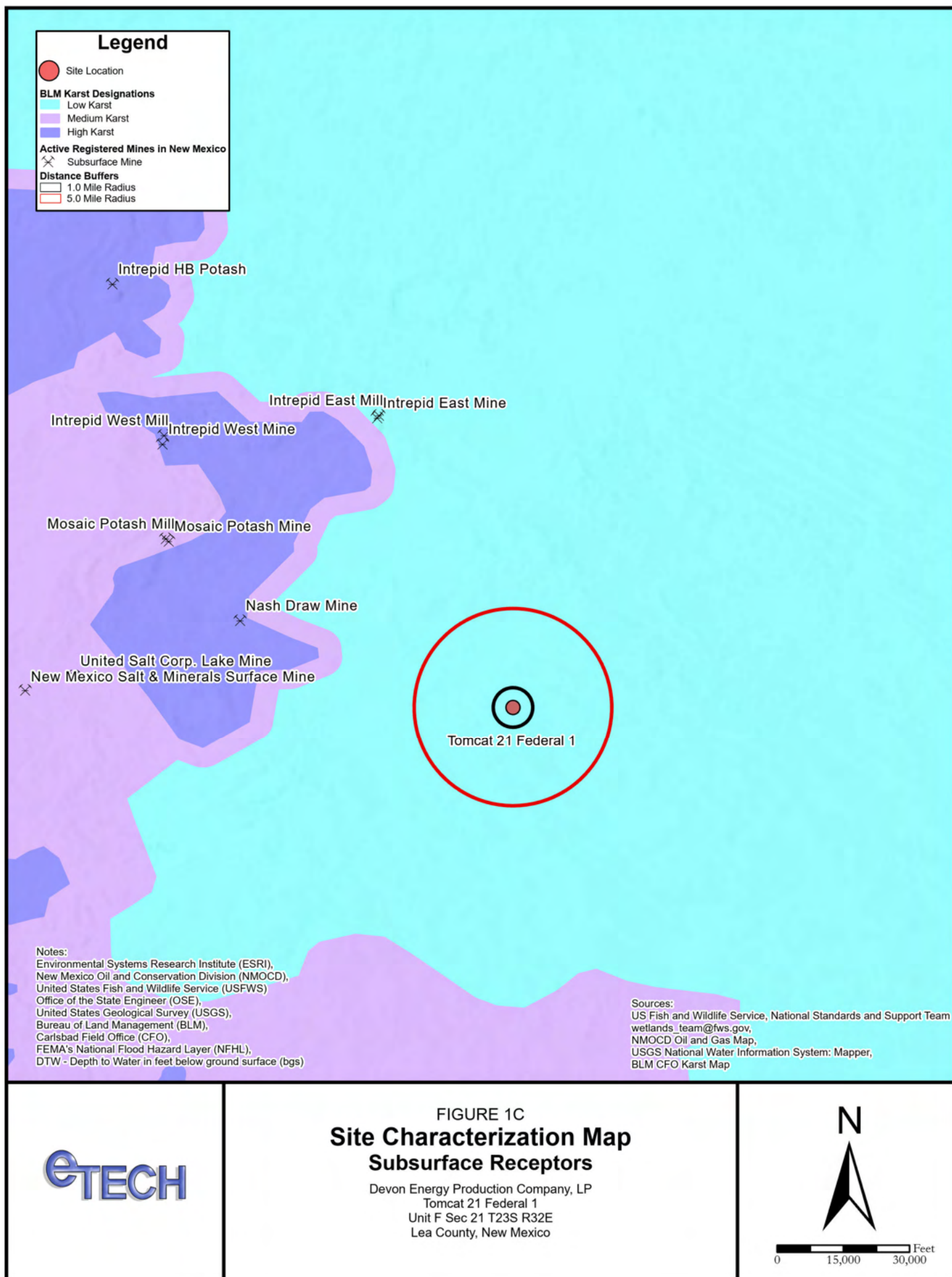


FIGURE 1B  
**Site Characterization Map  
 Surficial Receptors**

Devon Energy Production Company, LP  
 Tomcat 21 Federal 1  
 Unit F Sec 21 T23S R32E  
 Lea County, New Mexico







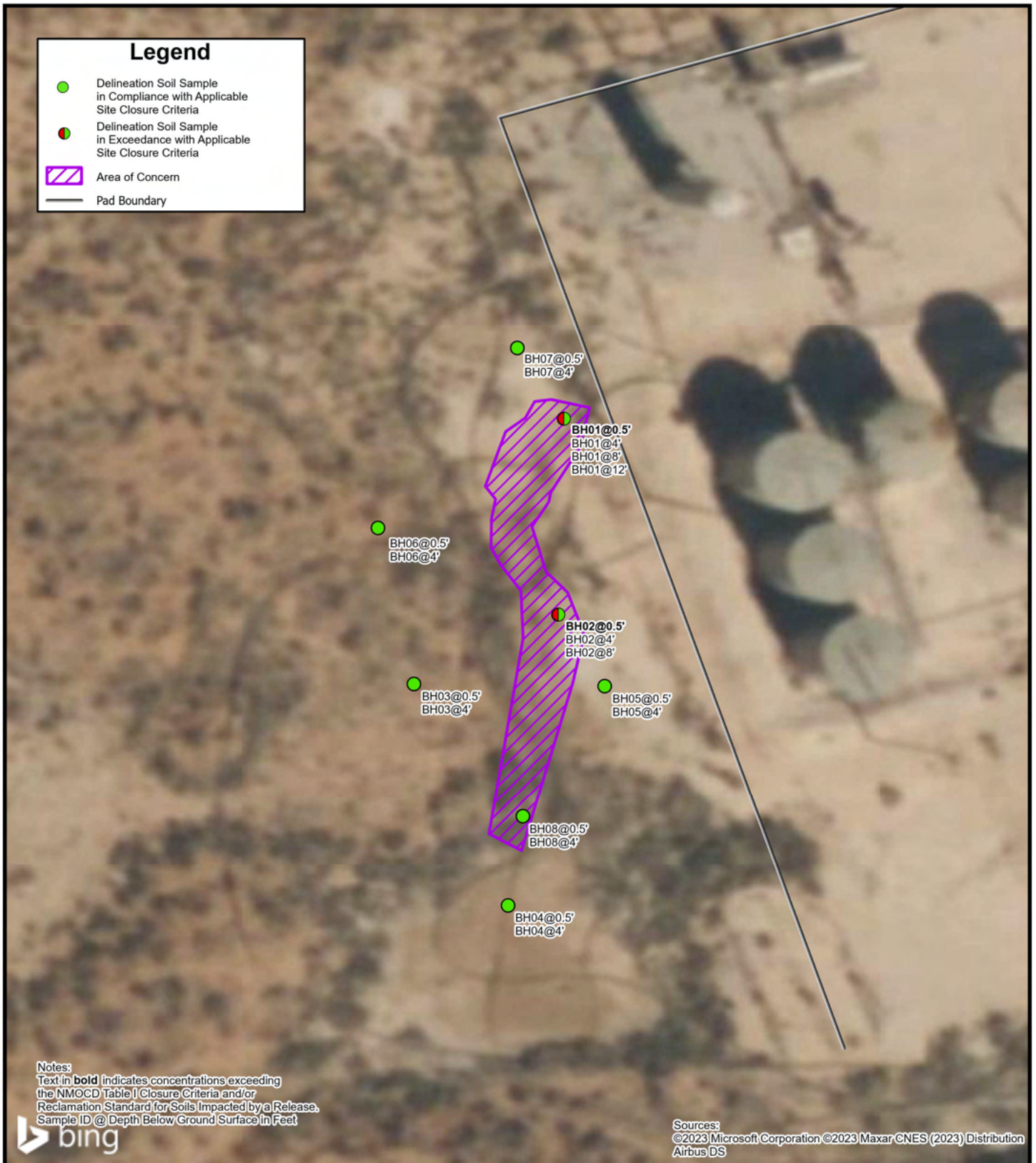


FIGURE 2

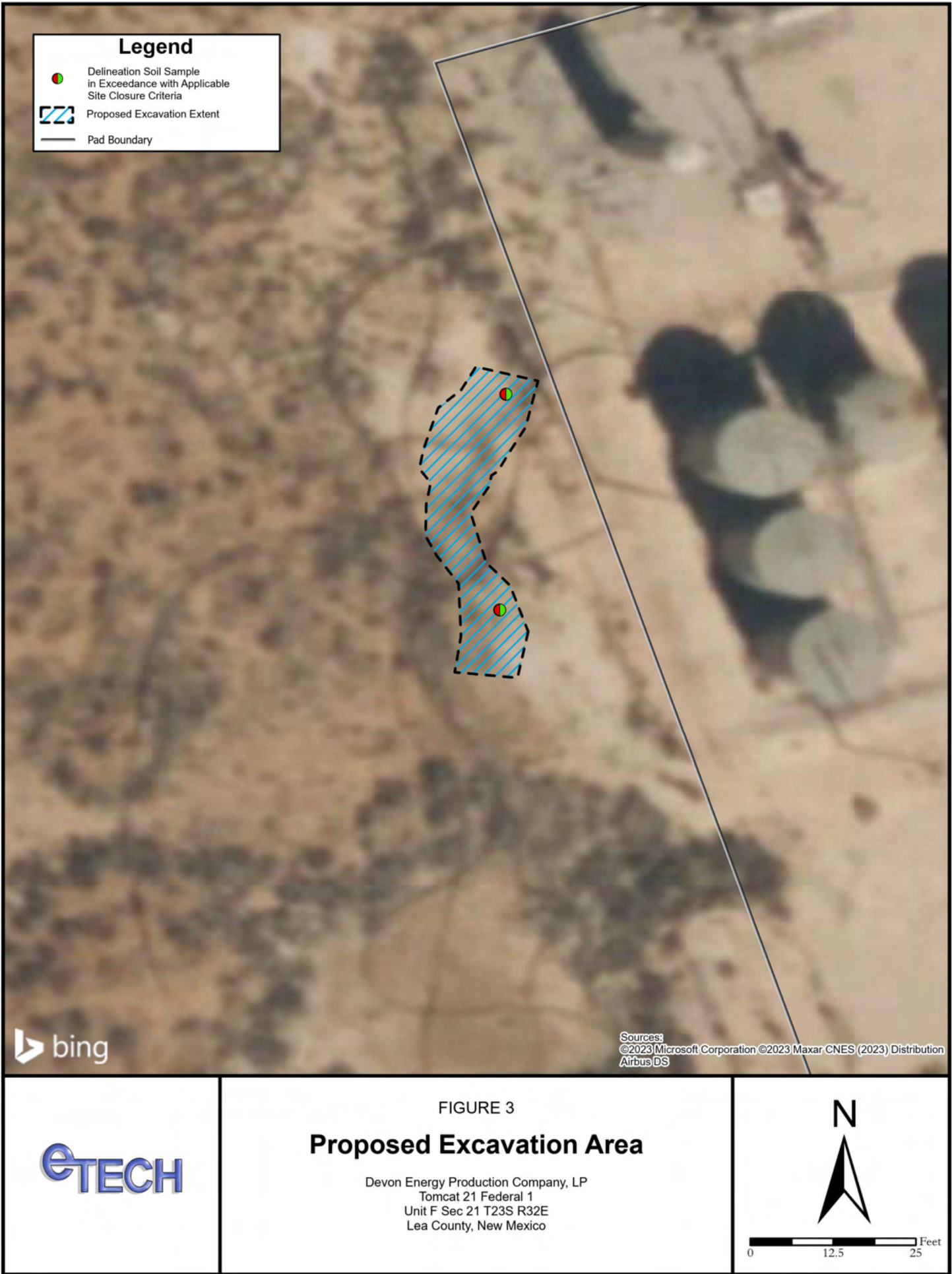
## Delineation Soil Sample Locations

Devon Energy Production Company, LP  
Tomcat 21 Federal 1  
Unit F Sec 21 T23S R32E  
Lea County, New Mexico



0 14.5 29 Feet







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## APPENDIX B

### Referenced Well Records



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are smallest to largest)

(meters)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
<a href="#">C 02216</a>		CUB	LE	NE	NE	SE	21	23S	32E	625035.0	3573261.0 *		1026	585	400	185
<a href="#">C 04712 POD2</a>		CUB	LE	SE	SE	SE	17	23S	32E	623331.9	3574331.5		1076	55		
<a href="#">C 03851 POD1</a>		CUB	LE	SW	SW	SE	20	23S	32E	622879.6	3572660.0		1447	1392	713	679
<a href="#">C 04815 POD1</a>		CUB	LE	NW	SE	SW	08	23S	32E	622391.9	3576025.7		2998	55		
<a href="#">C 04780 POD1</a>		CUB	LE	NW	SW	NW	34	23S	32E	625363.6	3570521.7		3278	80		
<a href="#">C 04807 POD1</a>		CUB	LE	NW	NE	NW	11	23S	32E	625605.4	3577401.0		4182	105		
<a href="#">C 04712 POD3</a>		CUB	ED	SE	NW	NE	24	23S	31E	619650.7	3573877.9		4405	55		
<a href="#">C 04712 POD1</a>		CUB	LE	NW	SE	NW	31	23S	32E	620917.2	3570289.2		4496	55		
<a href="#">C 04704 POD1</a>		CUB	ED	SW	NE	NE	13	23S	31E	619854.4	3575363.5		4574			
<a href="#">C 02349</a>		CUB	ED	SE	NE	SW	03	23S	32E	625677.9	3578003.4		4770	525		
<a href="#">C 04790 POD1</a>		CUB	ED	SE	SE	SW	25	23S	31E	619309.4	3570904.8		5408	55		
<a href="#">C 04774 POD1</a>		CUB	ED	SE	NE	NE	23	23S	31E	618456.0	3573856.4		5596	105		
<a href="#">C 04775 POD1</a>		CUB	LE	SE	SE	SE	06	24S	32E	621789.3	3567860.4		6093	105		
<a href="#">C 04746 POD1</a>		CUB	ED	SW	SE	SW	36	23S	31E	619225.7	3569417.8		6327	105		
<a href="#">C 04712 POD4</a>		CUB	ED	NW	SE	SW	14	23S	31E	617535.4	3574316.2		6554	55		
<a href="#">C 04672 POD 1</a>		CUB	ED	NE	NW	SE	01	24S	31E	619762.2	3568286.5		6762	110		
<a href="#">C 02275</a>		CUB	LE	SW	SW	NE	19	23S	33E	630843.0	3573557.0 *		6801	650	400	250
<a href="#">C 02276</a>		CUB	LE	SW	NW	SE	19	23S	33E	630848.0	3573154.0 *		6815	650	400	250
<a href="#">C 04726 POD1</a>		CUB	ED	NW	NW	SE	01	23S	31E	619538.3	3578821.3		6954			
<a href="#">C 02777</a>		CUB	ED	SE	SE	SE	10	23S	31E	616973.8	3575662.1		7385	890		
<a href="#">C 03749 POD1</a>		CUB	ED		NE	NE	15	23S	31E	616973.8	3575662.1		7385	865	639	226
<a href="#">C 04663 POD1</a>		CUB	LE	SW	NW	NE	31	22S	32E	621181.3	3580341.4		7395	110		
<a href="#">C 02350</a>		CUB	ED		SE	SW	10	24S	32E	625826.0	3566333.0 *		7407	60		
<a href="#">C 04551 POD1</a>		CUB	LE	SE	SE	SW	31	23S	33E	630671.0	3569556.5		7724			
<a href="#">C 02405</a>		CUB	ED		SE	NW	02	24S	31E	617690.0	3568631.0 *		8016	275	160	115

Average Depth to Water: 452 feet

Minimum Depth: **160 feet**

Maximum Depth: **713 feet**

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**Record Count:** 25

**Basin/County Search:**

**Basin:** C

**Subbasin:** CUB

**UTM Filters (in meters):**

**Easting:** 624042

**Northing:** 3573522

**Radius:** 8047

\* UTM location was derived from PLSS - see Help

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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.

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## WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

**www.ose.state.nm.us**

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NO. (WELL NO.) <div style="border: 1px solid black; padding: 2px;">C-4712</div>		WELL TAG ID NO.		OSE FILE NO(S). <div style="border: 1px solid black; padding: 2px;">C-4712</div>		
	WELL OWNER NAME(S) <div style="border: 1px solid black; padding: 2px;">Harvard Petroleum Company</div>				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS <div style="border: 1px solid black; padding: 2px;">P.O. Box 936</div>				CITY <div style="border: 1px solid black; padding: 2px;">Roswell</div>	STATE <div style="border: 1px solid black; padding: 2px;">NM</div>	
					ZIP <div style="border: 1px solid black; padding: 2px;">88202</div>		
	WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32	MINUTES 17	SECONDS 56.4	N	
		LONGITUDE -103	41	24.2	W		
* ACCURACY REQUIRED: ONE TENTH OF A SECOND							
* DATUM REQUIRED: WGS 84							
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NO. <div style="border: 1px solid black; padding: 2px;">1833</div>		NAME OF LICENSED DRILLER <div style="border: 1px solid black; padding: 2px;">Jason Maley</div>			NAME OF WELL DRILLING COMPANY <div style="border: 1px solid black; padding: 2px;">Vision Resources</div>	
	DRILLING STARTED <div style="border: 1px solid black; padding: 2px;">3-9-2023</div>		DRILLING ENDED <div style="border: 1px solid black; padding: 2px;">3-9-2023</div>		DEPTH OF COMPLETED WELL (FT) <div style="border: 1px solid black; padding: 2px;">55</div>		
			BORE HOLE DEPTH (FT) <div style="border: 1px solid black; padding: 2px;">55</div>		DEPTH WATER FIRST ENCOUNTERED (FT) <div style="border: 1px solid black; padding: 2px;">Dry</div>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <div style="border: 1px solid black; padding: 2px;">Dry</div>		
					DATE STATIC MEASURED <div style="border: 1px solid black; padding: 2px;">Dry</div>		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>						
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					
			None				
DSE DIT APR 4 2023 PM 1:22							
<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL <div style="border: 1px solid black; padding: 2px;">*(if using Centralizers for Artesian wells- indicate the spacing below)</div>	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM	TO					

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO. C-4712-PAD 2		POD NO. 2	TRN NO. 743189
LOCATION Mon 23.32.17.444			WELL TAG ID NO. _____



#### 4. HYDROGEOLOGIC LOG OF WELL

### 5. TEST: RIG SUPERVISION

## 6. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO.	C-4712-POD 2	POD NO.	2
LOCATION	Neon 23.32.17.444	TRN NO.	743189
		WELL TAG ID NO.	
			PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD2

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson". The signature is fluid and cursive.

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <del>C-04815</del> <b>POD 1</b>		WELL TAG ID NO.		OSE FILE NO(S). <del>C-4815-POD1</del>		
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 205 E. Bender Road #150				CITY Hobbs	STATE NM	
					ZIP 88240		
	WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32	MINUTES 18	SECONDS 51.8 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
		LONGITUDE -103	41	59.4 W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources	
	DRILLING STARTED 4-16-24		DRILLING ENDED 4-16-24		DEPTH OF COMPLETED WELL (FT) 55'	BORE HOLE DEPTH (FT) 55'	DEPTH WATER FIRST ENCOUNTERED (FT) N/A
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 0'	DATE STATIC MEASURED 4-16-24
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					
	0	45	6"	PVC 2" SCH40	Thread	2"	SCH40
	45	55	6"	PVC 2" SCH40	Thread	2"	SCH40
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM	TO					
				None pulled and plugged			

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-04815</b>	POD NO. <b>1</b>	TRN NO. <b>757440</b>
LOCATION <b>236.32E.08.143</b>	WELL TAG ID NO.	PAGE 1 OF 2







Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 757440  
File Nbr: C 04815  
Well File Nbr: C 04815 POD1

Apr. 25, 2024

CHANCE DIXON  
VERTEX RESOURCE SERVICES INC  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

Greetings:

The above numbered permit was issued in your name on 03/14/2024.

The Well Record was received in this office on 04/25/2024, stating that it had been completed on 04/16/2024, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 03/14/2025.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in cursive script, appearing to read "Rodolfo Chavez".

Rodolfo Chavez  
(575) 622-6521

drywell



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-04780 POD1</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-04780 POD1</b>		
	WELL OWNER NAME(S) <b>EOG Resources</b>				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS <b>5509 Champions Dr</b>				CITY <b>Midland</b>	STATE <b>TX</b>	
					ZIP <b>79705</b>		
	WELL LOCATION (FROM GPS)	DEGREES <b>32</b>	MINUTES <b>15</b>	SECONDS <b>51.8862</b>	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
	LONGITUDE <b>-103</b>	<b>40</b>	<b>8.3748</b>	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. <b>WD-1706</b>		NAME OF LICENSED DRILLER <b>Bryce Wallace</b>			NAME OF WELL DRILLING COMPANY <b>Elite Drillers Corporation</b>	
	DRILLING STARTED <b>10/27/23</b>	DRILLING ENDED <b>10/27/23</b>	DEPTH OF COMPLETED WELL (FT) <b>80</b>	BORE HOLE DEPTH (FT) <b>80</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>N/A</b>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>N/A</b>	DATE STATIC MEASURED <b>N/A</b>	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches) <b>6</b>	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen) <b>N/A</b>	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches) <b>6</b>	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <b>N/A</b>		AMOUNT (cubic feet)	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. <b>C-04780</b>	POD NO. <b>1</b>	TRN NO. <b>751921</b>
LOCATION <b>23S. 32E. 34. 131</b>	WELL TAG ID NO.	PAGE 1 OF 2




4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	5	5	RED SAND/CALICHE	Y ✓ N	
	5	10	5	RED TAN SAND	Y ✓ N	
	10	15	5	RED TAN SAND W/ CALICHE	Y ✓ N	
	15	20	5	CALICHE W/ TAN SAND	Y ✓ N	
	20	25	5	RED TAN SAND W/ CALICHE	Y ✓ N	
	25	35	5	TAN SAND/SMALL CALICHE ROCK	Y ✓ N	
	35	80	45	TAN/RED SAND W/ SMALL CALICHE ROCK	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
	<div style="text-align: right;">05E OCT NOV 7 2023 PM 1:38</div>	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 _____ SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Bryce Wallace 11/01/23 _____ DATE

FOR USE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)

FILE NO. C-04780	POD NO. 1	TRN NO. 751921
LOCATION 235.32E.34.131	WELL TAG ID NO.	PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751921  
File Nbr: C 04780  
Well File Nbr: C 04780 POD1

Nov. 14, 2023

BLAKE GROOMS  
EOG RESOURCES  
5509 CHAMPIONS DR.  
MIDLAND, TX 79705

Greetings:

The above numbered permit was issued in your name on 10/11/2023.

The Well Record was received in this office on 11/07/2023, stating that it had been completed on 10/27/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 10/10/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in cursive script, appearing to read "Rodolfo Chavez".

Rodolfo Chavez  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4712-POD3</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4712</b>		
	WELL OWNER NAME(S) <b>Harvard Petroleum Company</b>				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS <b>P.O. Box 936</b>				CITY <b>Roswell</b>	STATE <b>NM</b>	ZIP <b>88202</b>
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <b>32</b>	MINUTES <b>17</b>	SECONDS <b>43.1</b>	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
	LONGITUDE <b>103</b>	<b>43</b>	<b>45.2</b>	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. <b>1833</b>		NAME OF LICENSED DRILLER <b>Jason Maley</b>		NAME OF WELL DRILLING COMPANY <b>Vision Resources</b>		
	DRILLING STARTED <b>3-9-2023</b>	DRILLING ENDED <b>3-9-2023</b>	DEPTH OF COMPLETED WELL (FT) <b>55</b>	BORE HOLE DEPTH (FT) <b>55</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>Dry</b>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>Dry</b>		DATE STATIC MEASURED <b>Dry</b>
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:				CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	<b>0 45</b>		<b>8"</b>	<b>2" PUC Sch 40</b>	<b>Thread</b>	<b>2"</b>	<b>Sch 40</b>
	<b>45 55</b>		<b>6"</b>	<b>2" PUC Sch 40 (screen)</b>	<b>Thread</b>	<b>2"</b>	<b>Sch 40</b>
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
				<b>None Pulled and Plugged</b>			

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4712-POD3</b>	POD NO. <b>3</b>	TRN NO. <b>743189</b>
LOCATION <b>Mon 23.21.24.412</b>	WELL TAG ID NO. <b>---</b>	PAGE 1 OF 2



#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST: RIG SUPERVISION

### 5. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-4712-POD3	POD NO. 3	TRN NO. 743189	
LOCATION Neom 23.31.24.412		WELL TAG ID NO. _____	PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD3

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell



# WELL RECORD & LOG

**OFFICE OF THE STATE ENGINEER**

**www.ose.state.nm.us**

STATE ENGINEER OFFICE  
ROSWELL, N.M.

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>C-3555-POO1</b>					OSE FILE NUMBER <b>C-3555</b>																					
	WELL OWNER NAME(S) <b>Mark McCloy - McCloy Ranches</b>					PHONE (OPTIONAL) <b>432-940-4459</b>																					
	WELL OWNER MAILING ADDRESS <b>Box 1076 254 Diamond Road</b>					CITY STATE ZIP <b>Jal NM 88252</b>																					
	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:15%;">WELL LOCATION (FROM GPS)</td> <td style="width:15%;">DEGREES</td> <td style="width:15%;">MINUTES</td> <td style="width:15%;">SECONDS</td> <td style="width:10%;"></td> <td style="width:30%;">           * ACCURACY REQUIRED: ONE TENTH OF A SECOND            * DATUM REQUIRED: WGS 84         </td> </tr> <tr> <td></td> <td>LATITUDE</td> <td><b>32</b></td> <td><b>15</b></td> <td><b>12.71</b></td> <td>N</td> </tr> <tr> <td></td> <td>LONGITUDE</td> <td><b>103</b></td> <td><b>41</b></td> <td><b>49.24</b></td> <td>W</td> </tr> </table>					WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS		* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		LATITUDE	<b>32</b>	<b>15</b>	<b>12.71</b>	N		LONGITUDE	<b>103</b>	<b>41</b>	<b>49.24</b>	W				
WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS		* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84																						
	LATITUDE	<b>32</b>	<b>15</b>	<b>12.71</b>	N																						
	LONGITUDE	<b>103</b>	<b>41</b>	<b>49.24</b>	W																						
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>Hwy 128 mm 20 4 miles North - 1/4 west</b>																											
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>1654</b>		NAME OF LICENSED DRILLER <b>John Sirman</b>			NAME OF WELL DRILLING COMPANY <b>Sirman Drilling &amp; Const. LLC</b>																					
	DRILLING STARTED <b>10/20/13</b>		DRILLING ENDED <b>10/21/13</b>		DEPTH OF COMPLETED WELL (FT) <b>600'0</b>		BORE HOLE DEPTH (FT) <b>600'0</b>		DEPTH WATER FIRST ENCOUNTERED (FT) <b>475'0</b>																		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)								STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>380'0</b>																		
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:																										
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:																										
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)																			
	FROM	TO																									
	<b>0</b>	<b>460</b>	<b>10</b>	<b>PVC</b>	<b>Certa-Lok</b>	<b>6</b>	<b>DR-17</b>	<b>Blank</b>																			
	<b>460</b>	<b>520</b>	<b>10</b>	<b>PVC</b>	<b>Certa-Lok</b>	<b>6</b>	<b>DR-17</b>	<b>1032 screen</b>																			
	<b>520</b>	<b>600</b>	<b>10</b>	<b>PVC</b>	<b>Certa-Lok</b>	<b>6"</b>	<b>DR-17</b>	<b>Blank</b>																			
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT																					
	FROM	TO																									
	<b>0</b>	<b>20</b>	<b>10</b>	<b>3/8 bentonite hole plug</b>	<b>6 Bags</b>	<b>gravity</b>																					
	<b>34</b>	<b>600</b>	<b>10</b>	<b>3/8 pea gravel pack</b>	<b>4 yds</b>	<b>gravity</b>																					

**FOR OSE INTERNAL USE**

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

**FILE NUMBER**

6-3555

**POD NUMBER**

TRN NUMBER

534311

24S, 32E, 05

1-2-2



*Released to Imaging: 12/3/2024 1:50:51 PM*



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4712 POD 1</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4712</b>			
	WELL OWNER NAME(S) <b>Harvard Petroleum Company</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>PO Box 936</b>				CITY <b>Roswell</b>	STATE <b>NM</b>	ZIP <b>88202</b>	
	WELL LOCATION (FROM GPS)	DEGREES <b>32</b>	MINUTES <b>15</b>	SECONDS <b>46.1</b>	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE <b>-103</b>	<b>42</b>	<b>58.4</b>	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. <b>1833</b>		NAME OF LICENSED DRILLER <b>Jason Maley</b>			NAME OF WELL DRILLING COMPANY <b>Vision Resources</b>		
	DRILLING STARTED <b>Mar 9, 2023</b>	DRILLING ENDED <b>3/9/23</b>	DEPTH OF COMPLETED WELL (FT) <b>55</b>		BORE HOLE DEPTH (FT) <b>55</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>Dry</b>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>Dry</b>		
	DATE STATIC MEASURED <b>Dry</b>							
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	<b>0 45</b>		<b>6</b>	<b>2" pvc sch 40</b>	<b>Thread</b>	<b>2"</b>	<b>sch 40</b>	<b>-</b>
	<b>45 55</b>		<b>6</b>	<b>2" pvc sch 40</b>	<b>Tread</b>	<b>2"</b>	<b>sch 40</b>	<b>.02</b>
USE OF APP 4 2023 REV 1 122								
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>		AMOUNT (cubic feet)	METHOD OF PLACEMENT	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4712-POD 1</b>	POD NO. <b>1</b>	TRN NO. <b>743189</b>
LOCATION <b>Mon 23.32.31.141</b>	WELL TAG ID NO. <b>-</b>	PAGE 1 OF 2



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Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD1

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson". The signature is fluid and cursive, with the first name "Maret" being more prominent.

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4704			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 18	SECONDS 31.26	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	43	36.7	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW NE NE Sec.13 T23S R31E NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 4/11/23	DRILLING ENDED 4/11/23	DEPTH OF COMPLETED WELL (FT) Temporary Well Material		BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 4/18/23		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0	55	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	METHOD OF PLACEMENT	
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-04704	POD NO. 1	TRN NO. 742173
LOCATION 28S. 31E. 13. 322	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	20	20	Sand, fine-grained, poorly graded, semi-consolidated, with caliche Tan/ white	Y    ✓ N	
	20	44	24	Sand, fine-grained, poorly graded, semi-consolidated, Tan/ Brown	Y    ✓ N	
	44	55	9	Sand, fine-grained, poorly graded, semi-consolidated, Reddish Brown	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					WELL YIELD (gpm):            0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. 35 Tomb Raider 12 CTB 1 <div style="text-align: right; color: gray; font-style: italic;">QSE DIT APR 28 2023 PM 1:50</div>	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:
<div style="text-align: center;">             Jackie D. Atkins         </div>	4/27/23
SIGNATURE OF DRILLER / PRINT SIGNEE NAME <span style="float: right;">DATE</span>	

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	C-04704	POD NO.	1
LOCATION		TRN NO.	742173
235.31E.13.322		WELL TAG ID NO	PAGE 2 OF 2

National Water Information System: Web Interface

USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

GO

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- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 321952103400801

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

USGS 321952103400801 23S.32E.03.311114

Lea County, New Mexico  
Latitude 32°19'59.2", Longitude 103°40'12.6" NAD83  
Land-surface elevation 3,648.00 feet above NGVD29  
The depth of the well is 630 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1976-12-09			D 62610		3227.43	NGVD29	1		Z	
1976-12-09			D 62611		3229.14	NAVD88	1		Z	
1976-12-09			D 72019	420.57			1		Z	
1981-03-26			D 62610		3209.66	NGVD29	P		Z	
1981-03-26			D 62611		3211.37	NAVD88	P		Z	
1981-03-26			D 72019	438.34			P		Z	
1981-05-21			D 62610		3210.33	NGVD29	1		Z	
1981-05-21			D 62611		3212.04	NAVD88	1		Z	
1981-05-21			D 72019	437.67			1		Z	
1986-04-17			D 62610		3209.32	NGVD29	1		Z	
1986-04-17			D 62611		3211.03	NAVD88	1		Z	
1986-04-17			D 72019	438.68			1		Z	
1991-05-30			D 62610		3210.07	NGVD29	1		Z	
1991-05-30			D 62611		3211.78	NAVD88	1		Z	
1991-05-30			D 72019	437.93			1		Z	
1992-11-05			D 62610		3209.88	NGVD29	1		S	
1992-11-05			D 62611		3211.59	NAVD88	1		S	

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1992-11-05			D	72019	438.12			1	S	
1996-03-15			D	62610	3210.18	NGVD29		1	S	
1996-03-15			D	62611	3211.89	NAVD88		1	S	
1996-03-15			D	72019	437.82			1	S	
2013-01-17	01:00 UTC		m	62610	3161.40	NGVD29		P	S	USGS
2013-01-17	01:00 UTC		m	62611	3163.11	NAVD88		P	S	USGS
2013-01-17	01:00 UTC		m	72019	486.60			P	S	USGS

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

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**Title: Groundwater for USA: Water Levels**  
**URL:**

Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2024-09-05 14:59:20 EDT  
0.34   0.25 nadww01





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE 011 FEB 26 2024 PM 2:04

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C4790-POD1		WELL TAG ID NO. C4790		OSE FILE NO(S). C04790			
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 205 E Bender Road #150				CITY Hobbs	STATE NM	ZIP 88240	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 16	SECONDS 6.708 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources		
	DRILLING STARTED 2-6-24	DRILLING ENDED 2-6-24	DEPTH OF COMPLETED WELL (FT) 55'		BORE HOLE DEPTH (FT) 55'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 0'	DATE STATIC MEASURED 2-10-24		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	45'	6"	2" PVC SCH40	Thread	2"	SCH40	N/A
	45'	55'	6"	2" PVC SCH40	Thread	2"	SCH40	.02
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL  *(if using Centralizers for Artesian wells- indicate the spacing below)	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				None Pulled and plugged				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. C-04790	POD NO. 1	TRN NO. 753931
LOCATION 235.31E.26.443	WELL TAG ID NO.	PAGE 1 OF 2

OSE DII FEB 26 2024 PM2:04

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

Released to Imaging: 12/3/2024 1:50:51 PM





# WELL RECORD & LOG *Todd 23 Fed*

OFFICE OF THE STATE ENGINEER  
www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <del>C-4774</del> POD 1		WELL TAG ID NO. <b>NA</b>		OSE FILE NO(S). C04774			
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 205 E. Bender Road # 150				CITY Hobbs	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 17	SECONDS 42.8604 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources		
	DRILLING STARTED 12-14-23		DRILLING ENDED 12-14-23		DEPTH OF COMPLETED WELL (FT) 105'	BORE HOLE DEPTH (FT) 105'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 12-17-23	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	95'	6"	2" PVC SCH40	Thread	2'	SCH40	N/A
	95'	105'	6"	2" PVC SCH40	Thread	2'	SCH40	.02
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				None Pulled and Plugged				


FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO. <b>C-4774-POD 1</b>	POD NO. <b>1</b>	TRN NO. <b>751178</b>
LOCATION <b>Exp 23.31.23.422</b>		WELL TAG ID NO. <b>_____</b>

PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	5'	5'	Brown sand with coarse rock	Y	✓ N	
	5'	30'	25'	Tan fine sand with coarse rock	Y	✓ N	
	30'	105'	75'	Brown sand mixed with clay	Y	✓ N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
					Y	N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
	<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY: Dry hole					Dry	
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION:  <div>USE ON JAN 12 2024 PM 1:52</div>							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	<div><div></div><div>Jason Maley</div><div>1/10/24</div></div> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAMEDATE</div>						

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO		PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Well Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751178  
File Nbr: C 04774  
Well File Nbr: C 04774 POD1

Jan. 12, 2024

DALE WOODALL  
DEVON ENGERGY RESOURCES  
205 E BENDER ROAD #150  
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 09/19/2023.

The Well Record was received in this office on 01/12/2024, stating that it had been completed on 12/14/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/18/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

*Mesa Verde bed*

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4775 POD1</b>		WELL TAG ID NO. <b>NA</b>		OSE FILE NO(S). C04775		
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 205 E. Bender Road # 150				CITY Hobbs	STATE NM	ZIP 88240
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 14	SECONDS 26.8944 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE -103	42	26.1864 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources	
	DRILLING STARTED 12-14-23		DRILLING ENDED 12-14-23		DEPTH OF COMPLETED WELL (FT) 105'	BORE HOLE DEPTH (FT) 105'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) Dry	DATE STATIC MEASURED 12-18-23
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	0 95'		6"	2" PVC SCH40	Thread	2"	SCH40
	95' 105'		6"	2" PVC SCH40	Thread	2"	SCH40
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)		AMOUNT (cubic feet)	METHOD OF PLACEMENT
				None Pulled and Plugged			

OSE OIT JAN 12 2024 PM 1:53

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4775-POD1</b>	POD NO. <b>1</b>	TRN NO. <b>751179</b>
LOCATION <b>Expt 24.32.06.444</b>		PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
	0	10'	10'	Red coarse sand	Y    ✓ N		
	10'	30'	20'	Tan Fine sand wih coarse rock	Y    ✓ N		
	30'	40'	10'	Red sand with white caliche	Y    ✓ N		
	40'	60'	20'	Tan sand with white caliche	Y    ✓ N		
	60'	80'	20'	Red sand with small rock	Y    ✓ N		
	80'	105'	25'	Tan fine sand with caliche	Y    ✓ N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY: Dry					TOTAL ESTIMATED WELL YIELD (gpm): 0	
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION:							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	<div style="display: flex; justify-content: space-between;"><div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div><div>DATE</div></div>						

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO.	C-4775-70A 1	POD NO.	1
LOCATION		TRN NO.	751179
Fral 2432.06.444		WELL TAG ID NO.	—
		PAGE 2 OF 2	

Mike A. Hamman, P.E.  
State Engineer



well Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751179  
File Nbr: C 04775  
Well File Nbr: C 04775 POD1

Jan. 12, 2024

DALE WOODALL  
DEVON ENERGY RESOURCES  
205 E BENDER ROAD #150  
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 09/19/2023.

The Well Record was received in this office on 01/12/2024, stating that it had been completed on 12/14/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/18/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4746 POD 1</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4746</b>			
	WELL OWNER NAME(S) <b>Devon Energy Resources</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>205 E Bender Road #150</b>				CITY <b>Hobbs</b>	STATE <b>NM</b>	ZIP <b>88240</b>	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <b>32</b>	MINUTES <b>15'</b>	SECONDS <b>18.5"</b>	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. <b>1833</b>		NAME OF LICENSED DRILLER <b>Jason Maley</b>			NAME OF WELL DRILLING COMPANY <b>Vision Resources</b>		
	DRILLING STARTED <b>6-1-23</b>		DRILLING ENDED <b>6-1-23</b>	DEPTH OF COMPLETED WELL (FT) <b>105'</b>	BORE HOLE DEPTH (FT) <b>105'</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>Dry</b>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>Dry</b>		DATE STATIC MEASURED	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:				CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>			
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 100		6	2" PVC SCH 40	Thread	2"	SCH 40	-
	100 105		6	2" PVC SCH 40	Thread	2"	SCH 40	.02
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)		AMOUNT (cubic feet)	METHOD OF PLACEMENT	
				None pulled and plugged				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4746</b>	POD NO. <b>1</b>	TRN NO. <b>147203</b>
LOCATION <b>235. 31E. 36 3 4 3</b>	WELL TAG ID NO. <b>NA</b>	PAGE 1 OF 2



#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST: RIG SUPERVISION

### 5. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-4746	POD NO. 1	TRN NO. 747 203	
LOCATION 235-31E 30 343	WELL TAG ID NO. NA		PAGE 2 OF 2





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

I. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <u>C-4712 POD4</u>		WELL TAG ID NO.		OSE FILE NO(S). <u>C-4712</u>		
	WELL OWNER NAME(S) <u>Harvard Petroleum Company</u>				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS <u>PO Box 936</u>				CITY <u>Roswell</u>	STATE <u>NM</u> ZIP <u>88202</u>	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <u>32</u>	MINUTES <u>17</u>	SECONDS <u>58.2</u> N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. <u>1833</u>		NAME OF LICENSED DRILLER <u>Jason Mahay</u>		NAME OF WELL DRILLING COMPANY <u>Vision Resources</u>		
	DRILLING STARTED <u>3/9/23</u>	DRILLING ENDED <u>3/9/23</u>	DEPTH OF COMPLETED WELL (FT) <u>55</u>	BORE HOLE DEPTH (FT) <u>55</u>	DEPTH WATER FIRST ENCOUNTERED (FT) <u>Dry</u>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <u>Dry</u>		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:				DATE STATIC MEASURED		
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	<u>0 45</u>		<u>6</u>	<u>2" pvc sch 40</u>	<u>Thread</u>	<u>2"</u>	<u>sch 40</u>
	<u>45 55</u>		<u>6</u>	<u>2" pvc sch 40</u>	<u>Thread</u>	<u>2"</u>	<u>sch 40</u>
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)		AMOUNT (cubic feet)	

FOR OSE INTERNAL USE

FILE NO. <u>C-4712-POD4</u>	POD NO. <u>4</u>	WR-20 WELL RECORD & LOG (Version 09/22/2022)
LOCATION <u>Mon 23.31.14.143</u>	TRN NO. <u>743189</u>	
WELL TAG ID NO. <u>---</u>	PAGE 1 OF 2	



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Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD4

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-04672 POD 1		WELL TAG ID NO.		OSE FILE NO(S). C-04672			
	WELL OWNER NAME(S) OXY US INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS PO BOX 4294				CITY HOUSTON	STATE TX	ZIP 77210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 14	SECONDS 41.51	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE -103	43	43.43	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE PROXIMITY 31								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1184		NAME OF LICENSED DRILLER RUSSELL SOUTHERLAND			NAME OF WELL DRILLING COMPANY WEST TEXAS WATER WELL SERVICE		
	DRILLING STARTED 09/01/2022		DRILLING ENDED 09/01/2022		DEPTH OF COMPLETED WELL (FT) 110	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
				NO CASING IN HOLE				
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

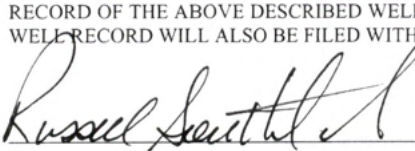
WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. <u>C-4672</u>	POD NO. <u>1</u>	TRN NO. <u>134614</u>
LOCATION <u>245. 31E. 01 214</u>	WELL TAG ID NO.	PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	10		RED SAND, TOPSOIL	Y    ✓ N	
	10	20		CALICHIE	Y    ✓ N	
	20	37		RED SANDY CLAY	Y    ✓ N	
	37	40		SANDSTONE	Y    ✓ N	
	40	50		LIGHT RED SANDY CLAY	Y    ✓ N	
	50	78		RED CLAY W/ SANDSTONE	Y    ✓ N	
	78	88		RED CLAY	Y    ✓ N	
	88	91		SANDSTONE	Y    ✓ N	
	91	93		RED CLAY	Y    ✓ N	
	93	100		SANDSTONE	Y    ✓ N	
	100	110		RED SANDSTONE	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER – SPECIFY: DRY HOLE					TOTAL ESTIMATED WELL YIELD (gpm):                      0.00	

5. TEST, RIG SUPERVISION	WELL TEST	
	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.	
MISCELLANEOUS INFORMATION:		
<div style="text-align: right;">05E DII SEP 26 2022 PM3:23</div>		
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: RUSSELL SOUTHERLAND		

6. SIGNATURE
<div style="display: flex; justify-content: space-between;"> <div>  <div style="text-align: center;">           _____            SIGNATURE OF DRILLER / PRINT SIGNEE NAME         </div> </div> <div style="text-align: center;">           RUSSELL SOUTHERLAND         </div> <div style="text-align: right;">           09/01/2022            _____            DATE         </div> </div>

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO.	C-4672	POD NO.	1
LOCATION		TRN NO.	734614
245 31E 01 214		WELL TAG ID NO.	PAGE 2 OF 2



Mike A. Hamman, P.E.  
State Engineer

Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER

Trn Nbr: 734614  
File Nbr: C 04672  
Well File Nbr: C 04672 POD 1

Oct. 04, 2022

BEAUX JENNINGS  
ENSOLUM LLC  
601 N. MARIENFELD ST SUITE 400  
MIDLAND, TX 79701

Greetings:

The above numbered permit was issued in your name on 09/22/2022.

The Well Record was received in this office on 09/26/2022, stating that it had been completed on 09/01/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/22/2023.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in cursive script that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

drywell



Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER

Trn Nbr: 734614  
File Nbr: C 04672  
Well File Nbr: C 04672 POD 1

Oct. 04, 2022

WADE DITTRICH  
OXY USA INC.  
P.O. BOX 4294  
HOUSTON, TX 77210

Greetings:

The above numbered permit was issued in your name on 09/22/2022.

The Well Record was received in this office on 09/26/2022, stating that it had been completed on 09/01/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/22/2023.

If you have any questions, please feel free to contact us.

Sincerely,

  
Vanessa Clements  
(575) 622-6521

drywell

National Water Information System: Web Interface

USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

GO

Click to hideNews Bulletins

- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 321609103445901

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

USGS 321609103445901 23S.31E.26.34411

Eddy County, New Mexico  
Latitude 32°16'11.9", Longitude 103°45'01.2" NAD83  
Land-surface elevation 3,451.00 feet above NGVD29  
The depth of the well is 365 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Dewey Lake Redbeds (312DYLK) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1959-02-04			D 62610		3194.13	NGVD29	P		Z	
1959-02-04			D 62611		3195.83	NAVD88	P		Z	
1959-02-04			D 72019	256.87			P		Z	
1972-09-20			D 62610		3200.53	NGVD29	1		Z	
1972-09-20			D 62611		3202.23	NAVD88	1		Z	
1972-09-20			D 72019	250.47			1		Z	
1988-03-17			D 62610		3201.98	NGVD29	1		S	
1988-03-17			D 62611		3203.68	NAVD88	1		S	
1988-03-17			D 72019	249.02			1		S	
2013-01-17	00:00 UTC		m 62610		3349.45	NGVD29	P		S	USGS
2013-01-17	00:00 UTC		m 62611		3351.15	NAVD88	P		S	USGS
2013-01-17	00:00 UTC		m 72019	101.55			P		S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day



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

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[Explanation of terms](#)  
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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)  
**Title: Groundwater for USA: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2024-09-05 18:12:37 EDT  
0.31 0.22 nadww01



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>C-2348-</b>			OSE FILE NUMBER(S) <b>113 NOV - 71A II. 11</b> <b>C-2348</b>				
	WELL OWNER NAME(S) <b>MARK McCloy - McCloy Ranches</b>			PHONE (OPTIONAL) <b>432-940-4459</b>				
	WELL OWNER MAILING ADDRESS <b>P.O. Box 1076 254 Diamond Rd</b>			CITY <b>Tal</b> STATE <b>NM</b> ZIP <b>88252</b>				
	WELL LOCATION (FROM GPS)			* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84				
	DEGREES	MINUTES	SECONDS					
	LATITUDE	<b>32</b>	<b>16</b>	<b>12.91</b>	N			
	LONGITUDE	<b>103</b>	<b>45</b>	<b>03.61</b>	W			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>Hwy 128 to 18 mm 1 mile N 1 mile west on Red Road</b>								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>1654</b>		NAME OF LICENSED DRILLER <b>John Sireman</b>		NAME OF WELL DRILLING COMPANY <b>Sireman Drilling + Const. LLC</b>			
	DRILLING STARTED <b>10/31/13</b>	DRILLING ENDED <b>11/1/13</b>	DEPTH OF COMPLETED WELL (FT) <b>700'-0</b>	BORE HOLE DEPTH (FT) <b>700'-0</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>575'-600</b>			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>430'-0</b>			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input checked="" type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	
	FROM	TO					SLOT SIZE (inches)	
	<b>0</b>	<b>560</b>	<b>10</b>	<b>PVC</b>	<b>Certa-lok</b>	<b>6</b>	<b>DR-17</b>	<b>Blank</b>
	<b>560</b>	<b>620</b>	<b>10</b>	<b>PVC</b>	<b>Certa Lok</b>	<b>6</b>	<b>DR-17</b>	<b>1032 screen</b>
	<b>620</b>	<b>680</b>	<b>10</b>	<b>PVC</b>	<b>Certa Lok</b>	<b>6</b>	<b>DR-17</b>	<b>Blank</b>
<b>680</b>	<b>700</b>	<b>10</b>	<b>PVC</b>	<b>Certa Lok</b>	<b>6</b>	<b>DR-17</b>	<b>1032 screen</b>	
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	<b>0</b>	<b>20</b>	<b>10</b>	<b>3/8 bentonite hole plug</b>	<b>6 bags</b>	<b>gravity</b>		
	<b>67</b>	<b>700</b>	<b>10</b>	<b>3/8 pea gravel</b>	<b>5 yds</b>	<b>gravity</b>		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER **C-2348**

POD NUMBER **1**

TRN NUMBER **491413**

LOCATION **C**

**235.31E.26.3-4-1**

**Livestock**



*Released to Imaging: 12/3/2024 1:50:51 PM*



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE DTJ APR 27 2023 PM 01:24

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4726			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 20	SECONDS 23.65	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	43	47.22	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW L2 Sec.1 T23S R31E NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 4/17/23	DRILLING ENDED 4/17/23	DEPTH OF COMPLETED WELL (FT) Temporary Well Material		BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 4/25/23		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	55	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-04726	POD NO. 1	TRN NO. 745169
LOCATION 23S. 31E. 01. 114	WELL TAG ID NO.	PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <b>(attach supplemental sheets to fully describe all units)</b>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)	
	FROM	TO					
<b>4. HYDROGEOLOGIC LOG OF WELL</b>	0	9	9	Sand, medium-fine grained, poorly, graded, unconsolidated, brown	Y    ✓ N		
	9	14	5	Sand, medium-fine grained, poorly, graded, semi-consolidated, brown	Y    ✓ N		
	14	20	6	Sand, medium-fine grained, poorly, graded, unconsolidated, tan	Y    ✓ N		
	20	45	25	Sand, fine grained, poorly, graded, unconsolidated, tan	Y    ✓ N		
	45	55	10	Clay,stiff, with very-fine silt, reddish brown	Y    ✓ N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):                  0.00	
	<b>5. TEST; RIG SUPERVISION</b>	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. 10 Tomb Raider 1 Fed 1 03E 011 APR 27 2023 PM 3:24							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt							
<b>6. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  Jackie D. Atkins  SIGNATURE OF DRILLER / PRINT SIGNEE NAME					4/26/23  DATE	

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	C-04726	POD NO.	1
LOCATION		TRN NO.	745169
735. 31E. 01. 114		WELL TAG ID NO.	PAGE 2 OF 2





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-04663 POD 1		WELL TAG ID NO.		OSE FILE NO(S). C-04663			
	WELL OWNER NAME(S) OXY US INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS PO BOX 4294				CITY HOUSTON	STATE TX	ZIP 77210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 21	SECONDS 12.43	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE -103	42	43.74	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE PROXIMITY 31								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1184		NAME OF LICENSED DRILLER RUSSELL SOUTHERLAND			NAME OF WELL DRILLING COMPANY WEST TEXAS WATER WELL SERVICE		
	DRILLING STARTED 09/01/2022		DRILLING ENDED 09/01/2022		DEPTH OF COMPLETED WELL (FT) 110	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
				NO CASING IN HOLE				
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-04663	POD NO. 1	TRN NO. 732427
LOCATION 22S. 32E. 31. 3. 1. 2	WELL TAG ID NO. —	PAGE 1 OF 2

[illegible]

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO. C-04663	POD NO. 1	TRN NO. 732427	
LOCATION 775.32E, 31.3.1.2	WELL TAG ID NO. _____	PAGE 2 OF 2	





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

4-23-12

Corrected well log

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) C-03528-POD1				OSE FILE NUMBER(S) C-03528-POD1			
	WELL OWNER NAME(S) MARK & ANNETTE MCCLOY				PHONE (OPTIONAL) 432-940-4459			
	WELL OWNER MAILING ADDRESS PO BOX 1076				CITY JAL		STATE NM	
					ZIP 88252			
	WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32	MINUTES 13	SECONDS 29.00 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
LONGITUDE 103 39 44.60 W								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS Coordinates Based on map (Non-GPS)								
2. OPTIONAL	(2.5 ACRE) NW 1/4	(10 ACRE) NW 1/4	(40 ACRE) NW 1/4	(160 ACRE) NE 1/4	SECTION 15	TOWNSHIP 24	RANGE 32 <input type="checkbox"/> NORTH <input checked="" type="checkbox"/> EAST <input checked="" type="checkbox"/> SOUTH <input type="checkbox"/> WEST	
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY					MAP NUMBER		TRACT NUMBER
3. DRILLING INFORMATION	LICENSE NUMBER WD1682		NAME OF LICENSED DRILLER JOHN NORRIS			NAME OF WELL DRILLING COMPANY HUNGRY HORSE, LLC		
	DRILLING STARTED 2-20-12		DRILLING ENDED 3-12-12		DEPTH OF COMPLETED WELL (FT) 541		BORE HOLE DEPTH (FT) 541	
							DEPTH WATER FIRST ENCOUNTERED (FT) 133	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT)	
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (FT)		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
	FROM	TO						
	0	541	8 3/4	PVC	GLUED	6"	3/8	1/8
4. WATER BEARING STRATA	DEPTH (FT)		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			YIELD (GPM)	
	FROM	TO						
	133	152	19	SAND			UK	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA N/A							TOTAL ESTIMATED WELL YIELD (GPM)	

FOR OSE INTERNAL USE

WELL RECORD &amp; LOG (Version 6/9/08)

FILE NUMBER C-3528

POD NUMBER C-03528-POD1

TRN NUMBER 491386

LOCATION 24-32-15.211

PAGE 1 OF 2



<b>5. SEAL AND PUMP</b>	TYPE OF PUMP: <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> JET <input type="checkbox"/> NO PUMP - WELL NOT EQUIPPED <input type="checkbox"/> TURBINE <input type="checkbox"/> CYLINDER <input type="checkbox"/> OTHER - SPECIFY: UNKNOWN						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	20				

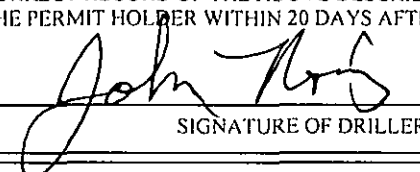
<b>6. GEOLOGIC LOG OF WELL</b>	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
	FROM	TO			
	0	3	3	TOPSOIL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	3	18	15	CALICHE	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	18	26	8	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	26	133	107	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	133	152	19	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	152	318	166	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	318	345	27	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	345	384	39	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	384	418	34	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	418	444	26	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	444	468	24	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	468	500	32	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	500	508	8	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	508	541	33	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

<b>7. TEST &amp; ADDITIONAL INFO</b>	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY: N/A
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	ADDITIONAL STATEMENTS OR EXPLANATIONS:	

<b>8. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER	4-23-12 DATE

FOR OSE INTERNAL USE

WELL RECORD &amp; LOG (Version 6/9/08)

FILE NUMBER C-3528

POD NUMBER C-03528-P001

TRN NUMBER 491386

LOCATION 24.32.15.2111

PAGE 2 OF 2

**Locator Tool Report****General Information:**

Application ID:29

Date: 04-03-2012

Time: 08:10:09

WR File Number: C-03528-POD1

Purpose: POINT OF DIVERSION

Applicant First Name: MARK &amp; ANNETTE MCCLOY

Applicant Last Name: NEW STOCK WELL (COTTON PLACE)(WELL LOG LOCATION)

GW Basin: CARLSBAD

County: LEA

*(Based on Application  
not Driller GPS)*

Critical Management Area Name(s): NONE

Special Condition Area Name(s): NONE

Land Grant Name: NON GRANT

**PLSS Description (New Mexico Principal Meridian):**

NW 1/4 of NW 1/4 of NW 1/4 of NE 1/4 of Section 15, Township 24S, Range 32E.

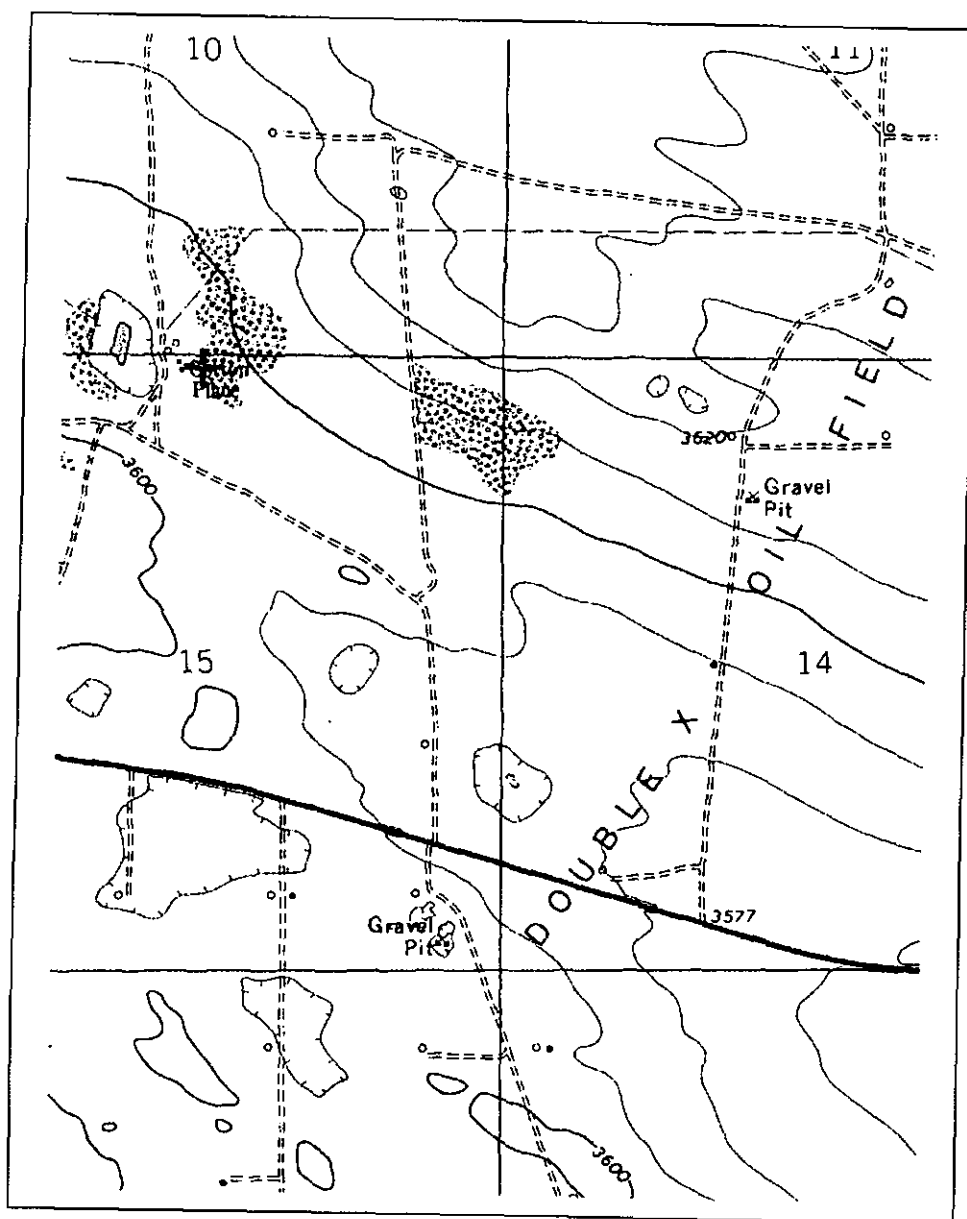
**Coordinate System Details:****Geographic Coordinates:**Latitude: 32 Degrees 13 Minutes 29.0 Seconds N  
Longitude: 103 Degrees 39 Minutes 44.6 Seconds W**Universal Transverse Mercator Zone: 13N**

NAD 1983(92) (Meters)	N: 3,566,130	E: 626,040
NAD 1983(92) (Survey Feet)	N: 11,699,877	E: 2,053,934
NAD 1927 (Meters)	N: 3,565,928	E: 626,089
NAD 1927 (Survey Feet)	N: 11,699,215	E: 2,054,092

**State Plane Coordinate System Zone: New Mexico East**

NAD 1983(92) (Meters)	N: 135,982	E: 228,239
NAD 1983(92) (Survey Feet)	N: 446,136	E: 748,815
NAD 1927 (Meters)	N: 135,964	E: 215,686
NAD 1927 (Survey Feet)	N: 446,077	E: 707,631

## Locator Tool Report




GW Basin: Carlsbad




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## APPENDIX C


### Soil Sampling Logs

							Sample Name: BH01		Date: 07/30/2024	
							Site Name: Tomcat 21 Federal 1			
							Incident Number: NRM2003860041			
							Job Number: 19304			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>							Logged By: EK		Method: Hand Auger	
Site Coordinates: 32.291726, -103.682612							Hole Diameter: 3.5 inches		Total Depth: 4 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.										
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes		
Dry	2,092	0	No	BH01	0.5	0.5	SP-SM	(0-13') SAND, dry, brown, poorly graded with trace silt, very fine-fine grain, trace organic, no stain, no odor.		
Dry	2,600	0.1	No	BH01	1	1		@6' increase of silt to abundant silt.		
Dry	2,816	0	No		2	2		@10' decrease of silt to trace silt.		
						3		@13 hit refusal.		
Dry	2,816	0	No	BH01	4	4				
						5				
Dry	3,356	0			6	6				
						7				
Dry	5,024	0		BH01	8	8				
						9				
Dry	5,024	0			10	10				
						11				
Dry	3,952	0		BH01	12	12				
Dry	4,640	0			13	13				
Total Depth										

					Sample Name: BH02		Date: 07/30/2024	
					Site Name: Tomcat 21 Federal 1			
					Incident Number: NRM2003860041			
					Job Number: 19304			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: EK		Method: Hand Auger	
Site Coordinates: 32.291621, -103.682616					Hole Diameter: 3.5 inches		Total Depth: 4 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	896	0	No	BH02	0.5	0.5	SP-SM	(0-9') SAND, dry, brown, poorly graded with trace silt, very fine-fine grain, trace organic, no stain, no odor.
Dry	896	0	No		1	1		@1' Color change from brown to tan, roots encountered.
								@2' Increase of silt from trace to some.
Dry	700	0	No		2	2		@9' hit refusal.
						3		
Dry	1,588	0.3	No	BH02	4	4		
						5		
Dry	1,384	0	No		6	6		
						7		
Dry	1,292	0.2	No	BH02	8	8		
Dry	1,712	0	No		9	9		
Total Depth								



					Sample Name: BH03		Date: 07/30/2024, 07/31/2024	
					Site Name: Tomcat 21 Federal 1			
					Incident Number: NRM2003860041			
					Job Number: 19304			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: EK		Method: Hand Auger	
Site Coordinates: 32.291584, -103.682692					Hole Diameter: 3.5 inches		Total Depth: 4 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	<124	0	No	BH03	0.5	0.5	CCHE	(0-8') CALICHE, dry, tan, well graded with trace silt, fine-coarse grain, no stain, no odor.
Dry	<124	0	No		1	1		@4' Color change to reddish brown, increase of silt to some.
Dry	<124	0	No		2	2		@8' hit refusal.
						3		
Dry	188	0.3	No	BH03	4	4		
						5		
Dry	<124	0	No		6	6		
						7		
Dry	188	0	No		8	8		
Total Depth								

					Sample Name: BH04		Date: 07/31/2024	
					Site Name: Tomcat 21 Federal 1			
					Incident Number: NRM2003860041			
					Job Number: 19304			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: EK		Method: Hand Auger	
Site Coordinates: 32.291464, -103.682642					Hole Diameter: 3.5 inches		Total Depth: 4 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	280	0	No	BH04	0.5	0.5	SP-SM	(0-1') SAND, dry, light brown, poorly graded with trace silt, very fine-fine grain, trace organic, no stain, no odor.
Dry	140	0	No		1	1		(2-5.5') CALICHE, dry, tan, well graded with trace silt, fine-coarse grain, no stain, no odor.
Dry	280	0	No		2	2	CCHE	@5.5' hit refusal.
						3		
Dry	280	0	No	BH04	4	4		
						5		
Dry	352	0	No		5.5	5.5		
Total Depth								



Sample Name: BH05

Date: 07/31/2024

Site Name: Tomcat 21 Federal 1

Incident Number: NRM2003860041

Job Number: 19304

**LITHOLOGIC / SOIL SAMPLING LOG**

Logged By: EK

Method: Hand Auger

Site Coordinates: 32.291582, -103.682590

Hole Diameter: 3.5 inches


Total Depth: 4 feet


Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.


Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	<124	0	No	BH05	0.5	0.5	SP-SM	(0-1') SAND, dry, light brown, poorly graded with trace silt, very fine-fine grain, trace organic, no stain, no odor.
Dry	<124	0	No		1	1		(4-6') CALICHE, dry, tan, well graded with trace silt, fine-coarse grain, no stain, no odor.
Dry	<124	0	No		2	2		@6' hit refusal.
						3		
Dry	352	0	No	BH05	4	4	CCHE	
						5		
Dry	1,292	0	No		6	6		

Total Depth



					Sample Name: BH06		Date: 07/31/2024	
					Site Name: Tomcat 21 Federal 1			
					Incident Number: NRM2003860041			
					Job Number: 19304			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: EK		Method: Hand Auger	
Site Coordinates: 32.291667, -103.682712					Hole Diameter: 3.5 inches		Total Depth: 4 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	216	0	No	BH06	0.5	0.5	SP-SM	(0-4') SAND, dry, light brown, poorly graded with trace silt, very fine-fine grain, trace organic, no stain, no odor.
Dry	316	0	No		1	1		@4' Color change to reddish brown, increase of silt to some.
Dry	352	0	No		2	2		
						3		
Dry	216	0	No	BH06	4	4		
						5		
Dry	188	0	No		6	6		
Total Depth								

				Sample Name: BH07		Date: 07/31/2024		
				Site Name: Tomcat 21 Federal 1				
				Incident Number: NRM2003860041				
				Job Number: 19304				
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>				Logged By: EK		Method: Hand Auger		
Site Coordinates: 32.291764, -103.682637				Hole Diameter: 3.5 inches		Total Depth: 4 feet		
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	<124	0	No	BH07	0.5	0.5	CCHE	(0-1') CALICHE, dry, tan, well graded with trace silt, fine-coarse grain, no stain, no odor.
Dry	<124	0	No		1	1	SP-SM	(1-4') SAND, dry, brown, poorly graded with trace silt, very fine-fine grain, trace organic, no stain, no odor.
Dry	<124	0	No		2	2		@1' No more organic
						3		
Dry	<124	0	No	BH07	4	4		
Total Depth								

					Sample Name: BH08		Date: 07/31/2024	
					Site Name: Tomcat 21 Federal 1			
					Incident Number: NRM2003860041			
					Job Number: 19304			
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: EK		Method: Hand Auger	
Site Coordinates: 32.291512, -103.682634					Hole Diameter: 3.5 inches		Total Depth: 4 feet	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (feet bgs)	Depth (feet bgs)	USCS/Rock Symbol	Lithologic Descriptions/Notes
Dry	352	0	No	BH08	0.5	0.5	SP-SM	(0-4') SAND, dry, light brown, poorly graded with some silt, very fine-fine grain, trace organic, no stain, no odor.
Dry	280	0	No		1	1		(1-4') CALICHE, dry, tan, well graded with trace silt, fine-coarse grain, no stain, no odor.
Dry	280	0.1	No		2	2	CCHE	@4' Color change to reddish brown, increase of silt to some.
						3		@4' Hit refusal.
Dry	188	0	No	BH08	4	4		
Total Depth								



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## APPENDIX D

### Photographic Logs

**PHOTOGRAPHIC LOG**

Devon Energy Production Company, LP

Tomcat 21 Federal 1

Incident Number NRM2003860041

**Photograph 1****Date: 7/30/2024**

Description: Northwestern view of delineation activities.

**Photograph 2****Date: 7/30/2024**

Description: Northeastern view of delineation activities.

**Photograph 3****Date: 7/31/2024**

Description: Southeastern view of delineation activities.

**Photograph 4****Date: 7/31/2024**

Description: Southeastern view of delineation activities.

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# APPENDIX E

## Tables





**Table 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**Devon Energy Production Co. LP**  
**Tomcat 21 Federal 1**  
**Lea County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	DRO+GRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria for Soils Impacted by a Release (NMAC 19.15.29)			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>10,000</b>
Delineation Soil Samples - Incident Number NRM2003860041										
BH01	07/30/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>2,020</b>
BH01	07/30/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	2,720
BH01	07/30/2024	8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	5,250
BH01	07/30/2024	12	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	3,610
BH02	07/30/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<b>797<sup>†</sup></b>
BH02	07/30/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,860
BH02	07/30/2024	8	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	1,810
BH03	07/30/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	49.4
BH03	07/31/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	41.4
BH04	07/31/2024	0.5	<0.0250	<0.0500	<20.0	29.0	<50.0	29.0	29.0	251
BH04	07/31/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	557
BH05	07/31/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	<20.0
BH05	07/31/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	446
BH06	07/31/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	170
BH06	07/31/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	222
BH07	07/31/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	111
BH07	07/31/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	117
BH08	07/31/2024	0.5	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	406
BH08	07/31/2024	4	<0.0250	<0.0500	<20.0	<25.0	<50.0	<25.0	<50.0	285

**Notes:**

bgs: below ground surface

mg/kg: milligrams per kilogram

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

Text in "grey" represents excavated soil samples

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria and/or Reclamation Standard<sup>†</sup> for Soils Impacted by a Release

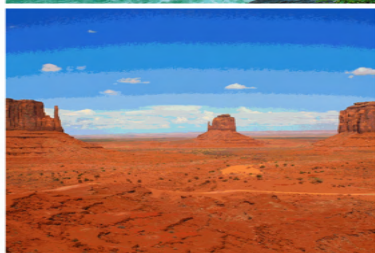
<sup>†</sup> The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

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## APPENDIX F

### Laboratory Analytical Reports & Chain-of-Custody Documentation

Report to:  
Anna Byers



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: TOMCAT 21 FEDERAL #001

Work Order: E408019

Job Number: 01058-0007

Received: 8/2/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/7/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/7/24



Anna Byers  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: TOMCAT 21 FEDERAL #001  
Workorder: E408019  
Date Received: 8/2/2024 8:00:16AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/2/2024 8:00:16AM, under the Project Name: TOMCAT 21 FEDERAL #001.

The analytical test results summarized in this report with the Project Name: TOMCAT 21 FEDERAL #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
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Sample Summary

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:10

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 - 0.5'	E408019-01A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.
BH01 - 4'	E408019-02A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.
BH02 - 0.5'	E408019-03A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.
BH02 - 4'	E408019-04A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.





Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 10:10:04AM
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BH01 - 0.5'  
E408019-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431133	
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		98.9 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431133	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		98.9 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2431137	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		106 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2431148	
Chloride	2020	40.0	2	08/03/24	08/03/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported: 8/7/2024 10:10:04AM
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	

BH01 - 4'

E408019-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431133	
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		93.3 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		98.3 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431133	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		93.3 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		98.3 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2431137	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		102 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2431148	
Chloride	2720	40.0	2	08/03/24	08/03/24	

Sample Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported: 8/7/2024 10:10:04AM
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	

BH02 - 0.5'  
E408019-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.5 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.5 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		102 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431148
Chloride	797	20.0	1	08/03/24	08/03/24	





Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 10:10:04AM
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BH02 - 4'

E408019-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		97.1 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.0 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		97.1 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.0 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		99.2 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431148
Chloride	1860	40.0	2	08/03/24	08/03/24	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:10:04AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431133-BLK1)Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS1)Prepared: 08/02/24 Analyzed: 08/06/24

Benzene	2.41	0.0250	2.50		96.5	70-130			
Ethylbenzene	2.43	0.0250	2.50		97.1	70-130			
Toluene	2.29	0.0250	2.50		91.6	70-130			
o-Xylene	2.41	0.0250	2.50		96.5	70-130			
p,m-Xylene	4.83	0.0500	5.00		96.7	70-130			
Total Xylenes	7.25	0.0250	7.50		96.6	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.7	70-130			

Matrix Spike (2431133-MS1)Source: E408004-03Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.56	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.65	0.0250	2.50	ND	106	45-135			
Toluene	2.49	0.0250	2.50	ND	99.6	48-130			
o-Xylene	2.67	0.0250	2.50	ND	107	43-135			
p,m-Xylene	5.31	0.0500	5.00	ND	106	43-135			
Total Xylenes	7.98	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			

Matrix Spike Dup (2431133-MSD1)Source: E408004-03Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.60	0.0250	2.50	ND	104	48-131	1.76	23	
Ethylbenzene	2.71	0.0250	2.50	ND	108	45-135	2.07	27	
Toluene	2.54	0.0250	2.50	ND	102	48-130	1.99	24	
o-Xylene	2.77	0.0250	2.50	ND	111	43-135	3.66	27	
p,m-Xylene	5.52	0.0500	5.00	ND	110	43-135	3.87	27	
Total Xylenes	8.29	0.0250	7.50	ND	111	43-135	3.80	27	
Surrogate: Bromofluorobenzene	0.524		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:10:04AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS2) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	43.3	20.0	50.0		86.7	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

Matrix Spike (2431133-MS2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/06/24

Gasoline Range Organics (C6-C10)	44.2	20.0	50.0	ND	88.4	70-130			
Surrogate: Bromofluorobenzene	0.513		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

Matrix Spike Dup (2431133-MSD2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	50.1	20.0	50.0	ND	100	70-130	12.5	20	
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:10:04AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431137-BLK1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	62.2		50.0		124	50-200			

LCS (2431137-BS1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Diesel Range Organics (C10-C28)	272	25.0	250		109	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2431137-MS1)					Source: E408015-08		Prepared: 08/02/24 Analyzed: 08/02/24		
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	60.1		50.0		120	50-200			

Matrix Spike Dup (2431137-MSD1)					Source: E408015-08		Prepared: 08/02/24 Analyzed: 08/02/24		
Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132	3.93	20	
Surrogate: n-Nonane	57.4		50.0		115	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:10:04AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431148-BLK1)				Prepared: 08/03/24 Analyzed: 08/03/24					
Chloride	ND	20.0							
LCS (2431148-BS1)				Prepared: 08/03/24 Analyzed: 08/03/24					
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2431148-MS1)				Source: E408019-03		Prepared: 08/03/24 Analyzed: 08/03/24			
Chloride	1070	20.0	250	797	109	80-120			
Matrix Spike Dup (2431148-MSD1)				Source: E408019-03		Prepared: 08/03/24 Analyzed: 08/03/24			
Chloride	1050	20.0	250	797	99.9	80-120	2.25	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:10

- ND      Analyte NOT DETECTED at or above the reporting limit
  - NR      Not Reported
  - RPD      Relative Percent Difference
  - DNI      Did Not Ignite
  - DNR      Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: WPX Energy Permian, LLC.				Bill To		Lab Use Only				TAT				EPA Program	
Project: TOMCAT 21 FEDERAL #001				Attention: Jim Raley		Lab WO# E408019		Job Number 010580007		1D	2D	3D	Standard	CWA	SDWA
Project Manager: Anna Byers				Address: 5315 Buena Vista Dr.		E408019		010580007					5 day TAT		
Address: 13000 W County Rd 100				City, State, Zip: Carlsbad, NM, 88220		Analysis and Method									RCRA
City, State, Zip: Odessa, TX, 79765				Phone: 575-885-7502											
Phone: 432-305-6415				Email: jim.raley@dv.com											
Email: Devon-team@etechenv.com				WBS: 1061476201 - NM PERMIAN ABANDON											
				Incident ID: nRM2003860041											
Collected by: Edyte Konan															
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	XL GDOC	State	
														NM	CO
														UT	AZ
														TX	
														Remarks	
12:00	07.30.24	S	1	BH01	1	0.5'						X			
12:20	07.30.24	S	1	BH01	2	4'						X			
13:20	07.30.24	S	1	BH02	3	0.5'						X			
13:40	07.30.24	S	1	BH02	4	4'						X			
08/01/2024															
Additional Instructions:															
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: GM															
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.															
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only							
K. Byers		08/01/24	11:30	Michelle Gonzales		8-1-24	11:30	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N							
Michelle Gonzales		8-1-24	16:50	Candace Brigg		8-1-24	17:30	T1 T2 T3							
Candace Brigg		8-1-24	23:59	A. Brigg		8/2/24	8:00	AVG Temp °C 4							
Sample Matrix: S - Soil, sd - Solid, Sg - Sludge, A - Aqueous, O - Other															
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA															
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.															



## Envirotech Analytical Laboratory

Printed: 8/2/2024 12:56:12PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/02/24 08:00	Work Order ID:	E408019
Phone:	(575) 200-6754	Date Logged In:	08/01/24 16:22	Logged In By:	Noe Soto
Email:	anna@etechnv.vom	Due Date:	08/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

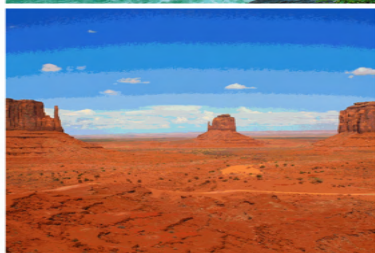
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:  
Anna Byers



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: TOMCAT 21 FEDERAL #001

Work Order: E408018

Job Number: 01058-0007

Received: 8/2/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/7/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/7/24



Anna Byers  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: TOMCAT 21 FEDERAL #001  
Workorder: E408018  
Date Received: 8/2/2024 8:00:16AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/2/2024 8:00:16AM, under the Project Name: TOMCAT 21 FEDERAL #001.

The analytical test results summarized in this report with the Project Name: TOMCAT 21 FEDERAL #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:08

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 - 8'	E408018-01A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.
BH01 - 12'	E408018-02A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.





## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 10:08:49AM

BH01 - 8'

E408018-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		92.4 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.2 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		101 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		92.4 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.2 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		101 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	5250	100	5	08/02/24	08/02/24	



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 10:08:49AM
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BH01 - 12'  
E408018-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		101 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		97.0 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		101 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		104 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	3610	40.0	2	08/02/24	08/02/24	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:08:49AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS1) Prepared: 08/02/24 Analyzed: 08/06/24

Benzene	2.41	0.0250	2.50		96.5	70-130			
Ethylbenzene	2.43	0.0250	2.50		97.1	70-130			
Toluene	2.29	0.0250	2.50		91.6	70-130			
o-Xylene	2.41	0.0250	2.50		96.5	70-130			
p,m-Xylene	4.83	0.0500	5.00		96.7	70-130			
Total Xylenes	7.25	0.0250	7.50		96.6	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.7	70-130			

Matrix Spike (2431133-MS1) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.56	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.65	0.0250	2.50	ND	106	45-135			
Toluene	2.49	0.0250	2.50	ND	99.6	48-130			
o-Xylene	2.67	0.0250	2.50	ND	107	43-135			
p,m-Xylene	5.31	0.0500	5.00	ND	106	43-135			
Total Xylenes	7.98	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			

Matrix Spike Dup (2431133-MSD1) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.60	0.0250	2.50	ND	104	48-131	1.76	23	
Ethylbenzene	2.71	0.0250	2.50	ND	108	45-135	2.07	27	
Toluene	2.54	0.0250	2.50	ND	102	48-130	1.99	24	
o-Xylene	2.77	0.0250	2.50	ND	111	43-135	3.66	27	
p,m-Xylene	5.52	0.0500	5.00	ND	110	43-135	3.87	27	
Total Xylenes	8.29	0.0250	7.50	ND	111	43-135	3.80	27	
Surrogate: Bromofluorobenzene	0.524		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			





QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:08:49AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS2) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	43.3	20.0	50.0		86.7	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

Matrix Spike (2431133-MS2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/06/24

Gasoline Range Organics (C6-C10)	44.2	20.0	50.0	ND	88.4	70-130			
Surrogate: Bromofluorobenzene	0.513		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

Matrix Spike Dup (2431133-MSD2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	50.1	20.0	50.0	ND	100	70-130	12.5	20	
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:08:49AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431137-BLK1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	62.2		50.0		124	50-200			

LCS (2431137-BS1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Diesel Range Organics (C10-C28)	272	25.0	250		109	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2431137-MS1)					Source: E408015-08		Prepared: 08/02/24 Analyzed: 08/02/24		
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	60.1		50.0		120	50-200			

Matrix Spike Dup (2431137-MSD1)					Source: E408015-08		Prepared: 08/02/24 Analyzed: 08/02/24		
Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132	3.93	20	
Surrogate: n-Nonane	57.4		50.0		115	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:08:49AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431142-BLK1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Chloride	ND	20.0							
LCS (2431142-BS1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Chloride	256	20.0	250		103	90-110			
Matrix Spike (2431142-MS1)					Source: E408015-01		Prepared: 08/02/24 Analyzed: 08/02/24		
Chloride	487	20.0	250	251	94.0	80-120			
Matrix Spike Dup (2431142-MSD1)					Source: E408015-01		Prepared: 08/02/24 Analyzed: 08/02/24		
Chloride	521	20.0	250	251	108	80-120	6.81	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:08

- ND      Analyte NOT DETECTED at or above the reporting limit
  - NR      Not Reported
  - RPD      Relative Percent Difference
  - DNI      Did Not Ignite
  - DNR      Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: WPX Energy Permian, LLC.				Bill To				Lab Use Only				TAT				EPA Program				
Project: TOMCAT 21 FEDERAL #001				Attention: Jim Raley				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA			
Project Manager: Anna Byers				Address: 5315 Buena Vista Dr.				E 408018		010580007					5 day TAT					
Address: 13000 W County Rd 100				City, State, Zip: Carlsbad, NM, 88220				Analysis and Method										RCRA		
City, State, Zip: Odessa, TX, 79765				Phone: 575-885-7502				Depth (ft.)	TPH GRO/DRO/GRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	XL DOOG	State				
Phone: 432-305-6415				Email: jim.raley@dv.com												NM	CO	UT	AZ	TX
Email: Devon-team@etechnv.com				WBS: 1061476201 - NM PERMIAN ABANDON																
Incident ID: nRM2003860041																				
Collected by: Edyte Konan																				
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/GRO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	XL DOOG	Remarks						
2:40	<del>NS</del> 07-18-24	S	1	BH01	1	8'						X		Date sampled is actually 7-30-24.						
13:00	<del>NS</del> 07-18-24	S	1	BH01	2	12'						X		Per A. Byers 8-2-24						
08/01/2024																				
Additional Instructions:																				
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: GM																				
Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.																				
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only												
		08/01/24	11:30	Michelle Gonzales		8-1-24	1130	Received on ice: <input checked="" type="radio"/> Y / <input type="radio"/> N												
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3												
Michelle Gonzales		8-1-24	1650	Candice Briggs		8-1-24	1730													
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C												
Candice Briggs		8-1-24	23:51			8/2/24	800	4												
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																				
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																				
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																				





Page 13 of 14

## Envirotech Analytical Laboratory

Printed: 8/2/2024 11:24:35AM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/02/24 08:00	Work Order ID:	E408018
Phone:	(575) 200-6754	Date Logged In:	08/01/24 16:16	Logged In By:	Noe Soto
Email:	anna@etechnv.vom	Due Date:	08/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? No
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/Resolution

Date Sampled on COC was put down as 7/16/24 and the containers said 7/30/24, called A. Byers and she confirmed they were sampled on 7/30/24.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
  - Sample ID? Yes
  - Date/Time Collected? Yes
  - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

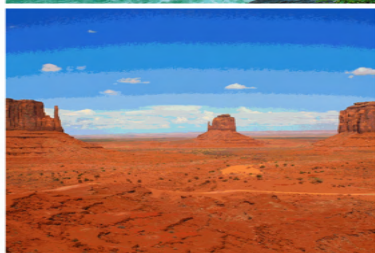
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:  
Anna Byers



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: TOMCAT 21 FEDERAL #001

Work Order: E408020

Job Number: 01058-0007

Received: 8/2/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/7/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
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Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/7/24

Anna Byers  
5315 Buena Vista Dr  
Carlsbad, NM 88220



Project Name: TOMCAT 21 FEDERAL #001  
Workorder: E408020  
Date Received: 8/2/2024 8:00:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/2/2024 8:00:00AM, under the Project Name: TOMCAT 21 FEDERAL #001.

The analytical test results summarized in this report with the Project Name: TOMCAT 21 FEDERAL #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
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Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:14

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH02 8'	E408020-01A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 10:14:06AM
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BH02 8'  
E408020-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431133	
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.2 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431133	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		102 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		94.1 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.2 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2431137	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		102 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2431148	
Chloride	1810	40.0	2	08/03/24	08/03/24	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:14:06AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS1) Prepared: 08/02/24 Analyzed: 08/06/24

Benzene	2.41	0.0250	2.50		96.5	70-130			
Ethylbenzene	2.43	0.0250	2.50		97.1	70-130			
Toluene	2.29	0.0250	2.50		91.6	70-130			
o-Xylene	2.41	0.0250	2.50		96.5	70-130			
p,m-Xylene	4.83	0.0500	5.00		96.7	70-130			
Total Xylenes	7.25	0.0250	7.50		96.6	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.7	70-130			

Matrix Spike (2431133-MS1) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.56	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.65	0.0250	2.50	ND	106	45-135			
Toluene	2.49	0.0250	2.50	ND	99.6	48-130			
o-Xylene	2.67	0.0250	2.50	ND	107	43-135			
p,m-Xylene	5.31	0.0500	5.00	ND	106	43-135			
Total Xylenes	7.98	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			

Matrix Spike Dup (2431133-MSD1) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.60	0.0250	2.50	ND	104	48-131	1.76	23	
Ethylbenzene	2.71	0.0250	2.50	ND	108	45-135	2.07	27	
Toluene	2.54	0.0250	2.50	ND	102	48-130	1.99	24	
o-Xylene	2.77	0.0250	2.50	ND	111	43-135	3.66	27	
p,m-Xylene	5.52	0.0500	5.00	ND	110	43-135	3.87	27	
Total Xylenes	8.29	0.0250	7.50	ND	111	43-135	3.80	27	
Surrogate: Bromofluorobenzene	0.524		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:14:06AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS2) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	43.3	20.0	50.0		86.7	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

Matrix Spike (2431133-MS2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/06/24

Gasoline Range Organics (C6-C10)	44.2	20.0	50.0	ND	88.4	70-130			
Surrogate: Bromofluorobenzene	0.513		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

Matrix Spike Dup (2431133-MSD2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	50.1	20.0	50.0	ND	100	70-130	12.5	20	
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:14:06AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431137-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	62.2		50.0		124	50-200			

LCS (2431137-BS1) Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	272	25.0	250		109	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2431137-MS1) Source: E408015-08 Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	60.1		50.0		120	50-200			

Matrix Spike Dup (2431137-MSD1) Source: E408015-08 Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132	3.93	20	
Surrogate: n-Nonane	57.4		50.0		115	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:14:06AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431148-BLK1)					Prepared: 08/03/24 Analyzed: 08/03/24				
Chloride	ND	20.0							
LCS (2431148-BS1)					Prepared: 08/03/24 Analyzed: 08/03/24				
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2431148-MS1)					Source: E408019-03		Prepared: 08/03/24 Analyzed: 08/03/24		
Chloride	1070	20.0	250	797	109	80-120			
Matrix Spike Dup (2431148-MSD1)					Source: E408019-03		Prepared: 08/03/24 Analyzed: 08/03/24		
Chloride	1050	20.0	250	797	99.9	80-120	2.25	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:14

- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- RPD Relative Percent Difference
- DNI Did Not Ignite
- DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: WPX Energy Permian, LLC.				Bill To				Lab Use Only				TAT				EPA Program																	
Project: TOMCAT 21 FEDERAL #001				Attention: Jim Raley				Lab WO#		Job Number		1D	2D	3D	Standard	CWA	SDWA																
Project Manager: Anna Byers				Address: 5315 Buena Vista Dr.				E408020		010580007					5 day TAT																		
Address: 13000 W County Rd 100				City, State, Zip: Carlsbad, NM, 88220				Analysis and Method										RCRA															
City, State, Zip: Odessa, TX, 79765				Phone: 575-885-7502				Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	GDGC TX	State																	
Phone: 432-305-6415				Email: jim.raley@dv.com												NM	CO	UT	AZ	TX													
Email: Devon-team@etechnv.com				WBS: 1061476201 - NM PERMIAN ABANDON																													
Incident ID: nRM2003860041																																	
Collected by: Edyte Konan																																	
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number																												
14:00	07.30.24	S	1	BH02	1	8'									X																		
08/01/2024																																	
Additional Instructions:																																	
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action.												Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6 °C on subsequent days.																					
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Received on ice: (Y) N																									
Michelle Gonzales		8-1-24	1650	Michelle Gonzales		8-1-24	1130																										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																										
Michelle Gonzales		8-1-24	1650	Michelle Gonzales		8-1-24	1730																										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time																										
Michelle Gonzales		8-1-24	23:59	Michelle Gonzales		8-1-24	800																										
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other												Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																					
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																																	

## Envirotech Analytical Laboratory

Printed: 8/2/2024 1:10:30PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/02/24 08:00	Work Order ID:	E408020
Phone:	(575) 200-6754	Date Logged In:	08/02/24 08:40	Logged In By:	Alexa Michaels
Email:	anna@etechnv.vom	Due Date:	08/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

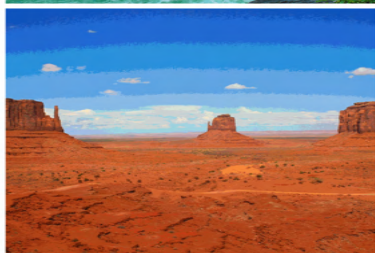
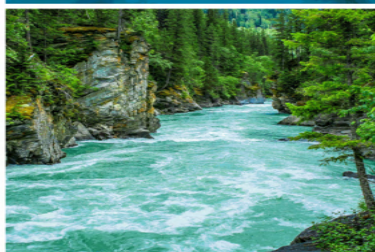
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:  
Anna Byers



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: TOMCAT 21 FEDERAL #001

Work Order: E408016

Job Number: 01058-0007

Received: 8/2/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/7/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/7/24



Anna Byers  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: TOMCAT 21 FEDERAL #001  
Workorder: E408016  
Date Received: 8/2/2024 8:00:16AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/2/2024 8:00:16AM, under the Project Name: TOMCAT 21 FEDERAL #001.

The analytical test results summarized in this report with the Project Name: TOMCAT 21 FEDERAL #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 09:43

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03 - 0.5'	E408016-01A	Soil	07/30/24	08/02/24	Glass Jar, 2 oz.



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 9:43:37AM
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BH03 - 0.5'  
E408016-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431129	
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	99.7 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	105 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg	Analyst: RKS		Batch: 2431129	
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	99.7 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	96.9 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	105 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg	Analyst: NV		Batch: 2431137	
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane	105 %	50-200		08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg	Analyst: DT		Batch: 2431142	
Chloride	49.4	20.0	1	08/02/24	08/02/24	





QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:43:37AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431129-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.486		0.500		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.5	70-130			
Surrogate: Toluene-d8	0.527		0.500		105	70-130			

LCS (2431129-BS1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.26	0.0250	2.50		90.3	70-130			
Ethylbenzene	2.32	0.0250	2.50		92.7	70-130			
Toluene	2.31	0.0250	2.50		92.4	70-130			
o-Xylene	2.24	0.0250	2.50		89.5	70-130			
p,m-Xylene	4.57	0.0500	5.00		91.4	70-130			
Total Xylenes	6.81	0.0250	7.50		90.8	70-130			
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.8	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike (2431129-MS1) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.26	0.0250	2.50	ND	90.5	48-131			
Ethylbenzene	2.32	0.0250	2.50	ND	93.0	45-135			
Toluene	2.31	0.0250	2.50	ND	92.4	48-130			
o-Xylene	2.26	0.0250	2.50	ND	90.3	43-135			
p,m-Xylene	4.57	0.0500	5.00	ND	91.4	43-135			
Total Xylenes	6.83	0.0250	7.50	ND	91.0	43-135			
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike Dup (2431129-MSD1) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.25	0.0250	2.50	ND	89.9	48-131	0.709	23	
Ethylbenzene	2.27	0.0250	2.50	ND	91.0	45-135	2.17	27	
Toluene	2.29	0.0250	2.50	ND	91.6	48-130	0.870	24	
o-Xylene	2.20	0.0250	2.50	ND	88.1	43-135	2.51	27	
p,m-Xylene	4.43	0.0500	5.00	ND	88.7	43-135	3.01	27	
Total Xylenes	6.64	0.0250	7.50	ND	88.5	43-135	2.84	27	
Surrogate: Bromofluorobenzene	0.492		0.500		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			

QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:43:37AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431129-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.486		0.500		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.5	70-130			
Surrogate: Toluene-d8	0.527		0.500		105	70-130			

LCS (2431129-BS2) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	41.6	20.0	50.0		83.2	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			

Matrix Spike (2431129-MS2) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	43.8	20.0	50.0	ND	87.7	70-130			
Surrogate: Bromofluorobenzene	0.508		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike Dup (2431129-MSD2) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	50.6	20.0	50.0	ND	101	70-130	14.4	20	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.534		0.500		107	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:43:37AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431137-BLK1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	62.2		50.0		124	50-200			

LCS (2431137-BS1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Diesel Range Organics (C10-C28)	272	25.0	250		109	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2431137-MS1)					Source: E408015-08		Prepared: 08/02/24 Analyzed: 08/02/24		
Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	60.1		50.0		120	50-200			

Matrix Spike Dup (2431137-MSD1)					Source: E408015-08		Prepared: 08/02/24 Analyzed: 08/02/24		
Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132	3.93	20	
Surrogate: n-Nonane	57.4		50.0		115	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:43:37AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431142-BLK1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Chloride	ND	20.0							
LCS (2431142-BS1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Chloride	256	20.0	250		103	90-110			
Matrix Spike (2431142-MS1)					Source: E408015-01		Prepared: 08/02/24 Analyzed: 08/02/24		
Chloride	487	20.0	250	251	94.0	80-120			
Matrix Spike Dup (2431142-MSD1)					Source: E408015-01		Prepared: 08/02/24 Analyzed: 08/02/24		
Chloride	521	20.0	250	251	108	80-120	6.81	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 09:43

- ND            Analyte NOT DETECTED at or above the reporting limit
- NR            Not Reported
- RPD          Relative Percent Difference
- DNI          Did Not Ignite
- DNR          Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: WPX Energy Permian, LLC.				Bill To		Lab Use Only		TAT		EPA Program																			
Project: TOMCAT 21 FEDERAL #001				Attention: Jim Raley		Lab WO# E408016		Job Number 010580007		1D	2D	3D	Standard	CWA	SDWA														
Project Manager: Anna Byers				Address: 5315 Buena Vista Dr.		City, State, Zip: Carlsbad, NM, 88220		Phone: 575-885-7502		5 day TAT				RCRA															
Address: 13000 W County Rd 100				City, State, Zip: Odessa, TX, 79765		Email: jim.raley@devon.com		WBS: 1061476201 - NM PERMIAN ABANDON		Incident ID: nRM2003860041																			
Phone: 432-305-6415				Email: Devon-team@etechnv.com																									
Collected by: Edyte Konan																													
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	BGDOC NM	XL GDOC	Remarks															
14:20	07.30.24	S	1	BH03	1	0.5'						X																	
08/01/2024																													
Additional Instructions:																													
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: GM																													
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only																					
Michelle Gonzales		08/01/24	11:30	Michelle Gonzales		8-1-24	1130	Received on ice: Y N																					
Michelle Gonzales		8-1-24	1650	Camille Briggs		8-1-24	1730	T1 T2 T3																					
Camille Briggs		8-1-24	23:59	Michelle Gonzales		8/2/24	800	AVG Temp °C 4																					
Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other																													
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																													
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																													



envirotech

## Envirotech Analytical Laboratory

Printed: 8/2/2024 12:52:23PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/02/24 08:00	Work Order ID:	E408016
Phone:	(575) 200-6754	Date Logged In:	08/01/24 16:05	Logged In By:	Noe Soto
Email:	anna@etechnv.vom	Due Date:	08/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

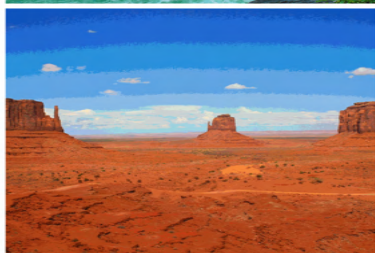
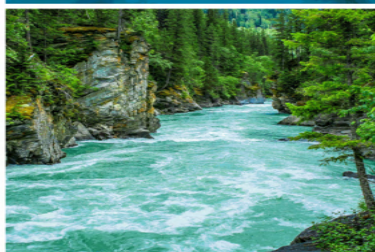
Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:  
Anna Byers



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: TOMCAT 21 FEDERAL #001

Work Order: E408021

Job Number: 01058-0007

Received: 8/2/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/7/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/7/24

Anna Byers  
5315 Buena Vista Dr  
Carlsbad, NM 88220



Project Name: TOMCAT 21 FEDERAL #001  
Workorder: E408021  
Date Received: 8/2/2024 8:00:00AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/2/2024 8:00:00AM, under the Project Name: TOMCAT 21 FEDERAL #001.

The analytical test results summarized in this report with the Project Name: TOMCAT 21 FEDERAL #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

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Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

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Sample Summary

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:  08/07/24 10:15
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH03 4'	E408021-01A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 10:15:39AM

BH03 4'

E408021-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Benzene	ND	0.0250	1	08/02/24	08/03/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/03/24	
Toluene	ND	0.0250	1	08/02/24	08/03/24	
o-Xylene	ND	0.0250	1	08/02/24	08/03/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/03/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.8 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431133
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/03/24	
Surrogate: Bromofluorobenzene		103 %	70-130	08/02/24	08/03/24	
Surrogate: 1,2-Dichloroethane-d4		96.2 %	70-130	08/02/24	08/03/24	
Surrogate: Toluene-d8		99.8 %	70-130	08/02/24	08/03/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: KH		Batch: 2432004
Diesel Range Organics (C10-C28)	ND	25.0	1	08/05/24	08/05/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/05/24	08/05/24	
Surrogate: n-Nonane		101 %	50-200	08/05/24	08/05/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431148
Chloride	41.4	20.0	1	08/03/24	08/03/24	





QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:15:39AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS1) Prepared: 08/02/24 Analyzed: 08/06/24

Benzene	2.41	0.0250	2.50		96.5	70-130			
Ethylbenzene	2.43	0.0250	2.50		97.1	70-130			
Toluene	2.29	0.0250	2.50		91.6	70-130			
o-Xylene	2.41	0.0250	2.50		96.5	70-130			
p,m-Xylene	4.83	0.0500	5.00		96.7	70-130			
Total Xylenes	7.25	0.0250	7.50		96.6	70-130			
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.462		0.500		92.4	70-130			
Surrogate: Toluene-d8	0.494		0.500		98.7	70-130			

Matrix Spike (2431133-MS1) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.56	0.0250	2.50	ND	102	48-131			
Ethylbenzene	2.65	0.0250	2.50	ND	106	45-135			
Toluene	2.49	0.0250	2.50	ND	99.6	48-130			
o-Xylene	2.67	0.0250	2.50	ND	107	43-135			
p,m-Xylene	5.31	0.0500	5.00	ND	106	43-135			
Total Xylenes	7.98	0.0250	7.50	ND	106	43-135			
Surrogate: Bromofluorobenzene	0.520		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.485		0.500		97.0	70-130			
Surrogate: Toluene-d8	0.505		0.500		101	70-130			

Matrix Spike Dup (2431133-MSD1) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.60	0.0250	2.50	ND	104	48-131	1.76	23	
Ethylbenzene	2.71	0.0250	2.50	ND	108	45-135	2.07	27	
Toluene	2.54	0.0250	2.50	ND	102	48-130	1.99	24	
o-Xylene	2.77	0.0250	2.50	ND	111	43-135	3.66	27	
p,m-Xylene	5.52	0.0500	5.00	ND	110	43-135	3.87	27	
Total Xylenes	8.29	0.0250	7.50	ND	111	43-135	3.80	27	
Surrogate: Bromofluorobenzene	0.524		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.475		0.500		94.9	70-130			
Surrogate: Toluene-d8	0.503		0.500		101	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:15:39AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431133-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.501		0.500		100	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.473		0.500		94.5	70-130			
Surrogate: Toluene-d8	0.483		0.500		96.6	70-130			

LCS (2431133-BS2) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	43.3	20.0	50.0		86.7	70-130			
Surrogate: Bromofluorobenzene	0.521		0.500		104	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		99.0	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			

Matrix Spike (2431133-MS2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/06/24

Gasoline Range Organics (C6-C10)	44.2	20.0	50.0	ND	88.4	70-130			
Surrogate: Bromofluorobenzene	0.513		0.500		103	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.1	70-130			
Surrogate: Toluene-d8	0.509		0.500		102	70-130			

Matrix Spike Dup (2431133-MSD2) Source: E408004-03 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	50.1	20.0	50.0	ND	100	70-130	12.5	20	
Surrogate: Bromofluorobenzene	0.523		0.500		105	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.471		0.500		94.1	70-130			
Surrogate: Toluene-d8	0.502		0.500		100	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:15:39AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KH

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2432004-BLK1) Prepared: 08/05/24 Analyzed: 08/05/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	56.3		50.0		113	50-200			

LCS (2432004-BS1) Prepared: 08/05/24 Analyzed: 08/05/24

Diesel Range Organics (C10-C28)	284	25.0	250		114	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2432004-MS1) Source: E408023-04 Prepared: 08/05/24 Analyzed: 08/05/24

Diesel Range Organics (C10-C28)	274	25.0	250	ND	110	38-132			
Surrogate: n-Nonane	55.1		50.0		110	50-200			

Matrix Spike Dup (2432004-MSD1) Source: E408023-04 Prepared: 08/05/24 Analyzed: 08/05/24

Diesel Range Organics (C10-C28)	268	25.0	250	ND	107	38-132	2.49	20	
Surrogate: n-Nonane	55.1		50.0		110	50-200			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 10:15:39AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431148-BLK1)					Prepared: 08/03/24 Analyzed: 08/03/24				
Chloride	ND	20.0							
LCS (2431148-BS1)					Prepared: 08/03/24 Analyzed: 08/03/24				
Chloride	259	20.0	250		104	90-110			
Matrix Spike (2431148-MS1)					Source: E408019-03		Prepared: 08/03/24 Analyzed: 08/03/24		
Chloride	1070	20.0	250	797	109	80-120			
Matrix Spike Dup (2431148-MSD1)					Source: E408019-03		Prepared: 08/03/24 Analyzed: 08/03/24		
Chloride	1050	20.0	250	797	99.9	80-120	2.25	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.



Definitions and Notes

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 10:15

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



**envirotech**

## Envirotech Analytical Laboratory

Printed: 8/2/2024 1:11:03PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/02/24 08:00	Work Order ID:	E408021
Phone:	(575) 200-6754	Date Logged In:	08/02/24 09:01	Logged In By:	Alexa Michaels
Email:	anna@etechnv.vom	Due Date:	08/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? Yes

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

Report to:  
Anna Byers



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

WPX Energy - Carlsbad

Project Name: TOMCAT 21 FEDERAL #001

Work Order: E408015

Job Number: 01058-0007

Received: 8/2/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
8/7/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.



Date Reported: 8/7/24



Anna Byers  
5315 Buena Vista Dr  
Carlsbad, NM 88220

Project Name: TOMCAT 21 FEDERAL #001  
Workorder: E408015  
Date Received: 8/2/2024 8:00:16AM

Anna Byers,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 8/2/2024 8:00:16AM, under the Project Name: TOMCAT 21 FEDERAL #001.

The analytical test results summarized in this report with the Project Name: TOMCAT 21 FEDERAL #001 apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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Sample Summary

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 09:42

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH04 - 0.5'	E408015-01A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH04 - 4'	E408015-02A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH05 - 0.5'	E408015-03A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH05 - 4'	E408015-04A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH06 - 0.5'	E408015-05A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH06 - 4'	E408015-06A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH07 - 0.5'	E408015-07A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH07 - 4'	E408015-08A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH08 - 0.5'	E408015-09A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.
BH08 - 4'	E408015-10A	Soil	07/31/24	08/02/24	Glass Jar, 2 oz.

## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 9:42:08AM

BH04 - 0.5'

E408015-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene		97.1 %	70-130	08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4		96.5 %	70-130	08/02/24	08/02/24	
Surrogate: Toluene-d8		105 %	70-130	08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene		97.1 %	70-130	08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4		96.5 %	70-130	08/02/24	08/02/24	
Surrogate: Toluene-d8		105 %	70-130	08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	29.0	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane		110 %	50-200	08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	251	20.0	1	08/02/24	08/02/24	





## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 9:42:08AM

BH04 - 4'

E408015-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	97.4 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	97.4 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	99.7 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	111 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	557	20.0	1	08/02/24	08/02/24	



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 9:42:08AM
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BH05 - 0.5'  
E408015-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.3 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	94.5 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	105 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.3 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	94.5 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	105 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	117 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	ND	20.0	1	08/02/24	08/02/24	



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 9:42:08AM
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BH05 - 4'

E408015-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	96.4 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	92.8 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	96.4 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	92.8 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	102 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	466	20.0	1	08/02/24	08/02/24	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 9:42:08AM

BH06 - 0.5'

E408015-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.7 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	98.6 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.7 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	98.6 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	104 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	170	20.0	1	08/02/24	08/02/24	





## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 9:42:08AM

BH06 - 4'

E408015-06

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.0 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	94.0 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	106 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.0 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	94.0 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	106 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	104 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	222	20.0	1	08/02/24	08/02/24	



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 9:42:08AM
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BH07 - 0.5'  
E408015-07

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	99.4 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	99.4 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	104 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	102 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	111	20.0	1	08/02/24	08/02/24	



## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 9:42:08AM

BH07 - 4'

E408015-08

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.5 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	106 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.5 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	96.6 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	106 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	97.5 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	117	20.0	1	08/02/24	08/02/24	



Sample Data

WPX Energy - Carlsbad 5315 Buena Vista Dr Carlsbad NM, 88220	Project Name: TOMCAT 21 FEDERAL #001 Project Number: 01058-0007 Project Manager: Anna Byers	Reported: 8/7/2024 9:42:08AM
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BH08 - 0.5'  
E408015-09

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.9 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	99.1 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	105 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene	98.9 %	70-130		08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4	99.1 %	70-130		08/02/24	08/02/24	
Surrogate: Toluene-d8	105 %	70-130		08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/02/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/02/24	
Surrogate: n-Nonane	98.7 %	50-200		08/02/24	08/02/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	406	20.0	1	08/02/24	08/02/24	





## Sample Data

WPX Energy - Carlsbad  
5315 Buena Vista Dr  
Carlsbad NM, 88220

Project Name: TOMCAT 21 FEDERAL #001  
Project Number: 01058-0007  
Project Manager: Anna Byers

**Reported:**  
8/7/2024 9:42:08AM

BH08 - 4'

E408015-10

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organic Compounds by EPA 8260B</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Benzene	ND	0.0250	1	08/02/24	08/02/24	
Ethylbenzene	ND	0.0250	1	08/02/24	08/02/24	
Toluene	ND	0.0250	1	08/02/24	08/02/24	
o-Xylene	ND	0.0250	1	08/02/24	08/02/24	
p,m-Xylene	ND	0.0500	1	08/02/24	08/02/24	
Total Xylenes	ND	0.0250	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130	08/02/24	08/02/24	
Surrogate: Toluene-d8		105 %	70-130	08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>						
	mg/kg	mg/kg		Analyst: RKS		Batch: 2431129
Gasoline Range Organics (C6-C10)	ND	20.0	1	08/02/24	08/02/24	
Surrogate: Bromofluorobenzene		100 %	70-130	08/02/24	08/02/24	
Surrogate: 1,2-Dichloroethane-d4		96.0 %	70-130	08/02/24	08/02/24	
Surrogate: Toluene-d8		105 %	70-130	08/02/24	08/02/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>						
	mg/kg	mg/kg		Analyst: NV		Batch: 2431137
Diesel Range Organics (C10-C28)	ND	25.0	1	08/02/24	08/03/24	
Oil Range Organics (C28-C36)	ND	50.0	1	08/02/24	08/03/24	
Surrogate: n-Nonane		106 %	50-200	08/02/24	08/03/24	
<b>Anions by EPA 300.0/9056A</b>						
	mg/kg	mg/kg		Analyst: DT		Batch: 2431142
Chloride	285	20.0	1	08/02/24	08/02/24	



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:42:08AM

Volatile Organic Compounds by EPA 8260B

Analyst: RKS

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431129-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.486		0.500		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.5	70-130			
Surrogate: Toluene-d8	0.527		0.500		105	70-130			

LCS (2431129-BS1) Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.26	0.0250	2.50		90.3	70-130			
Ethylbenzene	2.32	0.0250	2.50		92.7	70-130			
Toluene	2.31	0.0250	2.50		92.4	70-130			
o-Xylene	2.24	0.0250	2.50		89.5	70-130			
p,m-Xylene	4.57	0.0500	5.00		91.4	70-130			
Total Xylenes	6.81	0.0250	7.50		90.8	70-130			
Surrogate: Bromofluorobenzene	0.490		0.500		98.0	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.484		0.500		96.8	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike (2431129-MS1) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.26	0.0250	2.50	ND	90.5	48-131			
Ethylbenzene	2.32	0.0250	2.50	ND	93.0	45-135			
Toluene	2.31	0.0250	2.50	ND	92.4	48-130			
o-Xylene	2.26	0.0250	2.50	ND	90.3	43-135			
p,m-Xylene	4.57	0.0500	5.00	ND	91.4	43-135			
Total Xylenes	6.83	0.0250	7.50	ND	91.0	43-135			
Surrogate: Bromofluorobenzene	0.489		0.500		97.8	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.514		0.500		103	70-130			

Matrix Spike Dup (2431129-MSD1) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Benzene	2.25	0.0250	2.50	ND	89.9	48-131	0.709	23	
Ethylbenzene	2.27	0.0250	2.50	ND	91.0	45-135	2.17	27	
Toluene	2.29	0.0250	2.50	ND	91.6	48-130	0.870	24	
o-Xylene	2.20	0.0250	2.50	ND	88.1	43-135	2.51	27	
p,m-Xylene	4.43	0.0500	5.00	ND	88.7	43-135	3.01	27	
Total Xylenes	6.64	0.0250	7.50	ND	88.5	43-135	2.84	27	
Surrogate: Bromofluorobenzene	0.492		0.500		98.4	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.493		0.500		98.6	70-130			
Surrogate: Toluene-d8	0.513		0.500		103	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:42:08AM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: RKS

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431129-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.486		0.500		97.1	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.468		0.500		93.5	70-130			
Surrogate: Toluene-d8	0.527		0.500		105	70-130			

LCS (2431129-BS2) Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	41.6	20.0	50.0		83.2	70-130			
Surrogate: Bromofluorobenzene	0.498		0.500		99.5	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.472		0.500		94.4	70-130			
Surrogate: Toluene-d8	0.532		0.500		106	70-130			

Matrix Spike (2431129-MS2) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	43.8	20.0	50.0	ND	87.7	70-130			
Surrogate: Bromofluorobenzene	0.508		0.500		102	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.515		0.500		103	70-130			

Matrix Spike Dup (2431129-MSD2) Source: E408014-04 Prepared: 08/02/24 Analyzed: 08/02/24

Gasoline Range Organics (C6-C10)	50.6	20.0	50.0	ND	101	70-130	14.4	20	
Surrogate: Bromofluorobenzene	0.504		0.500		101	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.489		0.500		97.7	70-130			
Surrogate: Toluene-d8	0.534		0.500		107	70-130			



QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:42:08AM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2431137-BLK1) Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	62.2		50.0		124	50-200			

LCS (2431137-BS1) Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	272	25.0	250		109	38-132			
Surrogate: n-Nonane	58.2		50.0		116	50-200			

Matrix Spike (2431137-MS1) Source: E408015-08 Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	277	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	60.1		50.0		120	50-200			

Matrix Spike Dup (2431137-MSD1) Source: E408015-08 Prepared: 08/02/24 Analyzed: 08/02/24

Diesel Range Organics (C10-C28)	266	25.0	250	ND	106	38-132	3.93	20	
Surrogate: n-Nonane	57.4		50.0		115	50-200			





QC Summary Data

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	Reported:
5315 Buena Vista Dr	Project Number:	01058-0007	
Carlsbad NM, 88220	Project Manager:	Anna Byers	8/7/2024 9:42:08AM

Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2431142-BLK1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Chloride	ND	20.0							
LCS (2431142-BS1)					Prepared: 08/02/24 Analyzed: 08/02/24				
Chloride	256	20.0	250		103	90-110			
Matrix Spike (2431142-MS1)					Source: E408015-01		Prepared: 08/02/24 Analyzed: 08/02/24		
Chloride	487	20.0	250	251	94.0	80-120			
Matrix Spike Dup (2431142-MSD1)					Source: E408015-01		Prepared: 08/02/24 Analyzed: 08/02/24		
Chloride	521	20.0	250	251	108	80-120	6.81	20	

QC Summary Report Comment:  
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.  
Therefore, hand calculated values may differ slightly.

Definitions and Notes

WPX Energy - Carlsbad	Project Name:	TOMCAT 21 FEDERAL #001	
5315 Buena Vista Dr	Project Number:	01058-0007	Reported:
Carlsbad NM, 88220	Project Manager:	Anna Byers	08/07/24 09:42

- ND Analyte NOT DETECTED at or above the reporting limit
  - NR Not Reported
  - RPD Relative Percent Difference
  - DNI Did Not Ignite
  - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with \*\* are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Client: WPX Energy Permian, LLC.				<b>Bill To</b> Attention: Jim Raley Address: 5315 Buena Vista Dr. City, State, Zip: Carlsbad, NM, 88220 Phone: 575-885-7502 Email: jim.raley@dmv.com WBS: 1061476201 - NM PERMIAN ABANDON Incident ID: nRM2003860041		Lab Use Only						TAT				EPA Program		
Project: TOMCAT 21 FEDERAL #001						Lab WO#	Job Number					1D	2D	3D	Standard	CWA	SDWA	
Project Manager: Anna Byers						Analysis and Method					5 day TAT							
Address: 13000 W County Rd 100						Depth (ft.)	TPH GRO/DRO/ORO by 8015	BTEX by 8021	VOC by 8260	Metals 6010	Chloride 300.0	NM	XL	BGDOC	GDOC	RCRA		
City, State, Zip: Odessa, TX, 79765																State		
Phone: 432-305-6415																NM	CO	UT
Email: Devon-team@etechnv.com																		
Collected by: Edyte Konan																		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Lab Number	Remarks												
10:20	07.31.24	S	1	BH04	1	0.5'								X				
10:40	07.31.24	S	1	BH04	2	4'								X				
11:00	07.31.24	S	1	BH05	3	0.5'								X				
11:20	07.31.24	S	1	BH05	4	4'								X				
11:40	07.31.24	S	1	BH06	5	0.5'								X				
12:00	07.31.24	S	1	BH06	6	4'								X				
12:20	07.31.24	S	1	BH07	7	0.5'								X				
12:40	07.31.24	S	1	BH07	8	4'								X				
13:00	07.31.24	S	1	BH08	9	0.5'								X				
13:20	07.31.24	S	1	BH08	10	4'								X				
<b>Additional Instructions:</b>																		
I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabelling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled by: GM																		
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Lab Use Only										
[Signature]		08/01/24	11:30	Michelle Gonzales		8-1-24	1130	Received on ice: <input checked="" type="radio"/> Y <input type="radio"/> N										
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	T1 T2 T3										
Michelle Gonzales		8-1-24	1650	Candice Briggs		8-1-24	1730											
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	AVG Temp °C										
Candice Briggs		8-1-24	23:59	[Signature]		8/2/24	800	4										
Sample Matrix: S - Soil, SD - Solid, SG - Sludge, A - Aqueous, O - Other																		
Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA																		
Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.																		



envirotech

## Envirotech Analytical Laboratory

Printed: 8/2/2024 12:49:13PM

## Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	WPX Energy - Carlsbad	Date Received:	08/02/24 08:00	Work Order ID:	E408015
Phone:	(575) 200-6754	Date Logged In:	08/01/24 15:58	Logged In By:	Noe Soto
Email:	anna@etechnv.vom	Due Date:	08/08/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? Yes
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: CourierComments/ResolutionSample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:  
Sample ID? Yes  
Date/Time Collected? Yes  
Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.



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## APPENDIX G

### Correspondence & Notifications

**Erick Herrera**

---

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>  
**Sent:** Tuesday, October 1, 2024 3:21 PM  
**To:** Erick Herrera  
**Cc:** Raley, Jim; Devon-Team; Bratcher, Michael, EMNRD  
**Subject:** RE: [EXTERNAL] Devon Characterization Variance Request - Tomcat 21 Federal 1 (nRM2003860041)

Hi Erick,

Your request to remediate to Table 1 depth to groundwater standards of 51 feet-100 feet is approved. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Kind regards,

Shelly

Shelly Wells \* Environmental Specialist-Advanced  
Environmental Bureau  
EMNRD-Oil Conservation Division  
1220 S. St. Francis Drive|Santa Fe, NM 87505  
(505)469-7520|[Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Erick Herrera <[erick@etechnv.com](mailto:erick@etechnv.com)>  
**Sent:** Tuesday, October 1, 2024 1:26 PM  
**To:** Enviro, OCD, EMNRD <[OCD.Enviro@emnrd.nm.gov](mailto:OCD.Enviro@emnrd.nm.gov)>  
**Cc:** Raley, Jim <[jim.raleigh@dmn.com](mailto:jim.raleigh@dmn.com)>; Devon-Team <[Devon-Team@etechnv.com](mailto:Devon-Team@etechnv.com)>  
**Subject:** [EXTERNAL] Devon Characterization Variance Request - Tomcat 21 Federal 1 (nRM2003860041)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good afternoon,

Attached, you will find a Characterization Variance Request for the Tomcat 21 Federal 1 (Site) for Incident Number (nRM2003860041) for your review. This request proposes to use a Table I depth to ground water (DTW) range of 51-100 feet below ground surface (bgs), based on recent OSE POD and USGS data in the vicinity of the Site.

Please let me know if you have any questions or require any additional information.

Thanks,

**Erick Herrera**  
Project Geologist



Work: (432) 305-6416

Cell: (281) 777-4152

**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

QUESTIONS  
  
Action 368361

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 368361
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nRM2003860041
Incident Name	NRM2003860041 TOMCAT 21 FEDERAL 1 @ 30-025-33356
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-33356] TOMCAT 21 FEDERAL #001

Location of Release Source	
Site Name	TOMCAT 21 FEDERAL 1
Date Release Discovered	01/24/2020
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	600
What is the estimated number of samples that will be gathered	10
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/30/2024
Time sampling will commence	08:30 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Please contact Erick Herrera at 432-305-6416 with any questions.
Please provide any information necessary for navigation to sampling site	From inter of Paduca breaks Ln and NM-128/Jal HWY, go to NE on Paduca breaks Ln3.5 mi, go N on lease Rd 1.5 mi GPS reach the Tomcat 21 Federal #001 well pad at GPS coordinates (32.2919, -103.6821).



**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 368361

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 368361
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jralej	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/30/2024

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

QUESTIONS  
  
Action 368360

QUESTIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 368360
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

QUESTIONS

Prerequisites	
Incident ID (n#)	nRM2003860041
Incident Name	NRM2003860041 TOMCAT 21 FEDERAL 1 @ 30-025-33356
Incident Type	Produced Water Release
Incident Status	Initial C-141 Approved
Incident Well	[30-025-33356] TOMCAT 21 FEDERAL #001

Location of Release Source	
Site Name	TOMCAT 21 FEDERAL 1
Date Release Discovered	01/24/2020
Surface Owner	Federal

Sampling Event General Information	
Please answer all the questions in this group.	
What is the sampling surface area in square feet	600
What is the estimated number of samples that will be gathered	4
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/31/2024
Time sampling will commence	09:08 AM
Warning: Notification can not be less than two business days prior to conducting final sampling.	
Please provide any information necessary for observers to contact samplers	Please contact Erick Herrera at 432-305-6416 with any questions
Please provide any information necessary for navigation to sampling site	From the intersection of Orla Rd and NM-128, head west on NM-128 for approx. 3.76 mi; turn right on Lease Rd for approx 3.74mi; left for approx. 0.70 mi; right for approx. 0.70 mi. to reach well pad located at (32.2919, -103.6821)

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**Santa Fe, NM 87505**

CONDITIONS  
  
Action 368360

CONDITIONS

Operator: WPX Energy Permian, LLC Devon Energy - Regulatory Oklahoma City, OK 73102	OGRID: 246289
	Action Number: 368360
	Action Type: [NOTIFY] Notification Of Sampling (C-141N)

CONDITIONS

Created By	Condition	Condition Date
jraleay	Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remediation closure samples not being accepted.	7/30/2024

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# APPENDIX H

## Archived Reports

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P.O. Box 62228 Midland • TX • 79711 • Tel: 432-563-2200 • Fax: 432-563-2213







# CHARACTERIZATION VARIANCE REQUEST

*Prepared For:*

*Devon Energy Production Company, LP*

*5315 Buena Vista Dr.*

*Carlsbad, NM 88220*

*Site Information:*

**Tomcat 21 Federal 1**

**Incident Number nRM2003860041**

*Unit F, Section 21, Township 23 South, Range 32 East*

*Lea County, New Mexico*

*(32.291623°, -103.682619°)*

Carlsbad • Houston • Midland • San Antonio • Lubbock • Hobbs • Lafayette

## SYNOPSIS

Etech Environmental & Safety Solutions, Inc. (Etech), on behalf of Devon Energy Production Company, LP (Devon), presents the following Characterization Variance Request (CVR) detailing the assessment of potential sensitive receptors relative to the Tomcat 21 Federal 1 (Site) location (**Figure 1** in **Appendix A**). Based on the results of the desktop review according to Table I, 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), Devon requests the proposed Site Closure Criteria to be considered based on the regional depth to groundwater assessment.

## SITE BACKGROUND

On January 24, 2020, a 4-inch steel nipple connected to a ball valve on a poly flowline failed and resulted in approximately 47.875 barrels (bbls) of produced water to be released onto an adjacent pasture easement west of the Site well pad. A vacuum truck was immediately dispatched and recovered approximately 40 bbls of fluid. Devon immediately notified the New Mexico Oil and Conservation Division (NMOCD) via email on January 25, 2020, and reported the release on a Corrective Action Form C-141 (Form C-141), which was received by the NMOCD February 5, 2020, and was subsequently assigned Incident Number nRM2003860041.

## SITE CHARACTERIZATION AND PROPOSED CLOSURE CRITERIA

Etech characterized the Site according to Table I in 19.15.29.12 of the New Mexico Administrative Code (NMAC) considering depth to groundwater and the proximity to:

- Any continuously flowing watercourse or any other significant watercourse;
- Any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark);
- An occupied permanent residence, school, hospital, institution or church;
- A spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes;
- Any freshwater well or spring;
- Incorporated municipal boundaries or a defined municipal fresh water well field covered under a municipal ordinance;
- A wetland;
- A subsurface mine;
- An unstable area (i.e. high karst potential); and
- A 100-year floodplain.

An initial desktop review referencing the *NMOCD Oil and Gas Map* and/or the *USGS National Water Information System: Mapper* indicated a New Mexico Office of the State Engineer (NMOSE) permitted soil boring was drilled by Vision Resources for Harvard Petroleum Company on March 9, 2023, located approximately 0.65 miles northwest of the Site (**Figure 1A** in **Appendix A**). The boring was assigned NMOSE file number C-04712. Using a truck mounted drill rig equipped with air rotary, the soil boring was advanced to a total depth of 55 feet below ground surface (bgs). No fluids were observed throughout the drilling process. Following the observation period, the boring was plugged and abandoned per the appropriate NMOSE regulations. The boring log is provided in **Appendix B**.

Based on recent (defined by less than 25 years ago from the current year) depth to groundwater measurements of multiple wells and/or soil borings located within approximately 5 miles surrounding the Site (**Figure 1A** in **Appendix A**), regional depth to groundwater is estimated to be greater than 100 feet bgs. The next closest permitted boring with recent depth to groundwater data is NMOSE permitted boring C-04815 POD 1, located approximately 1.86 miles northeast of the Site. The boring was advanced to a total depth of 55 feet bgs on April 16, 2024. No fluids were observed through the drilling process, or after

the 72-hr observation period. The next closest well with recent available data is United States Geological Survey (USGS) well 321952103400801, located 2.88 miles northeast of the Site and with a groundwater measurement of 101.55 feet bgs from January 17, 2013. Based on the desktop well review, a total of 20 recent borings including USGS wells, were utilized to estimate depth to groundwater for the Site within a 5-mile radius. The findings indicate that none of these borings show a depth to groundwater of less than 55 feet bgs.

Wells and/or soil borings with recent depth to groundwater data supporting a regional depth to groundwater greater than 100 feet bgs exist within the same 5-mile radius of the Site. However, Devon proposes to conservatively estimate depth to water at the Site to be between 51 feet and 100 feet bgs, based on the nearest and shallowest recent available depth to groundwater data. All referenced boring and/or well records are included in **Appendix B**.

The Site is located within a low karst potential area and all other potential receptors are not within the established buffers defined in NMAC 19.15.29.12. Receptor details from the site characterization are included in **Figure 1B** and **Figure 1C** in **Appendix A**.

Based on the results from the desktop review and the estimated depth to groundwater at the Site, Devon proposes the following Closure Criteria:

Constituents of Concern (COCs)	Laboratory Analytical Method	Closure Criteria <sup>†</sup>
Chloride	Environmental Protection Agency (EPA) 300.0	10,000 milligram per kilogram (mg/kg)
Total Petroleum Hydrocarbon (TPH)	EPA 8015 M/D	2,500 mg/kg
TPH-Gasoline Range Organics (GRO)+ TPH-Deisel Range Organics (DRO)	EPA 8015 M/D	1,000 mg/kg
Benzene	EPA 8260B	10 mg/kg
Benzene, Toluene, Ethylbenzene, Total Xylenes (BTEX)	EPA 8260B	50 mg/kg

<sup>†</sup>The reclamation concentration requirements of 600 mg/kg chloride and 100 mg/kg TPH apply to the top 4 feet of areas to be immediately reclaimed following remediation pursuant to NMAC 19.15.17.13.

## DEPTH TO GROUNDWATER VARIANCE REQUEST

The closest depth to groundwater data for determining the proposed Site Closure Criteria is a dry boring located 0.65 miles, which is 0.15 miles (792 feet) outside the NMOCD accepted buffer for depth to groundwater determination for Site Characterization. If a boring were to be advanced within the 0.5 mile of the Site, depth to groundwater is anticipated to be greater than 55 feet bgs based on all supporting regional depth to groundwater data. Scheduling such a soil boring would drastically increase the timeline to complete the project due to limited availability of drillers in addition to permitting and approval processes required to advance a boring. Furthermore, the Site is located in a designated low karst potential, which reduces the chance of unexpected or sudden changes in depth to groundwater and results in a more predictable depth to groundwater following surface topography. The release is located off pad and increasing the Site Closure Criteria will not inhibit vegetative growth between 0-4 feet bgs.

Devon believes this proposed variance to accept NMOSE permitted boring C-04712 and regional groundwater data for the affiliated Site Closure Criteria is equally protective of groundwater, public health, and the environment. If you have any questions or comments, please do not hesitate to contact Erick Herrera at (432) 305-6416 or [erick@etechnv.com](mailto:erick@etechnv.com) or Joseph S. Hernandez at (432) 305-6413 or [joseph@etechnv.com](mailto:joseph@etechnv.com).

Sincerely,  
Etech Environmental and Safety Solutions, Inc.



Erick Hererra  
Project Geologist



Joseph S. Hernandez  
Senior Managing Geologist

cc: Jim Raley, Devon  
New Mexico Oil Conservation Division  
Bureau of Land Management

**Appendices:**

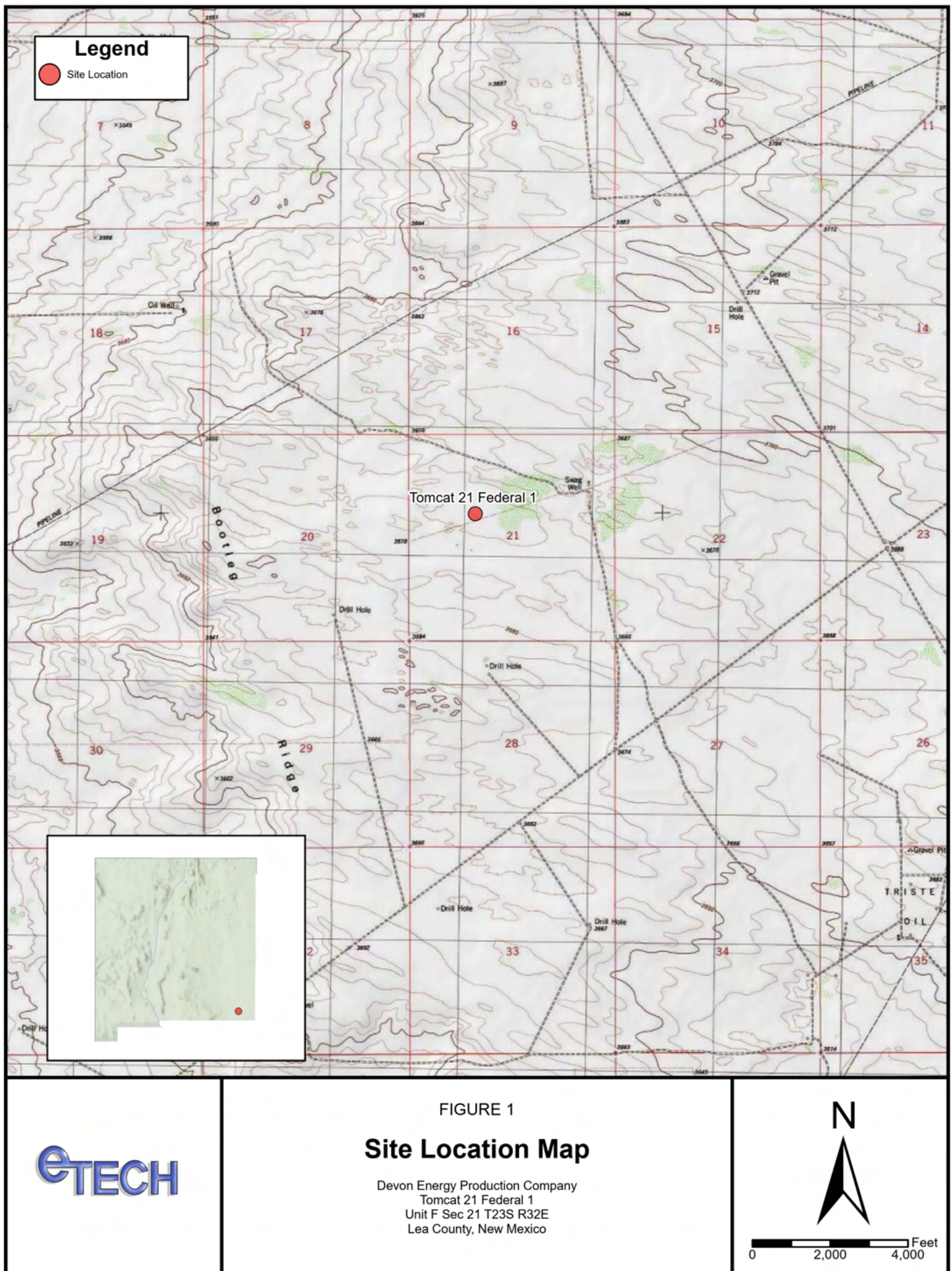
- Appendix A:** Figure 1: Site Map  
Figure 1A: Site Characterization Map – Groundwater  
Figure 1B: Site Characterization Map – Surficial Receptors  
Figure 1C: Site Characterization Map – Subsurface Receptors
- Appendix B:** Referenced Well Records



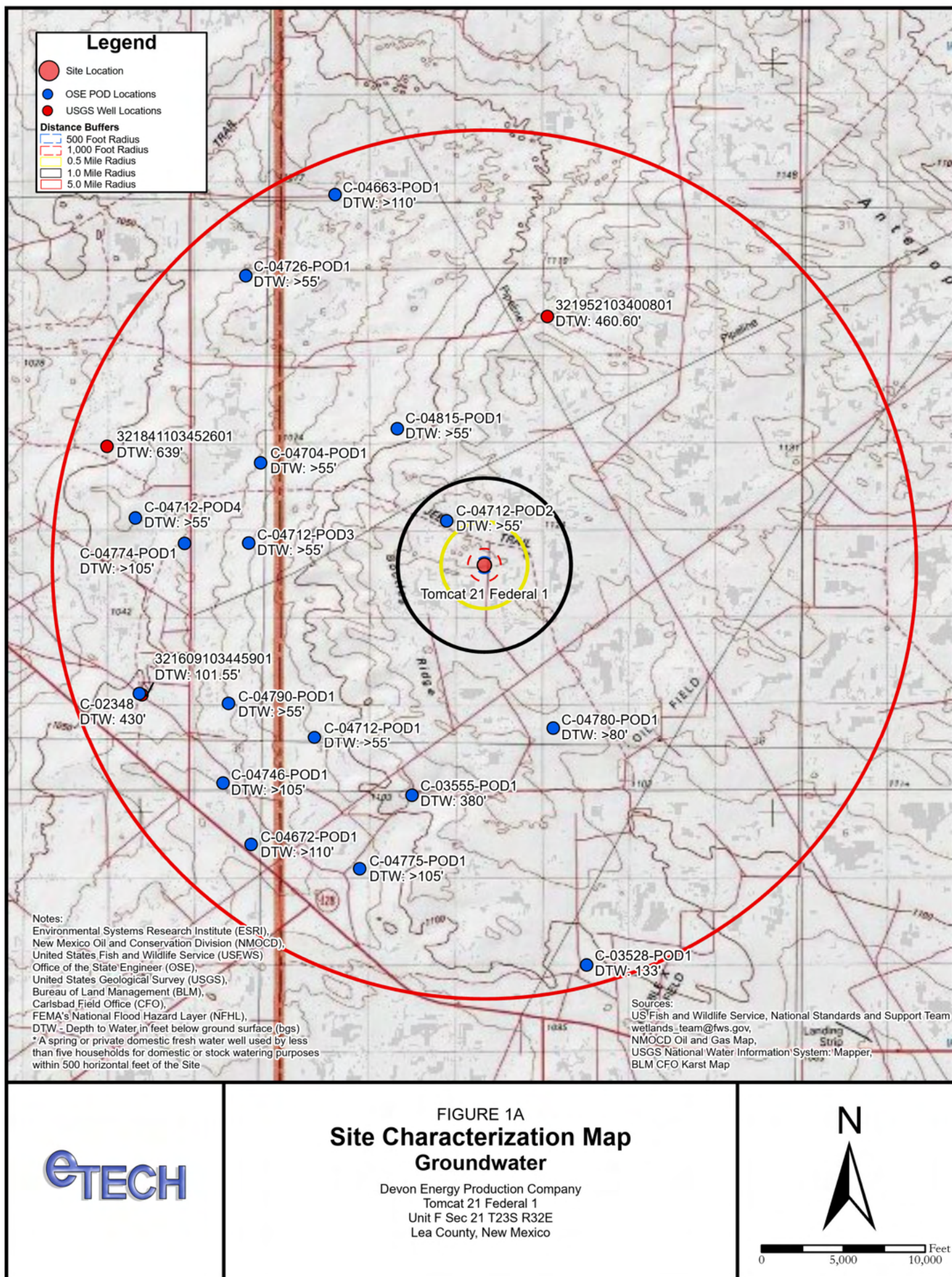
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# APPENDIX A

## Figures









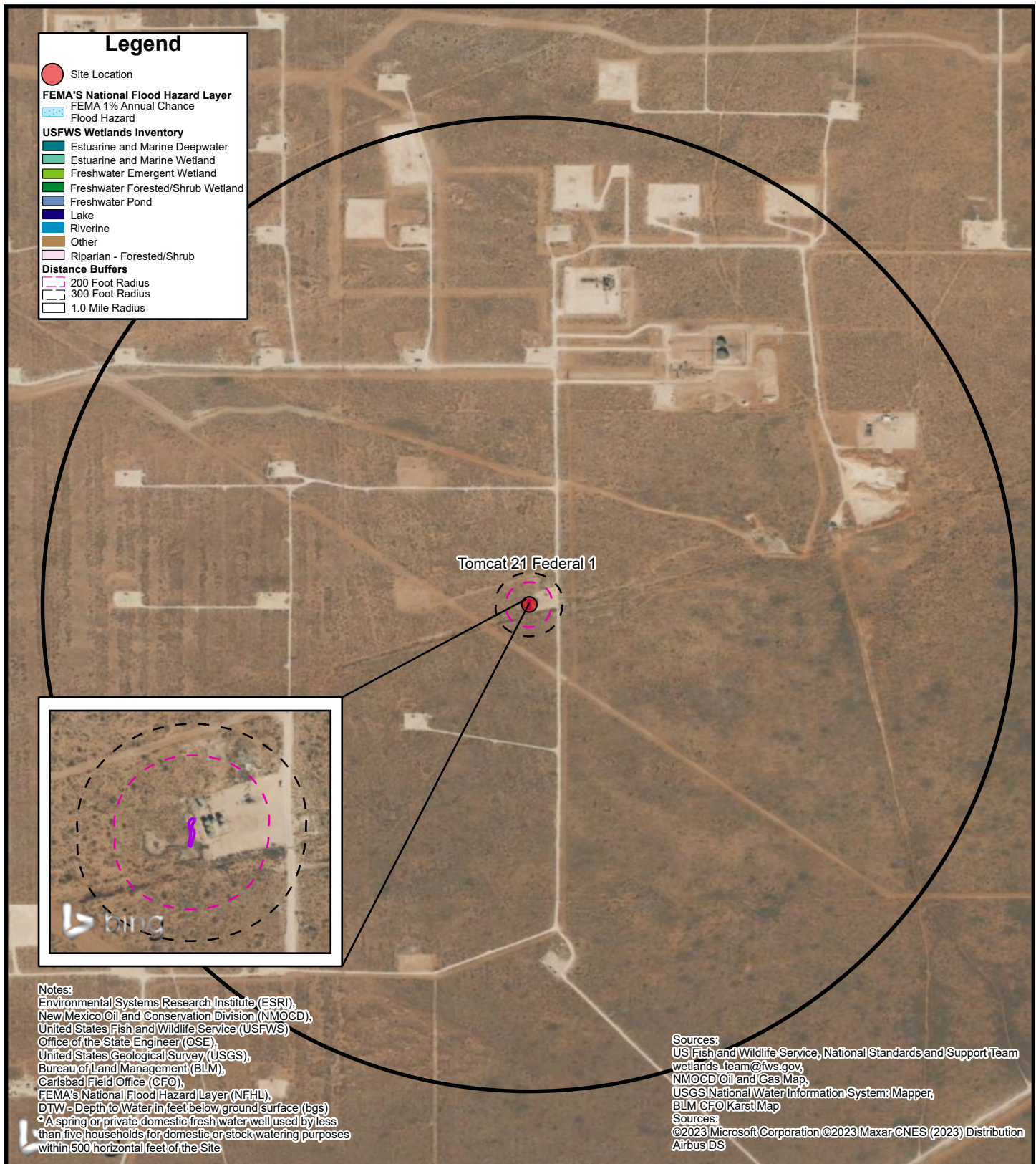
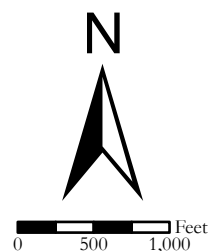
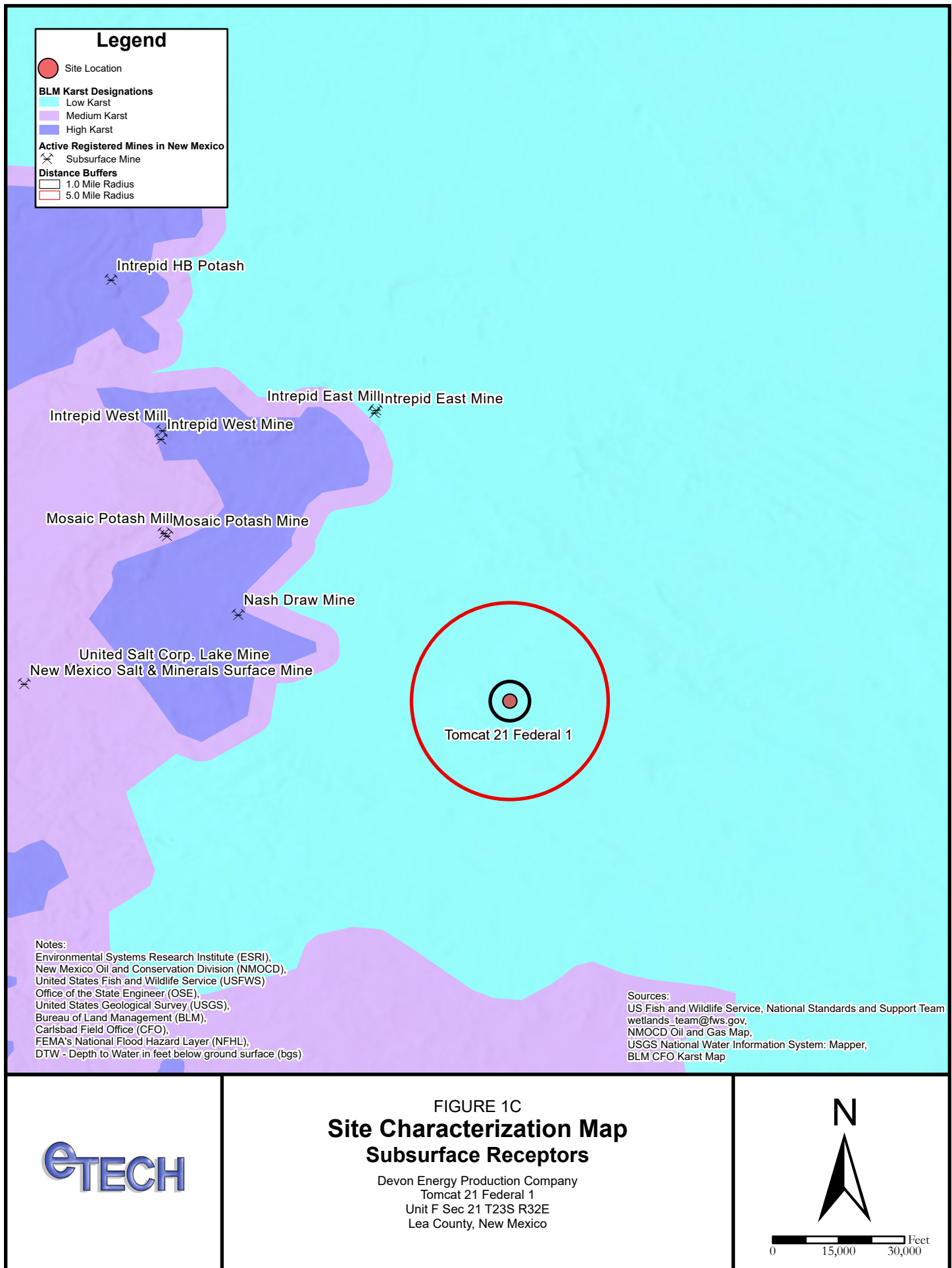


FIGURE 1B  
**Site Characterization Map  
 Surficial Receptors**

Devon Energy Production Company  
 Tomcat 21 Federal 1  
 Unit F Sec 21 T23S R32E  
 Lea County, New Mexico







---

## APPENDIX B

### Referenced Well Records



New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are smallest to largest)

(meters)

(In feet)

POD Number	Code	Sub basin	County	Q64	Q16	Q4	Sec	Tws	Range	X	Y	Map	Distance	Well Depth	Depth Water	Water Column
<a href="#">C 02216</a>		CUB	LE	NE	NE	SE	21	23S	32E	625035.0	3573261.0 *		1026	585	400	185
<a href="#">C 04712 POD2</a>		CUB	LE	SE	SE	SE	17	23S	32E	623331.9	3574331.5		1076	55		
<a href="#">C 03851 POD1</a>		CUB	LE	SW	SW	SE	20	23S	32E	622879.6	3572660.0		1447	1392	713	679
<a href="#">C 04815 POD1</a>		CUB	LE	NW	SE	SW	08	23S	32E	622391.9	3576025.7		2998	55		
<a href="#">C 04780 POD1</a>		CUB	LE	NW	SW	NW	34	23S	32E	625363.6	3570521.7		3278	80		
<a href="#">C 04807 POD1</a>		CUB	LE	NW	NE	NW	11	23S	32E	625605.4	3577401.0		4182	105		
<a href="#">C 04712 POD3</a>		CUB	ED	SE	NW	NE	24	23S	31E	619650.7	3573877.9		4405	55		
<a href="#">C 04712 POD1</a>		CUB	LE	NW	SE	NW	31	23S	32E	620917.2	3570289.2		4496	55		
<a href="#">C 04704 POD1</a>		CUB	ED	SW	NE	NE	13	23S	31E	619854.4	3575363.5		4574			
<a href="#">C 02349</a>		CUB	ED	SE	NE	SW	03	23S	32E	625677.9	3578003.4		4770	525		
<a href="#">C 04790 POD1</a>		CUB	ED	SE	SE	SW	25	23S	31E	619309.4	3570904.8		5408	55		
<a href="#">C 04774 POD1</a>		CUB	ED	SE	NE	NE	23	23S	31E	618456.0	3573856.4		5596	105		
<a href="#">C 04775 POD1</a>		CUB	LE	SE	SE	SE	06	24S	32E	621789.3	3567860.4		6093	105		
<a href="#">C 04746 POD1</a>		CUB	ED	SW	SE	SW	36	23S	31E	619225.7	3569417.8		6327	105		
<a href="#">C 04712 POD4</a>		CUB	ED	NW	SE	SW	14	23S	31E	617535.4	3574316.2		6554	55		
<a href="#">C 04672 POD 1</a>		CUB	ED	NE	NW	SE	01	24S	31E	619762.2	3568286.5		6762	110		
<a href="#">C 02275</a>		CUB	LE	SW	SW	NE	19	23S	33E	630843.0	3573557.0 *		6801	650	400	250
<a href="#">C 02276</a>		CUB	LE	SW	NW	SE	19	23S	33E	630848.0	3573154.0 *		6815	650	400	250
<a href="#">C 04726 POD1</a>		CUB	ED	NW	NW	SE	01	23S	31E	619538.3	3578821.3		6954			
<a href="#">C 02777</a>		CUB	ED	SE	SE	SE	10	23S	31E	616973.8	3575662.1		7385	890		
<a href="#">C 03749 POD1</a>		CUB	ED		NE	NE	15	23S	31E	616973.8	3575662.1		7385	865	639	226
<a href="#">C 04663 POD1</a>		CUB	LE	SW	NW	NE	31	22S	32E	621181.3	3580341.4		7395	110		
<a href="#">C 02350</a>		CUB	ED		SE	SW	10	24S	32E	625826.0	3566333.0 *		7407	60		
<a href="#">C 04551 POD1</a>		CUB	LE	SE	SE	SW	31	23S	33E	630671.0	3569556.5		7724			
<a href="#">C 02405</a>		CUB	ED		SE	NW	02	24S	31E	617690.0	3568631.0 *		8016	275	160	115

Average Depth to Water: 452 feet

Minimum Depth: **160 feet**

Maximum Depth: **713 feet**

---

**Record Count:** 25

**Basin/County Search:**

**Basin:** C

**Subbasin:** CUB

**UTM Filters (in meters):**

**Easting:** 624042

**Northing:** 3573522

**Radius:** 8047

\* 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.

---





## WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

**www.ose.state.nm.us**

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NO. (WELL NO.) <div style="border: 1px solid black; padding: 2px;">C-0412 1002</div>		WELL TAG ID NO.		OSE FILE NO(S). <div style="border: 1px solid black; padding: 2px;">C-4712</div>			
	WELL OWNER NAME(S) <div style="border: 1px solid black; padding: 2px;">Harvard Petroleum Company</div>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <div style="border: 1px solid black; padding: 2px;">P.O. Box 936</div>				CITY <div style="border: 1px solid black; padding: 2px;">Roswell</div>	STATE <div style="border: 1px solid black; padding: 2px;">NM</div>		
					ZIP <div style="border: 1px solid black; padding: 2px;">88202</div>			
	WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32		MINUTES 17	SECONDS 56.4 N		
		LONGITUDE -103		41	24.2 W			
* ACCURACY REQUIRED: ONE TENTH OF A SECOND								
* DATUM REQUIRED: WGS 84								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NO. <div style="border: 1px solid black; padding: 2px;">1833</div>		NAME OF LICENSED DRILLER <div style="border: 1px solid black; padding: 2px;">Jason Maley</div>		NAME OF WELL DRILLING COMPANY <div style="border: 1px solid black; padding: 2px;">Vision Resources</div>			
	DRILLING STARTED <div style="border: 1px solid black; padding: 2px;">3-9-2023</div>		DRILLING ENDED <div style="border: 1px solid black; padding: 2px;">3-9-2023</div>		DEPTH OF COMPLETED WELL (FT) <div style="border: 1px solid black; padding: 2px;">55</div>			
	BORE HOLE DEPTH (FT) <div style="border: 1px solid black; padding: 2px;">55</div>		DEPTH WATER FIRST ENCOUNTERED (FT) <div style="border: 1px solid black; padding: 2px;">Dry</div>					
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <div style="border: 1px solid black; padding: 2px;">Dry</div>			
					DATE STATIC MEASURED <div style="border: 1px solid black; padding: 2px;">Dry</div>			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
			None					
<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL <div style="border: 1px solid black; padding: 2px;">*(if using Centralizers for Artesian wells- indicate the spacing below)</div>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO. C-4712-PAD 2		POD NO. 2	TRN NO. 743189
LOCATION Mon 23.32.17.444			WELL TAG ID NO. _____



Released to Imaging: 12/3/2024 1:50:51 PM

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD2

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell





## WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

**www.ose.state.nm.us**

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <del>C-04815</del> <b>POD 1</b>		WELL TAG ID NO.		OSE FILE NO(S). <del>C-4815-POD1</del>					
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)					
	WELL OWNER MAILING ADDRESS 205 E. Bender Road #150				CITY Hobbs		STATE NM	ZIP 88240		
	WELL LOCATION (FROM GPS)	DEGREES 32		MINUTES 18	SECONDS 51.8	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
		LATITUDE								
		LONGITUDE		-103	41	59.4	W			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE										
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley				NAME OF WELL DRILLING COMPANY Vision Resources			
	DRILLING STARTED 4-16-24		DRILLING ENDED 4-16-24		DEPTH OF COMPLETED WELL (FT) 55'		BORE HOLE DEPTH (FT) 55'		DEPTH WATER FIRST ENCOUNTERED (FT) N/A	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) 0'		DATE STATIC MEASURED 4-16-24	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:									
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>			
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)		
	FROM	TO								
	0	45	6"	PVC 2" SCH40	Thread	2"	SCH40	N/A		
	45	55	6"	PVC 2" SCH40	Thread	2"	SCH40	.02		
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)		AMOUNT (cubic feet)	METHOD OF PLACEMENT			
	FROM	TO		None pulled and plugged						

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FOR USE INTERNAL USE		WK-20 WELL RECORD & LOG (VERSION 07/22/2022)	
FILE NO.	C-04815	POD NO.	1
LOCATION		TRN NO.	757440
135.32E.08.143		WELL TAG ID NO.	PAGE 1 OF 2



DEPTH (feet bgl)			THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <b>(attach supplemental sheets to fully describe all units)</b>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO				
0	10	10'	Brown sand with caliche	Y    ✓ N		
10	30	20'	Tan fine sand with small rock	Y    ✓ N		
30	55	25'	Tan fine sand	Y    ✓ N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
				Y    N		
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY: Dry hole				TOTAL ESTIMATED WELL YIELD (gpm): 0		

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
USE OIT APR 25 2024 PM2:37		
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Jason Maley		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE
	<div>Signature of Jason Maley</div> <div>Jason Maley</div>	<div>4/24/24</div> <div>DATE</div>

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-04815	POD NO. 1	TRN NO. 757440	
LOCATION 735 32 E. 08. 143	WELL TAG ID NO.		PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 757440  
File Nbr: C 04815  
Well File Nbr: C 04815 POD1

Apr. 25, 2024

CHANCE DIXON  
VERTEX RESOURCE SERVICES INC  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

Greetings:

The above numbered permit was issued in your name on 03/14/2024.

The Well Record was received in this office on 04/25/2024, stating that it had been completed on 04/16/2024, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 03/14/2025.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in cursive script, appearing to read "Rodolfo Chavez".

Rodolfo Chavez  
(575) 622-6521

drywell





## WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

**www.ose.state.nm.us**

[illegible]

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 01/28/2022)

FILE NO. C-04780

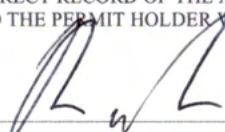
POD NO. |

TRN NO. 751921

LOCATION 235. 32E. 34. 131

WELL TAG ID NO.

PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
<b>4. HYDROGEOLOGIC LOG OF WELL</b>	0	5	5	RED SAND/CALICHE	Y    ✓ N		
	5	10	5	RED TAN SAND	Y    ✓ N		
	10	15	5	RED TAN SAND W/ CALICHE	Y    ✓ N		
	15	20	5	CALICHE W/ TAN SAND	Y    ✓ N		
	20	25	5	RED TAN SAND W/ CALICHE	Y    ✓ N		
	25	35	5	TAN SAND/SMALL CALICHE ROCK	Y    ✓ N		
	35	80	45	TAN/RED SAND W/ SMALL CALICHE ROCK	Y    ✓ N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):         0.00	
	<b>5. TEST; RIG SUPERVISION</b>	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION:  <div style="text-align: right;">QSE DOT NOV 7 2023 PM 1:38</div>							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
<b>6. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 <div style="text-align: center;">Bryce Wallace</div>				<div style="text-align: center;">11/01/23</div>		
SIGNATURE OF DRILLER / PRINT SIGNEE NAME				DATE			

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO. C-04780	POD NO. 1	TRN NO. 751921	
LOCATION 235.32E.34.131	WELL TAG ID NO.		PAGE 2 OF 2



Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751921  
File Nbr: C 04780  
Well File Nbr: C 04780 POD1

Nov. 14, 2023

BLAKE GROOMS  
EOG RESOURCES  
5509 CHAMPIONS DR.  
MIDLAND, TX 79705

Greetings:

The above numbered permit was issued in your name on 10/11/2023.

The Well Record was received in this office on 11/07/2023, stating that it had been completed on 10/27/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 10/10/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Rodolfo Chavez".

Rodolfo Chavez  
(575) 622-6521

drywell



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4712-POD3</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4712</b>		
	WELL OWNER NAME(S) <b>Harvard Petroleum Company</b>				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS <b>P.O. Box 936</b>				CITY <b>Roswell</b>	STATE <b>NM</b>	ZIP <b>88202</b>
	WELL LOCATION (FROM GPS)		DEGREES <b>32</b>	MINUTES <b>17</b>	SECONDS <b>43.1</b>	N	
		LONGITUDE <b>103</b>	<b>43</b>	<b>45.2</b>	W		* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							

2. DRILLING & CASING INFORMATION	LICENSE NO. <b>1833</b>		NAME OF LICENSED DRILLER <b>Jason Maley</b>		NAME OF WELL DRILLING COMPANY <b>Vision Resources</b>			
	DRILLING STARTED <b>3-9-2023</b>	DRILLING ENDED <b>3-9-2023</b>	DEPTH OF COMPLETED WELL (FT) <b>55</b>	BORE HOLE DEPTH (FT) <b>55</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>Dry</b>			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>Dry</b>		DATE STATIC MEASURED <b>Dry</b>	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:				CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>			
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	<b>0 45</b>		<b>8"</b>	<b>2" PVC Sch 40</b>	<b>Thread</b>	<b>2"</b>	<b>Sch 40</b>	<b>—</b>
<b>45 55</b>		<b>6"</b>	<b>2" PVC Sch 40 (screen)</b>	<b>Thread</b>	<b>2"</b>	<b>Sch 40</b>	<b>.02</b>	

3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT
				<b>None Pulled and Plugged</b>		

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO. <b>C-4712-POD3</b>	POD NO. <b>3</b>	TRN NO. <b>743189</b>
LOCATION <b>Mon 23.21.24.412</b>	WELL TAG ID NO. <b>—</b>	PAGE 1 OF 2



#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST: RIG SUPERVISION

## 6. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-4712-POD3	POD NO. 3	TRN NO. 743189	
LOCATION Neom 23.31.24.412		WELL TAG ID NO. —	PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD3

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

STATE ENGINEER OFFICE  
ROSVILLE, NM 88252

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>C-3555-POD1</b>			OSE FILE NUMBER <b>C-3555</b>			
	WELL OWNER NAME(S) <b>Mark McCloy - McCloy Ranches</b>			PHONE (OPTIONAL) <b>432-940-4459</b>			
	WELL OWNER MAILING ADDRESS <b>Box 1076 254 Diamond Road</b>			CITY STATE ZIP <b>Jal NM 88252</b>			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <b>32 15 12.71</b>	MINUTES <b>41</b>	SECONDS <b>49.24</b>	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>Hwy 128 mm 20 4 miles North - 1/4 east</b>							
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>1654</b>		NAME OF LICENSED DRILLER <b>John Sirman</b>		NAME OF WELL DRILLING COMPANY <b>Siemen Drilling &amp; Const. LLC</b>		
	DRILLING STARTED <b>10/20/13</b>		DRILLING ENDED <b>10/21/13</b>		DEPTH OF COMPLETED WELL (FT) <b>600'0"</b>		
	BORE HOLE DEPTH (FT) <b>600'0"</b>		DEPTH WATER FIRST ENCOUNTERED (FT) <b>475'0"</b>		STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>380'0"</b>		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)						
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	0 460		10	PVC	Certa-Lok	6	DR-17
	460 520		10	PVC	Certa-Lok	6	DR-17
	520 600		10	PVC	Certa-Lok	6"	DR-17
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	0 20		10	3/8 bentonite hole plug	6 Bags	gravity	
	34 600		10	3/8 pea gravel pack	4 yds	gravity	

FOR OSE INTERNAL USE

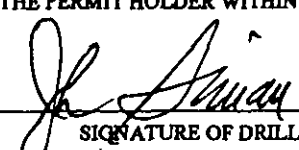
FILE NUMBER **C-3555** POD NUMBER **1** WR-20 WELL RECORD & LOG (Version 06/08/2012) TRN NUMBER **534311**

**24S.32E.05**

**1-2-2**

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	10	10	white caliche	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	10	60	50	Red sand	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	60	75	15	Brown sandstone	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	75	100	25	grey sandstone	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	100	110	10	Red clay	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	110	160	50	Brown sandstone	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	160	400	240	Red clay	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	400	450	50	Brown sandstone	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	450	475	25	Red clay	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
	475	550	75	Brown sandstone & sand	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N	5
	550	600	50	Red clay	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
		600			<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
					<input type="checkbox"/> Y <input type="checkbox"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="checkbox"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm): 5	
<input checked="" type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:						

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:  None	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:  None		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	<div style="display: flex; justify-content: space-between;"> <div>             SIGNATURE OF DRILLER / PRINT SIGNEE NAME         </div> <div>           John Skiman            DATE 11/3/13         </div> </div>	

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER	C-3555	POD NUMBER	1	TRN NUMBER	534311
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245.32E.05 1-2-2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4712 POD1</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4712</b>			
	WELL OWNER NAME(S) <b>Harvard Petroleum Company</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>PO Box 936</b>				CITY <b>Roswell</b>	STATE <b>NM</b>	ZIP <b>88202</b>	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <b>32</b>	MINUTES <b>15</b>	SECONDS <b>46.1</b>	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE <b>-103</b>	<b>42</b>	<b>58.4</b>	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. <b>1833</b>		NAME OF LICENSED DRILLER <b>Jason Maley</b>			NAME OF WELL DRILLING COMPANY <b>Vision Resources</b>		
	DRILLING STARTED <b>Mar 9, 2023</b>	DRILLING ENDED <b>3/9/23</b>	DEPTH OF COMPLETED WELL (FT) <b>55</b>	BORE HOLE DEPTH (FT) <b>55</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>Dry</b>			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>Dry</b>		DATE STATIC MEASURED <b>Dry</b>	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:				CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>			
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	<b>0 45</b>		<b>6</b>	<b>2" pvc sch 40</b>	<b>Thread</b>	<b>2"</b>	<b>sch 40</b>	<b>-</b>
	<b>45 55</b>		<b>6</b>	<b>2" pvc sch 40</b>	<b>Tread</b>	<b>2"</b>	<b>sch 40</b>	<b>.02</b>
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4712-POD1</b>	POD NO. <b>1</b>	TRN NO. <b>743189</b>
LOCATION <b>Mon 23.32.31.141</b>	WELL TAG ID NO. <b>-</b>	PAGE 1 OF 2



Released to Imaging: 12/3/2024 1:50:51 PM



Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD1

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson". The signature is fluid and cursive, with the first name "Maret" being more prominent.

Maret Thompson  
(575) 622-6521

drywell



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4704			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 18	SECONDS 31.26	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	43	36.7	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SW NE NE Sec.13 T23S R31E NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 4/11/23	DRILLING ENDED 4/11/23	DEPTH OF COMPLETED WELL (FT) Temporary Well Material		BORE HOLE DEPTH (FT) ±55	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 4/18/23		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0	55	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	METHOD OF PLACEMENT	
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. C-04704	POD NO. 1	TRN NO. 742173
LOCATION 28S. 31E. 13. 322	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	20	20	Sand, fine-grained, poorly graded, semi-consolidated, with caliche Tan/ white	Y    ✓ N	
	20	44	24	Sand, fine-grained, poorly graded, semi-consolidated, Tan/ Brown	Y    ✓ N	
	44	55	9	Sand, fine-grained, poorly graded, semi-consolidated, Reddish Brown	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					0.00	
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
	MISCELLANEOUS INFORMATION: Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. 35 Tomb Raider 12 CTB 1 <div style="text-align: right; color: gray;">QSE DIT APR 28 2023 PM 1:50</div>					
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge, Cameron Pruitt					
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:  <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="width: 30%;">             _____            SIGNATURE OF DRILLER / PRINT SIGNEE NAME         </div> <div style="width: 30%; text-align: center;">           Jackie D. Atkins             _____         </div> <div style="width: 30%; text-align: right;">           4/27/23             _____            DATE         </div> </div>					

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	C-04704	POD NO.	1
LOCATION		TRN NO.	742173
235.31E.13.322		WELL TAG ID NO	PAGE 2 OF 2



National Water Information System: Web Interface

USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

GO

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- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 321952103400801

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

USGS 321952103400801 23S.32E.03.311114

Lea County, New Mexico  
Latitude 32°19'59.2", Longitude 103°40'12.6" NAD83  
Land-surface elevation 3,648.00 feet above NGVD29  
The depth of the well is 630 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Santa Rosa Sandstone (231SNRS) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1976-12-09			D 62610		3227.43	NGVD29	1		Z	
1976-12-09			D 62611		3229.14	NAVD88	1		Z	
1976-12-09			D 72019	420.57			1		Z	
1981-03-26			D 62610		3209.66	NGVD29	P		Z	
1981-03-26			D 62611		3211.37	NAVD88	P		Z	
1981-03-26			D 72019	438.34			P		Z	
1981-05-21			D 62610		3210.33	NGVD29	1		Z	
1981-05-21			D 62611		3212.04	NAVD88	1		Z	
1981-05-21			D 72019	437.67			1		Z	
1986-04-17			D 62610		3209.32	NGVD29	1		Z	
1986-04-17			D 62611		3211.03	NAVD88	1		Z	
1986-04-17			D 72019	438.68			1		Z	
1991-05-30			D 62610		3210.07	NGVD29	1		Z	
1991-05-30			D 62611		3211.78	NAVD88	1		Z	
1991-05-30			D 72019	437.93			1		Z	
1992-11-05			D 62610		3209.88	NGVD29	1		S	
1992-11-05			D 62611		3211.59	NAVD88	1		S	



Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1992-11-05			D	72019	438.12			1	S	
1996-03-15			D	62610	3210.18	NGVD29		1	S	
1996-03-15			D	62611	3211.89	NAVD88		1	S	
1996-03-15			D	72019	437.82			1	S	
2013-01-17	01:00 UTC		m	62610	3161.40	NGVD29		P	S	USGS
2013-01-17	01:00 UTC		m	62611	3163.11	NAVD88		P	S	USGS
2013-01-17	01:00 UTC		m	72019	486.60			P	S	USGS

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

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



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2024-09-05 14:59:20 EDT  
0.34   0.25 nadww01



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE 011 FEB 26 2024 PM 2:04

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C4790-POD1		WELL TAG ID NO. C4790		OSE FILE NO(S). C04790			
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 205 E Bender Road #150				CITY Hobbs	STATE NM	ZIP 88240	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 16	SECONDS 6.708 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
LONGITUDE -103 43 59.556 W								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources		
	DRILLING STARTED 2-6-24	DRILLING ENDED 2-6-24	DEPTH OF COMPLETED WELL (FT) 55'	BORE HOLE DEPTH (FT) 55'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 0'	DATE STATIC MEASURED 2-10-24		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:					CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	45'	6"	2" PVC SCH40	Thread	2"	SCH40	N/A
	45'	55'	6"	2" PVC SCH40	Thread	2"	SCH40	.02
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				None Pulled and plugged				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. C-04790	POD NO. 1	TRN NO. 753931
LOCATION 235.31E.25.443	WELL TAG ID NO.	PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL					
DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <i>(attach supplemental sheets to fully describe all units)</i>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
FROM	TO				
0	40'	40'	Red dirt with small rocks	Y    ✓ N	
40'	55'	15'	Tan fine sand with small rocks	Y    ✓ N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
				Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY: Dry				TOTAL ESTIMATED WELL YIELD (gpm): 0	

5. TEST; RIG SUPERVISION	
WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
MISCELLANEOUS INFORMATION:	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE
THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:
SIGNATURE OF DRILLER / PRINT SIGNEE NAME

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO.	C-04790	POD NO.	TRN NO. 753931
LOCATION	735.31E.25.443	WELL TAG ID NO	PAGE 2 OF 2



# WELL RECORD & LOG *Todd 23 Fed*

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <del>C-4774</del> POD 1		WELL TAG ID NO. <b>NA</b>		OSE FILE NO(S). C04774		
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 205 E. Bender Road # 150				CITY STATE ZIP Hobbs NM 88210		
	WELL LOCATION (FROM GPS)	DEGREES 32		MINUTES 17	SECONDS 42.8604	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LATITUDE		LONGITUDE			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							

2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources		
	DRILLING STARTED 12-14-23		DRILLING ENDED 12-14-23		DEPTH OF COMPLETED WELL (FT) 105'	BORE HOLE DEPTH (FT) 105'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED) <small>Centralizer info below</small>					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	DATE STATIC MEASURED 12-17-23	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	95'	6"	2" PVC SCH40	Thread	2'	SCH40	N/A
	95'	105'	6"	2" PVC SCH40	Thread	2'	SCH40	.02

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL <i>*(if using Centralizers for Artesian wells- indicate the spacing below)</i>	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
				None Pulled and Plugged		

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO. <b>C-4774-POD 1</b>	POD NO. <b>1</b>	TRN NO. <b>751178</b>
LOCATION <b>Exp 23.31.23.422</b>		WELL TAG ID NO. <b>_____</b>

PAGE 1 OF 2

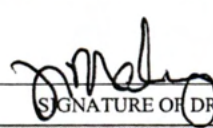


4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	5'	5'	Brown sand with coarse rock	Y    ✓ N	
	5'	30'	25'	Tan fine sand with coarse rock	Y    ✓ N	
	30'	105'	75'	Brown sand mixed with clay	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:					TOTAL ESTIMATED WELL YIELD (gpm):	
<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY: Dry hole					Dry	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION:	
USE DJJ JAN 12 2024 PM 1:52		
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME	Jason Maley DATE 1/10/24

FOR USE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO.	POD NO.	TRN NO.
LOCATION	WELL TAG ID NO.	PAGE 2 OF 2

Mike A. Hamman, P.E.  
State Engineer



Well Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751178  
File Nbr: C 04774  
Well File Nbr: C 04774 POD1

Jan. 12, 2024

DALE WOODALL  
DEVON ENGERGY RESOURCES  
205 E BENDER ROAD #150  
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 09/19/2023.

The Well Record was received in this office on 01/12/2024, stating that it had been completed on 12/14/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/18/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

*Mesa Verde bed*

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <b>C-4775 POD1</b>		WELL TAG ID NO. <b>NA</b>		OSE FILE NO(S). C04775			
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 205 E. Bender Road # 150				CITY Hobbs	STATE NM	ZIP 88240	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 14	SECONDS 26.8944	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE -103	42	26.1864	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources		
	DRILLING STARTED 12-14-23		DRILLING ENDED 12-14-23		DEPTH OF COMPLETED WELL (FT) 105'	BORE HOLE DEPTH (FT) 105'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) Dry	DATE STATIC MEASURED 12-18-23	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	0 95'		6"	2" PVC SCH40	Thread	2"	SCH40	N/A
	95' 105'		6"	2" PVC SCH40	Thread	2"	SCH40	.05
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE- RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)		AMOUNT (cubic feet)	METHOD OF PLACEMENT	
				None Pulled and Plugged				

OSE OIT JAN 12 2024 PM 1:53

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4775-POD1</b>	POD NO. <b>1</b>	TRN NO. <b>751179</b>
LOCATION <b>Expt 24.32.06.444</b>		WELL TAG ID NO. <b>NA</b>
		PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)	
	FROM	TO					
	0	10'	10'	Red coarse sand	Y    ✓ N		
	10'	30'	20'	Tan Fine sand wih coarse rock	Y    ✓ N		
	30'	40'	10'	Red sand with white caliche	Y    ✓ N		
	40'	60'	20'	Tan sand with white caliche	Y    ✓ N		
	60'	80'	20'	Red sand with small rock	Y    ✓ N		
	80'	105'	25'	Tan fine sand with caliche	Y    ✓ N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
					Y    N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY: Dry					TOTAL ESTIMATED WELL YIELD (gpm): 0	
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION:							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	<div style="display: flex; justify-content: space-between;"><div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div><div>DATE</div></div>						

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO.	C-4775-70A 1	POD NO.	1
LOCATION		TRN NO.	751179
Fral 2432.06.444		WELL TAG ID NO.	—
		PAGE 2 OF 2	



Mike A. Hamman, P.E.  
State Engineer



well Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 751179  
File Nbr: C 04775  
Well File Nbr: C 04775 POD1

Jan. 12, 2024

DALE WOODALL  
DEVON ENERGY RESOURCES  
205 E BENDER ROAD #150  
HOBBS, NM 88240

Greetings:

The above numbered permit was issued in your name on 09/19/2023.

The Well Record was received in this office on 01/12/2024, stating that it had been completed on 12/14/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/18/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) <del>C-4746</del> POD 1		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4746</b>		
	WELL OWNER NAME(S) Devon Energy Resources				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 205 E Bender Road #150				CITY Hobbs	STATE NM	ZIP 88240
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 15'	SECONDS 18.5" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. 1833		NAME OF LICENSED DRILLER Jason Maley			NAME OF WELL DRILLING COMPANY Vision Resources	
	DRILLING STARTED 6-1-23		DRILLING ENDED 6-1-23	DEPTH OF COMPLETED WELL (FT) 105'	BORE HOLE DEPTH (FT) 105'	DEPTH WATER FIRST ENCOUNTERED (FT) Dry	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) Dry	DATE STATIC MEASURED	
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:				CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>		
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	0 100		6	2" PVC SCH 40	Thread	2"	SCH 40
	100 105		6	2" PVC SCH 40	Thread	2"	SCH 40
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL *(if using Centralizers for Artesian wells- indicate the spacing below)	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
				None pulled and plugged			

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 09/22/2022)

FILE NO. <b>C-4746</b>	POD NO. <b>1</b>	TRN NO. <b>147203</b>
LOCATION <b>235. 31E. 36 3 4 3</b>	WELL TAG ID NO. <b>NA</b>	PAGE 1 OF 2



#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST: RIG SUPERVISION

## 6. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-4746	POD NO. 1	TRN NO. 747 203	
LOCATION 235-31E 36 343	WELL TAG ID NO. NA	PAGE 2 OF 2	





## WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

**www.ose.state.nm.us**

OSE POD NO. (WELL NO.) <b>C-4712</b>		WELL TAG ID NO.		OSE FILE NO(S). <b>C-4712</b>	
WELL OWNER NAME(S) <b>Harvard Petroleum Company</b>				PHONE (OPTIONAL)	
WELL OWNER MAILING ADDRESS <b>PO Box 936</b>				CITY <b>Roswell</b>	STATE ZIP <b>NM 88202</b>

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	N	W	NOTES
LATITUDE	<b>32</b>	<b>17</b>	<b>58.2</b>			* ACCURACY REQUIRED: ONE TENTH OF A SECOND
LONGITUDE	<b>103</b>	<b>45</b>	<b>05.8</b>			* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

LICENSE NO. <b>1833</b>		NAME OF LICENSED DRILLER <b>Jasen Mahay</b>		NAME OF WELL DRILLING COMPANY <b>Vision Resources</b>	
DRILLING STARTED <b>3/9/23</b>	DRILLING ENDED <b>3/9/23</b>	DEPTH OF COMPLETED WELL (FT) <b>55</b>	BORE HOLE DEPTH (FT) <b>55</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>Dry</b>	
COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN *add Centralizer info below <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) DATE STATIC MEASURED	
DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:				<b>Dry</b>	
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:				CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	

DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
FROM	TO						
<b>0</b>	<b>45</b>	<b>6</b>	<b>2" pvc sch 40</b>	<b>Thread</b>	<b>2"</b>	<b>sch 40</b>	<b>-</b>
<b>45</b>	<b>55</b>	<b>6</b>	<b>2" pvc sch 40</b>	<b>Thread</b>	<b>2"</b>	<b>sch 40</b>	<b>.02</b>

**USE DTI APR 4 2023 PM 1:23**

DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL <small>*(if using Centralizers for Artesian wells- indicate the spacing below)</small>	AMOUNT (cubic feet)	METHOD OF PLACEMENT
FROM	TO				
			<b>None Pulled And Plugged</b>		

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 09/22/2022)

FILE NO. C-4712-P0D4	POD NO. 4	TRN NO. 743189
LOCATION Mon 23.31.14.143	WELL TAG ID NO. —	PAGE 1 OF 2



#### 4. HYDROGEOLOGIC LOG OF WELL

## 5. TEST: RIG SUPERVISION

## 6. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 09/22/2022)	
FILE NO. C-4712-PDD 4	POD NO. 4	TRN NO. 743189	
LOCATION Wagon 23.31.14.143	WELL TAG ID NO. —	PAGE 2 OF 2	

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

**STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER**

Trn Nbr: 743189  
File Nbr: C 04712  
Well File Nbr: C 04712 POD4

Apr. 04, 2023

VERTEX RESOURCES  
P.O. BOX 936  
ROSWELL, NM 88202

Greetings:

The above numbered permit was issued in your name on 02/21/2023.

The Well Record was received in this office on 04/04/2023, stating that it had been completed on 03/09/2023, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 02/21/2024.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in black ink, appearing to read "Maret Thompson".

Maret Thompson  
(575) 622-6521

drywell





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-04672 POD 1		WELL TAG ID NO.		OSE FILE NO(S). C-04672			
	WELL OWNER NAME(S) OXY US INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS PO BOX 4294				CITY HOUSTON	STATE TX	ZIP 77210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 14	SECONDS 41.51	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE -103	43	43.43	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE PROXIMITY 31								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1184		NAME OF LICENSED DRILLER RUSSELL SOUTHERLAND			NAME OF WELL DRILLING COMPANY WEST TEXAS WATER WELL SERVICE		
	DRILLING STARTED 09/01/2022		DRILLING ENDED 09/01/2022		DEPTH OF COMPLETED WELL (FT) 110	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
				NO CASING IN HOLE				
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

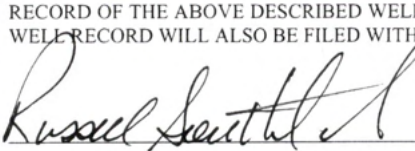
FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. <u>C-4672</u>	POD NO. <u>1</u>	TRN NO. <u>134614</u>
LOCATION <u>245. 31E. 01 214</u>	WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	10		RED SAND, TOPSOIL	Y    ✓ N	
	10	20		CALICHE	Y    ✓ N	
	20	37		RED SANDY CLAY	Y    ✓ N	
	37	40		SANDSTONE	Y    ✓ N	
	40	50		LIGHT RED SANDY CLAY	Y    ✓ N	
	50	78		RED CLAY W/ SANDSTONE	Y    ✓ N	
	78	88		RED CLAY	Y    ✓ N	
	88	91		SANDSTONE	Y    ✓ N	
	91	93		RED CLAY	Y    ✓ N	
	93	100		SANDSTONE	Y    ✓ N	
	100	110		RED SANDSTONE	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER – SPECIFY: DRY HOLE					TOTAL ESTIMATED WELL YIELD (gpm):            0.00	

5. TEST, RIG SUPERVISION	WELL TEST		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
MISCELLANEOUS INFORMATION:			
			05E DTI SEP 26 2022 PM3:23
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: RUSSELL SOUTHERLAND			

6. SIGNATURE		
 _____ SIGNATURE OF DRILLER / PRINT SIGNEE NAME	RUSSELL SOUTHERLAND	09/01/2022
		DATE

FOR USE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO.	C-4672	POD NO.	1
LOCATION		TRN NO.	734614
245 31E 01 214		WELL TAG ID NO.	PAGE 2 OF 2





Mike A. Hamman, P.E.  
State Engineer

Roswell Office  
1900 WEST SECOND STREET  
ROS WELL, NM 88201

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER

Trn Nbr: 734614  
File Nbr: C 04672  
Well File Nbr: C 04672 POD 1

Oct. 04, 2022

BEAUX JENNINGS  
ENSOLUM LLC  
601 N. MARIENFELD ST SUITE 400  
MIDLAND, TX 79701

Greetings:

The above numbered permit was issued in your name on 09/22/2022.

The Well Record was received in this office on 09/26/2022, stating that it had been completed on 09/01/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/22/2023.

If you have any questions, please feel free to contact us.

Sincerely,

A handwritten signature in cursive script that reads "Vanessa Clements".

Vanessa Clements  
(575) 622-6521

drywell

Mike A. Hamman, P.E.  
State Engineer



Roswell Office  
1900 WEST SECOND STREET  
ROSWELL, NM 88201

STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER

Trn Nbr: 734614  
File Nbr: C 04672  
Well File Nbr: C 04672 POD 1

Oct. 04, 2022

WADE DITTRICH  
OXY USA INC.  
P.O. BOX 4294  
HOUSTON, TX 77210

Greetings:

The above numbered permit was issued in your name on 09/22/2022.

The Well Record was received in this office on 09/26/2022, stating that it had been completed on 09/01/2022, and was a dry well. The well is to be plugged according to 19.27.4.30 NMAC.

Please note that another well can be drilled under this permit if the well is completed and the well log filed on or before 09/22/2023.

If you have any questions, please feel free to contact us.

Sincerely,

  
Vanessa Clements  
(575) 622-6521

drywell

National Water Information System: Web Interface

USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
United States

GO

Click to hideNews Bulletins

- Explore the NEW [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs

site\_no list =

- 321609103445901

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

USGS 321609103445901 23S.31E.26.34411

Eddy County, New Mexico  
Latitude 32°16'11.9", Longitude 103°45'01.2" NAD83  
Land-surface elevation 3,451.00 feet above NGVD29  
The depth of the well is 365 feet below land surface.  
This well is completed in the Other aquifers (N9999OTHER) national aquifer.  
This well is completed in the Dewey Lake Redbeds (312DYLK) local aquifer.

Output formats

<a href="#">Table of data</a>
<a href="#">Tab-separated data</a>
<a href="#">Graph of data</a>
<a href="#">Reselect period</a>

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1959-02-04			D 62610		3194.13	NGVD29	P		Z	
1959-02-04			D 62611		3195.83	NAVD88	P		Z	
1959-02-04			D 72019	256.87			P		Z	
1972-09-20			D 62610		3200.53	NGVD29	1		Z	
1972-09-20			D 62611		3202.23	NAVD88	1		Z	
1972-09-20			D 72019	250.47			1		Z	
1988-03-17			D 62610		3201.98	NGVD29	1		S	
1988-03-17			D 62611		3203.68	NAVD88	1		S	
1988-03-17			D 72019	249.02			1		S	
2013-01-17	00:00 UTC		m 62610		3349.45	NGVD29	P		S	USGS
2013-01-17	00:00 UTC		m 62611		3351.15	NAVD88	P		S	USGS
2013-01-17	00:00 UTC		m 72019	101.55			P		S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day

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

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[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)  
**Title: Groundwater for USA: Water Levels**  
**URL: <https://nwis.waterdata.usgs.gov/nwis/gwlevels?>**



Page Contact Information: [USGS Water Data Support Team](#)  
Page Last Modified: 2024-09-05 18:12:37 EDT  
0.31 0.22 nadww01





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>C-2348-</b>			OSE FILE NUMBER(S) <b>113 NOV - 71A II. 11</b> <b>C-2348</b>						
	WELL OWNER NAME(S) <b>MARK McCloy - McCloy Ranches</b>			PHONE (OPTIONAL) <b>432-940-4459</b>						
	WELL OWNER MAILING ADDRESS <b>P.O. Box 1076 254 Diamond Rd</b>			CITY <b>Tal</b> STATE <b>NM</b> ZIP <b>88252</b>						
	WELL LOCATION (FROM GPS)			* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84						
	DEGREES	MINUTES	SECONDS							
	LATITUDE	<b>32</b>	<b>16</b>	<b>12.91</b>	N					
	LONGITUDE	<b>103</b>	<b>45</b>	<b>03.61</b>	W					
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>Hwy 128 to 18 mm 1 mile N 1 mile west on Red Road</b>										
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>1654</b>		NAME OF LICENSED DRILLER <b>John Sireman</b>		NAME OF WELL DRILLING COMPANY <b>Sireman Drilling + Const. LLC</b>					
	DRILLING STARTED <b>10/31/13</b>		DRILLING ENDED <b>11/1/13</b>		DEPTH OF COMPLETED WELL (FT) <b>700'-0</b>					
	BORE HOLE DEPTH (FT) <b>700'-0</b>		DEPTH WATER FIRST ENCOUNTERED (FT) <b>575'-600</b>		STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>430'-0</b>					
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)									
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:									
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input checked="" type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:									
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)		CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO								
	<b>0</b>	<b>560</b>	<b>10</b>	<b>PVC</b>	<b>Certa-lok</b>	<b>6</b>	<b>DR-17</b>	<b>Blank</b>		
	<b>560</b>	<b>620</b>	<b>10</b>	<b>PVC</b>	<b>Certa Lok</b>	<b>6</b>	<b>DR-17</b>	<b>1032 screen</b>		
<b>620</b>	<b>680</b>	<b>10</b>	<b>PVC</b>	<b>Certa Lok</b>	<b>6</b>	<b>DR-17</b>	<b>Blank</b>			
<b>680</b>	<b>700</b>	<b>10</b>	<b>PVC</b>	<b>Certa Lok</b>	<b>6</b>	<b>DR-17</b>	<b>1032 screen</b>			
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)		LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)		METHOD OF PLACEMENT	
	FROM	TO								
	<b>0</b>	<b>20</b>	<b>10</b>		<b>3/8 bentonite hole plug</b>	<b>6 bags</b>	<b>gravity</b>			
	<b>67</b>	<b>700</b>	<b>10</b>		<b>3/8 pea gravel</b>	<b>5 yds</b>	<b>gravity</b>			

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER **C-2348**

POD NUMBER **1**

TRN NUMBER **491413**

LOCATION **C**

**235.31E.26.3-4-1**

**Livestock**

*Released to Imaging: 12/3/2024 1:50:51 PM*



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

OSE DJJ APR 27 2023 PM 3:24

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD 1 (TW-1)		WELL TAG ID NO. N/A		OSE FILE NO(S). C-4726			
	WELL OWNER NAME(S) Devon Energy				PHONE (OPTIONAL) 575-748-1838			
	WELL OWNER MAILING ADDRESS 6488 7 Rivers Hwy				CITY Artesia	STATE NM	ZIP 88210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 20	SECONDS 23.65	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	43	47.22	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW L2 Sec.1 T23S R31E NMPM								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 4/17/23		DRILLING ENDED 4/17/23		DEPTH OF COMPLETED WELL (FT) Temporary Well Material		BORE HOLE DEPTH (FT) ±55	
	DEPTH WATER FIRST ENCOUNTERED (FT) N/A		COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)		STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		DATE STATIC MEASURED 4/25/23	
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger						CHECK HERE IF PITLESS ADAPTER IS INSTALLED <input type="checkbox"/>	
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	55	±6.25	Soil Boring	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

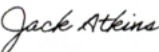
WR-20 WELL RECORD & LOG (Version 01/28/2022)

FILE NO. <b>C-04726</b>	POD NO. <b>1</b>	TRN NO. <b>745169</b>
LOCATION <b>23S. 31E. 01. 114</b>	WELL TAG ID NO.	PAGE 1 OF 2



4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
	0	9	9	Sand, medium-fine grained, poorly, graded, unconsolidated, brown	Y    ✓ N	
	9	14	5	Sand, medium-fine grained, poorly, graded, semi-consolidated, brown	Y    ✓ N	
	14	20	6	Sand, medium-fine grained, poorly, graded, unconsolidated, tan	Y    ✓ N	
	20	45	25	Sand, fine grained, poorly, graded, unconsolidated, tan	Y    ✓ N	
	45	55	10	Clay, stiff, with very-fine silt, reddish brown	Y    ✓ N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
					Y    N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):                      0.00	

5. TEST; RIG SUPERVISION	WELL TEST		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
MISCELLANEOUS INFORMATION:			Temporary well material removed and soil boring backfilled using drill cuttings from total depth to ten feet below ground surface(bgs), then hydrated bentonite chips ten feet bgs to surface. 10 Tomb Raider 1 Fed 1 <div style="text-align: right; color: gray;">USE ON APR 27 2023 PM 3:24</div>
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:			
Shane Eldridge, Cameron Pruitt			

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:	
<div style="display: flex; justify-content: space-between;"> <div>  </div> <div>           Jackie D. Atkins         </div> <div>           4/26/23         </div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div>SIGNATURE OF DRILLER / PRINT SIGNEE NAME</div> <div>DATE</div> </div>		

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 01/28/2022)	
FILE NO.	C-04726	POD NO.	1
LOCATION		TRN NO.	745169
735. 31E. 01. 114		WELL TAG ID NO.	PAGE 2 OF 2





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) C-04663 POD 1		WELL TAG ID NO.		OSE FILE NO(S). C-04663			
	WELL OWNER NAME(S) OXY US INC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS PO BOX 4294				CITY HOUSTON	STATE TX	ZIP 77210	
	WELL LOCATION (FROM GPS)	DEGREES 32	MINUTES 21	SECONDS 12.43	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE -103	42	43.74	W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE PROXIMITY 31								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1184		NAME OF LICENSED DRILLER RUSSELL SOUTHERLAND			NAME OF WELL DRILLING COMPANY WEST TEXAS WATER WELL SERVICE		
	DRILLING STARTED 09/01/2022	DRILLING ENDED 09/01/2022	DEPTH OF COMPLETED WELL (FT) 110	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
				NO CASING IN HOLE				
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
				N/A				

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. C-04663	POD NO. 1	TRN NO. 732427
LOCATION 22S. 32E. 31. 3. 1. 2	WELL TAG ID NO. —	PAGE 1 OF 2

	DEPTH (feet bgl)							THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <b>(attach supplemental sheets to fully describe all units)</b>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM		TO								
	0		10						RED SAND	Y    ✓ N	
	10		14						CALICHIE	Y    ✓ N	
	14		17						RED SAND	Y    ✓ N	
	17		40						RED SANDY CLAY	Y    ✓ N	
	40		90						SANDSTONE	Y    ✓ N	
	90		97						RED CLAY	Y    ✓ N	
	97		100						SANDSTONE	Y    ✓ N	
	100		110						RED CLAY WITH SANDSTONE	Y    ✓ N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
										Y    N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:								TOTAL ESTIMATED WELL YIELD (gpm):	0.00	
	<input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER – SPECIFY: DRY HOLE										
5. TEST; RIG SUPERVISION	WELL TEST		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.								
	MISCELLANEOUS INFORMATION:  										
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: RUSSELL SOUTHERLAND										
	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.  Russell Southerland Russell Southerland SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE 09/01/2022										

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO. C-04663	POD NO. 1	TRN NO. 732427	
LOCATION 775.32E, 31.3.1.2	WELL TAG ID NO. _____	PAGE 2 OF 2	





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

4-23-12  
Corrected well log

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER) C-03528-POD1				OSE FILE NUMBER(S) C-03528-POD1			
	WELL OWNER NAME(S) MARK & ANNETTE MCCLOY				PHONE (OPTIONAL) 432-940-4459			
	WELL OWNER MAILING ADDRESS PO BOX 1076				CITY JAL		STATE NM	
					ZIP 88252			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 13	SECONDS 29.00 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	39	44.60 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS Coordinates Based on map (Non-GPS)								
2. OPTIONAL	(2.5 ACRE) NW 1/4	(10 ACRE) NW 1/4	(40 ACRE) NW 1/4	(160 ACRE) NE 1/4	SECTION 15	TOWNSHIP 24	RANGE 32	<input type="checkbox"/> NORTH <input checked="" type="checkbox"/> EAST <input checked="" type="checkbox"/> SOUTH <input type="checkbox"/> WEST
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY					MAP NUMBER		TRACT NUMBER
3. DRILLING INFORMATION	LICENSE NUMBER WD1682		NAME OF LICENSED DRILLER JOHN NORRIS			NAME OF WELL DRILLING COMPANY HUNGRY HORSE, LLC		
	DRILLING STARTED 2-20-12		DRILLING ENDED 3-12-12		DEPTH OF COMPLETED WELL (FT) 541	BORE HOLE DEPTH (FT) 541	DEPTH WATER FIRST ENCOUNTERED (FT) 133	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT)	
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (FT) FROM TO		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
	0 541		8 3/4	PVC	GLUED	6"	3/8	1/8
4. WATER BEARING STRATA	DEPTH (FT) FROM TO		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)				YIELD (GPM)
	133 152		19	SAND				UK
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA N/A							TOTAL ESTIMATED WELL YIELD (GPM)	

FOR OSE INTERNAL USE

WELL RECORD &amp; LOG (Version 6/9/08)

FILE NUMBER	C-3528	POD NUMBER	C-03528-POD1	TRN NUMBER	491386
LOCATION	24-32-15.211				PAGE 1 OF 2

<b>5. SEAL AND PUMP</b>	TYPE OF PUMP: <input type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> JET <input type="checkbox"/> NO PUMP - WELL NOT EQUIPPED <input type="checkbox"/> TURBINE <input type="checkbox"/> CYLINDER <input type="checkbox"/> OTHER - SPECIFY: UNKNOWN						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		0	20				

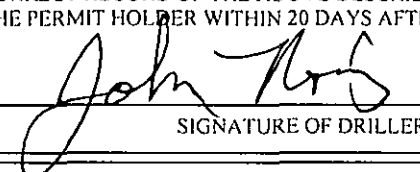
  

<b>6. GEOLOGIC LOG OF WELL</b>	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?
	FROM	TO			
	0	3	3	TOPSOIL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	3	18	15	CALICHE	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	18	26	8	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	26	133	107	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	133	152	19	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	152	318	166	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	318	345	27	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	345	384	39	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	384	418	34	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	418	444	26	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	444	468	24	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	468	500	32	RED CLAY	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
	500	508	8	SAND	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
	508	541	33	RED CLAY AND ROCK	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
					<input type="checkbox"/> YES <input type="checkbox"/> NO
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
				<input type="checkbox"/> YES <input type="checkbox"/> NO	
ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL					

<b>7. TEST &amp; ADDITIONAL INFO</b>	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY: N/A
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	ADDITIONAL STATEMENTS OR EXPLANATIONS:	

<b>8. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER	4-23-12 DATE

FOR OSE INTERNAL USE

WELL RECORD &amp; LOG (Version 6/9/08)

FILE NUMBER C-3528

POD NUMBER C-03528-P001

TRN NUMBER 491386

LOCATION 24.32.15.2111

PAGE 2 OF 2



**Locator Tool Report****General Information:**

Application ID:29

Date: 04-03-2012

Time: 08:10:09

WR File Number: C-03528-POD1

Purpose: POINT OF DIVERSION

Applicant First Name: MARK &amp; ANNETTE MCCLOY

Applicant Last Name: NEW STOCK WELL (COTTON PLACE)(WELL LOG LOCATION)

GW Basin: CARLSBAD

County: LEA

*(Based on Application  
not Driller GPS)*

Critical Management Area Name(s): NONE

Special Condition Area Name(s): NONE

Land Grant Name: NON GRANT

**PLSS Description (New Mexico Principal Meridian):**

NW 1/4 of NW 1/4 of NW 1/4 of NE 1/4 of Section 15, Township 24S, Range 32E.

**Coordinate System Details:****Geographic Coordinates:**

Latitude: 32 Degrees 13 Minutes 29.0 Seconds N

Longitude: 103 Degrees 39 Minutes 44.6 Seconds W

**Universal Transverse Mercator Zone: 13N**

NAD 1983(92) (Meters)

N: 3,566,130 E: 626,040

NAD 1983(92) (Survey Feet)

N: 11,699,877 E: 2,053,934

NAD 1927 (Meters)

N: 3,565,928 E: 626,089

NAD 1927 (Survey Feet)

N: 11,699,215 E: 2,054,092

**State Plane Coordinate System Zone: New Mexico East**

NAD 1983(92) (Meters)

N: 135,982 E: 228,239

NAD 1983(92) (Survey Feet)

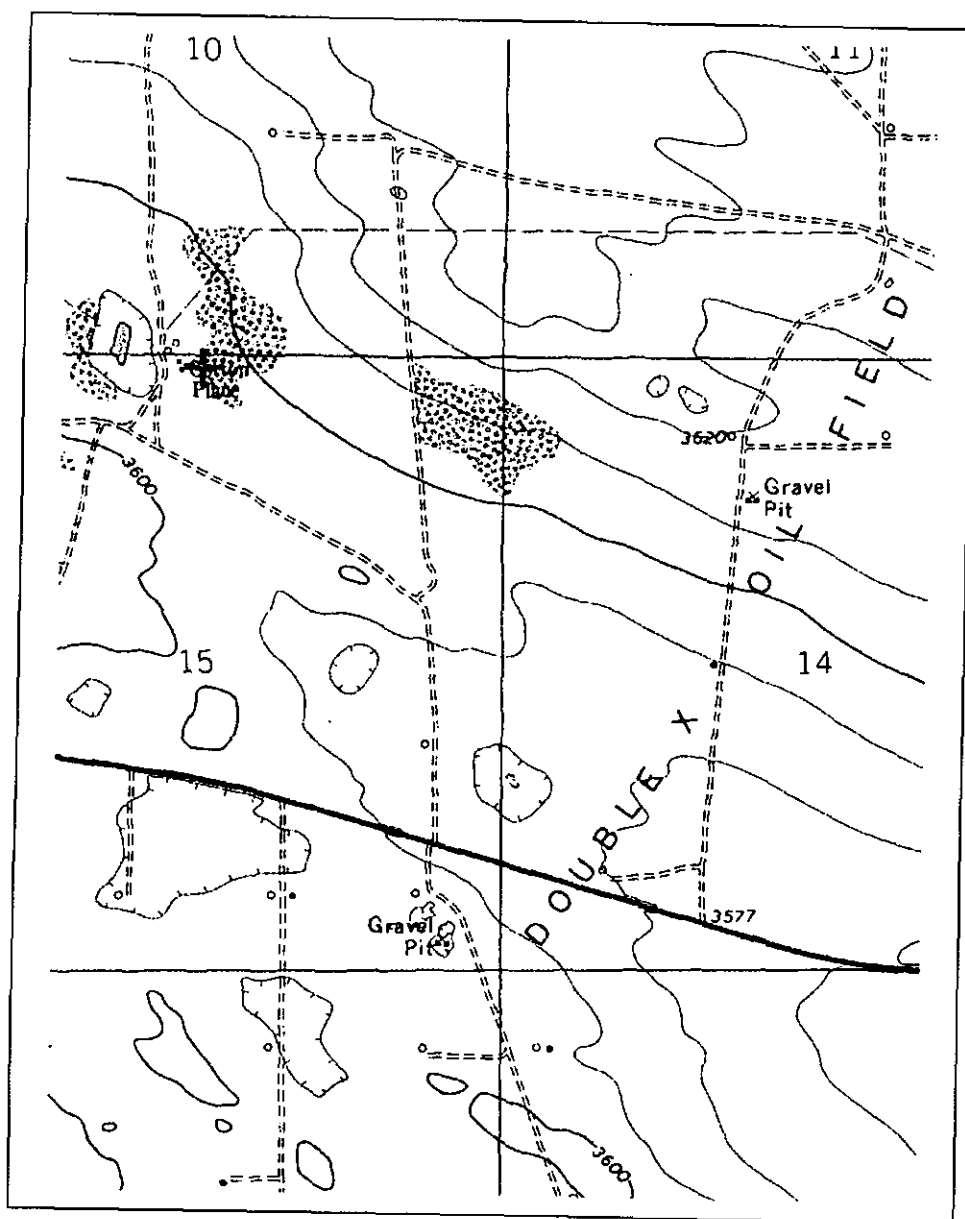
N: 446,136 E: 748,815

NAD 1927 (Meters)

N: 135,964 E: 215,686

NAD 1927 (Survey Feet)

N: 446,077 E: 707,631

**NEW MEXICO OFFICE OF STATE ENGINEER****Locator Tool Report**

WR File Number: C-03528-POD1 Scale: 1:19,970

Northing/Easting: UTM83(92) (Meter): N: 3,566,130 E: 626,040

Northing/Easting: SPCS83(92) (Feet): N: 446,136 E: 748,815

GW Basin: Carlsbad

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS

Action 405600

**QUESTIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405600
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nRM2003860041
Incident Name	NRM2003860041 TOMCAT 21 FEDERAL 1 @ 30-025-33356
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Well	[30-025-33356] TOMCAT 21 FEDERAL #001

**Location of Release Source**

Please answer all the questions in this group.

Site Name	TOMCAT 21 FEDERAL 1
Date Release Discovered	01/24/2020
Surface Owner	Federal

**Incident Details**

Please answer all the questions in this group.

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Produced Water   Released: 48 BBL   Recovered: 40 BBL   Lost: 8 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

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

QUESTIONS, Page 2

Action 405600

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405600
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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.

I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvni.com Date: 11/21/2024
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Sante Fe Main Office  
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QUESTIONS, Page 3

Action 405600

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405600
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	2020
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	29
GRO+DRO (EPA SW-846 Method 8015M)	29
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	01/31/2025
On what date will (or did) the final sampling or liner inspection occur	12/31/2025
On what date will (or was) the remediation complete(d)	12/31/2025
What is the estimated surface area (in square feet) that will be reclaimed	530
What is the estimated volume (in cubic yards) that will be reclaimed	79
What is the estimated surface area (in square feet) that will be remediated	530
What is the estimated volume (in cubic yards) that will be remediated	79

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 405600

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405600
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	HALFWAY DISPOSAL AND LANDFILL [FEEM0112334510]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
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.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 11/21/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5  
  
Action 405600

QUESTIONS (continued)

Operator:  DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID:  6137
	Action Number:  405600
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 405600

QUESTIONS (continued)

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405600
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	368360
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/31/2024
What was the (estimated) number of samples that were to be gathered	4
What was the sampling surface area in square feet	600

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No



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CONDITIONS

Action 405600

**CONDITIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 405600
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
scwells	Remediation plan approved with the following conditions: 1) Using Google Earth historical imagery, a large bare patch of soil appears in 2022 that was not present in 2017, in area west of the pad that will need to be explored before delineation is complete. Due to this being a historical release, samples should be collected in 1 foot increments beginning at surface, down to a depth of 4'. A sampling plan should be emailed to the OCD for approval, prior to completing delineation.	12/3/2024
scwells	2) Under Incident Files, uploaded on 5/21/2020, there is email correspondence from Tom Bynum that states: "We have decided to treat this area with an in-situ remediation and would very much appreciate the extra time needed to ensure the treatment has been effective." Any soil that has been chemically treated will need to be removed for disposal.	12/3/2024
scwells	3) Pg. 3 of report states: "Laboratory analytical results for the remaining samples collected within the AOC (BH01, BH02, and BH08) indicated that chloride concentrations exceeded the NMOCD reclamation standard requirement of 600 milligram per kilogram (mg/kg) within the top four feet." Your laboratory results do not indicate that BH08 is over the reclamation standards. Please verify.	12/3/2024
scwells	Submit remediation plan or remediation closure report to the OCD by 3/3/2025.	12/3/2024