U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report
06/16/2025

Well Name: SERPENTINE 2 26 STATE FED COM

Well Location: T23S / R33E / SEC 2 / SWSE / 32.328206 / -103.539618

County or Parish/State: LEA / NM

Well Number: 33H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM113969

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2858145

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 06/14/2025

Time Sundry Submitted: 03:48

Date proposed operation will begin: 06/14/2025

Procedure Description: API 30-025-54681. Engineering Only - Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: KOP change from 45 FSL & 1650 FEL to 133 FSL & 1200 FEL, both 2-23S-33E FTP change from 100 FSL & 1650 FEL to 303 FSL & 1200 FEL, both 2-23S-33E Spacing, SHL, LTP, and BHL remain unchanged. TVD/MD Change from 9500'/14,698' to 9549'/21,242' Casing program change: Minor Production Casing depth change. Production cement volume changes to accommodate casing change. Stump variance request included. Please see attached revised C-102, drilling & directional plans, and supporting documentation.

NOI Attachments

Procedure Description

Plan_1_Geo_Report__1_Rev__20250614154449.pdf

SERPENTINE_2_26_STATE_FEDERAL_COM_33H_C_102_WB_NOIpdf_20250614152726.pdf

Break_Test_Variance_Offline_BOP_2_3_2025_20250614152724.pdf

SERPENTINE_2_35_STATE_FEDERAL_COM_33H_6_13_2025__1__20250614152722.pdf

Well Name: SERPENTINE 2 26 STATE FED COM | **Well Location:** T23S / R33E / SEC 2 / SWSE / 32.328206 / -103.539618 | **County or Parish/State:** LEA / NM

Well Number: 33H | **Type of Well:** OIL WELL | **Allottee or Tribe Name:**

Lease Number: NMNM113969 | **Unit or CA Name:** | **Unit or CA Number:**

US Well Number: | **Operator:** DEVON ENERGY PRODUCTION COMPANY LP

Conditions of Approval

Specialist Review

Serpentine_2_26_State_Fed_Com_33H_Sundry_ID_2858145_20250616083131.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: REBECCA DEAL

Signed on: JUN 14, 2025 03:29 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Professional

Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY **State:** OK

Phone: (405) 228-8429

Email address: REBECCA.DEAL@DVN.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: LONG VO

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5759885402

BLM POC Email Address: LVO@BLM.GOV

Disposition: Approved

Disposition Date: 06/16/2025

Signature: Long Vo

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM113969

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
SERPENTINE 2 26 STATE FED COM/33H

2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP

9. API Well No.

3a. Address 333 WEST SHERIDAN AVE, OKLAHOMA CITY,

3b. Phone No. *(include area code)* (405) 235-3611

10. Field and Pool or Exploratory Area
BRINNINSTOOL/BONE SPRING

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SEC 2/T23S/R33E/NMP

11. Country or Parish, State
LEA/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

API 30-025-54681. Engineering Only - Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD:

KOP change from 45 FSL & 1650 FEL to 133 FSL & 1200 FEL, both 2-23S-33E

FTP change from 100 FSL & 1650 FEL to 303 FSL & 1200 FEL, both 2-23S-33E

Spacing, SHL, LTP, and BHL remain unchanged.

TVD/MD Change from 9500/14,698 to 9549/21,242

Casing program change: Minor Production Casing depth change. Production cement volume changes to accommodate casing change. Stump variance request included.

Please see attached revised C-102, drilling & directional plans, and supporting documentation.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
REBECCA DEAL / Ph: (405) 228-8429

Title Regulatory Professional

Signature (Electronic Submission)

Date 06/14/2025

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by
LONG VO / Ph: (575) 988-5402 / Approved

Title Petroleum Engineer

Date 06/16/2025

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office CARLSBAD

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: SWSE / 638 FSL / 1543 FEL / TWSP: 23S / RANGE: 33E / SECTION: 2 / LAT: 32.328206 / LONG: -103.539618 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 157 FSL / 1657 FEL / TWSP: 22S / RANGE: 33E / SECTION: 35 / LAT: 32.3413857 / LONG: -103.5399719 (TVD: 9500 feet, MD: 14700 feet)

BHL: SWSE / 1300 FSL / 1650 FEL / TWSP: 22S / RANGE: 33E / SECTION: 26 / LAT: 32.359035 / LONG: -103.539974 (TVD: 9500 feet, MD: 21121 feet)

WCDSC Permian NM

Lea County (NAD83 New Mexico East)
Sec 02-T23S-R33E
SERPENTINE 2 26 STATE FEDERAL COM 33H
WA022495087
Wellbore #1

Plan: MS DIR V1 (1650FEL) AVALON B

Standard Planning Report - Geographic

13 June, 2025

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Project	Lea County (NAD83 New Mexico East)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 02-T23S-R33E				
Site Position:		**Northing:**	488,666.43 usft	**Latitude:**	32.3409939
From:	Map	**Easting:**	782,735.71 usft	**Longitude:**	-103.5517032
Position Uncertainty:	5.00 ft	**Slot Radius:**	13.20 in		

Well	SERPENTINE 2 26 STATE FEDERAL COM 33H					
Well Position	**+N/-S**	0.00 ft	**Northing:**	484,041.56 usft	**Latitude:**	32.3282058
	+E/-W	0.00 ft	**Easting:**	786,502.84 usft	**Longitude:**	-103.5396175
Position Uncertainty		0.50 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,545.70 ft
Grid Convergence:		0.42 °				

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	12/31/2019	6.67	60.13	47,741.41141181

Design	MS DIR V1 (1650FEL) AVALON B			
Audit Notes:				
Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	359.01

Plan Survey Tool Program **Date** 6/13/2025

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,242.17	MS DIR V1 (1650FEL) AVALON	MWD+HDGM OWSG MWD + HDGM	

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
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Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,033.33	8.00	145.43	2,031.60	-30.61	21.09	1.50	1.50	0.00	145.43	
5,577.42	8.00	145.43	5,541.20	-436.78	300.94	0.00	0.00	0.00	0.00	
6,720.28	0.00	0.00	6,680.35	-502.37	346.14	0.70	-0.70	0.00	180.00	
9,176.47	0.00	0.00	9,136.54	-502.37	346.14	0.00	0.00	0.00	0.00	
9,926.47	90.00	359.64	9,614.01	-24.91	343.16	12.00	12.00	-0.05	359.64	
13,253.52	90.00	359.64	9,614.00	3,302.07	322.43	0.00	0.00	0.00	0.00	
13,410.26	93.13	359.64	9,609.71	3,458.73	321.45	2.00	2.00	0.00	0.00	
14,154.72	93.13	359.64	9,569.00	4,202.06	316.82	0.00	0.00	0.00	0.00	
15,104.93	90.85	335.98	9,535.47	5,123.61	117.64	2.50	-0.24	-2.49	-95.02	
15,305.01	90.85	335.98	9,532.50	5,306.34	36.21	0.00	0.00	0.00	0.00	
16,251.36	91.43	359.64	9,513.37	6,224.59	-162.18	2.50	0.06	2.50	88.37	
16,625.99	91.43	359.64	9,504.00	6,599.10	-164.55	0.00	0.00	0.00	0.00	
16,727.16	89.41	359.64	9,503.26	6,700.26	-165.18	2.00	-2.00	0.01	179.85	
21,162.17	89.41	359.64	9,549.00	11,134.95	-192.82	0.00	0.00	0.00	0.00	
21,242.17	89.41	359.64	9,549.83	11,214.94	-193.32	0.00	0.00	0.00	0.00	

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
100.00	0.00	0.00	100.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
200.00	0.00	0.00	200.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
300.00	0.00	0.00	300.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
400.00	0.00	0.00	400.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
500.00	0.00	0.00	500.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
600.00	0.00	0.00	600.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
700.00	0.00	0.00	700.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
800.00	0.00	0.00	800.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
900.00	0.00	0.00	900.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,000.00	0.00	0.00	1,000.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,100.00	0.00	0.00	1,100.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,200.00	0.00	0.00	1,200.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,300.00	0.00	0.00	1,300.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,400.00	0.00	0.00	1,400.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,500.00	0.00	0.00	1,500.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,600.00	1.50	145.43	1,599.99	-1.08	0.74	484,040.48	786,503.58	32.3282028	-103.5396151
1,700.00	3.00	145.43	1,699.91	-4.31	2.97	484,037.25	786,505.81	32.3281939	-103.5396080
1,800.00	4.50	145.43	1,799.69	-9.70	6.68	484,031.86	786,509.52	32.3281790	-103.5395961
1,900.00	6.00	145.43	1,899.27	-17.23	11.87	484,024.33	786,514.71	32.3281582	-103.5395795
2,000.00	7.50	145.43	1,998.57	-26.91	18.54	484,014.65	786,521.38	32.3281315	-103.5395581
2,033.33	8.00	145.43	2,031.60	-30.61	21.09	484,010.95	786,523.93	32.3281213	-103.5395500
2,100.00	8.00	145.43	2,097.62	-38.25	26.36	484,003.31	786,529.19	32.3281001	-103.5395331
2,200.00	8.00	145.43	2,196.65	-49.71	34.25	483,991.85	786,537.09	32.3280685	-103.5395078
2,300.00	8.00	145.43	2,295.67	-61.17	42.15	483,980.39	786,544.99	32.3280368	-103.5394825
2,400.00	8.00	145.43	2,394.70	-72.63	50.04	483,968.93	786,552.88	32.3280052	-103.5394572
2,500.00	8.00	145.43	2,493.73	-84.09	57.94	483,957.47	786,560.78	32.3279735	-103.5394320
2,600.00	8.00	145.43	2,592.75	-95.55	65.84	483,946.01	786,568.67	32.3279418	-103.5394067
2,700.00	8.00	145.43	2,691.78	-107.01	73.73	483,934.55	786,576.57	32.3279102	-103.5393814
2,800.00	8.00	145.43	2,790.81	-118.47	81.63	483,923.09	786,584.47	32.3278785	-103.5393561
2,900.00	8.00	145.43	2,889.83	-129.93	89.53	483,911.63	786,592.36	32.3278469	-103.5393308
3,000.00	8.00	145.43	2,988.86	-141.39	97.42	483,900.17	786,600.26	32.3278152	-103.5393055
3,100.00	8.00	145.43	3,087.89	-152.85	105.32	483,888.71	786,608.16	32.3277835	-103.5392802
3,200.00	8.00	145.43	3,186.91	-164.31	113.22	483,877.25	786,616.05	32.3277519	-103.5392549
3,300.00	8.00	145.43	3,285.94	-175.78	121.11	483,865.79	786,623.95	32.3277202	-103.5392297
3,400.00	8.00	145.43	3,384.97	-187.24	129.01	483,854.33	786,631.85	32.3276886	-103.5392044
3,500.00	8.00	145.43	3,484.00	-198.70	136.90	483,842.87	786,639.74	32.3276569	-103.5391791
3,600.00	8.00	145.43	3,583.02	-210.16	144.80	483,831.41	786,647.64	32.3276252	-103.5391538
3,700.00	8.00	145.43	3,682.05	-221.62	152.70	483,819.94	786,655.53	32.3275936	-103.5391285
3,800.00	8.00	145.43	3,781.08	-233.08	160.59	483,808.48	786,663.43	32.3275619	-103.5391032
3,900.00	8.00	145.43	3,880.10	-244.54	168.49	483,797.02	786,671.33	32.3275303	-103.5390779
4,000.00	8.00	145.43	3,979.13	-256.00	176.39	483,785.56	786,679.22	32.3274986	-103.5390526
4,100.00	8.00	145.43	4,078.16	-267.46	184.28	483,774.10	786,687.12	32.3274669	-103.5390274
4,200.00	8.00	145.43	4,177.18	-278.92	192.18	483,762.64	786,695.02	32.3274353	-103.5390021
4,300.00	8.00	145.43	4,276.21	-290.38	200.07	483,751.18	786,702.91	32.3274036	-103.5389768
4,400.00	8.00	145.43	4,375.24	-301.84	207.97	483,739.72	786,710.81	32.3273719	-103.5389515
4,500.00	8.00	145.43	4,474.26	-313.30	215.87	483,728.26	786,718.70	32.3273403	-103.5389262
4,600.00	8.00	145.43	4,573.29	-324.76	223.76	483,716.80	786,726.60	32.3273086	-103.5389009
4,700.00	8.00	145.43	4,672.32	-336.22	231.66	483,705.34	786,734.50	32.3272770	-103.5388756
4,800.00	8.00	145.43	4,771.34	-347.68	239.56	483,693.88	786,742.39	32.3272453	-103.5388504
4,900.00	8.00	145.43	4,870.37	-359.14	247.45	483,682.42	786,750.29	32.3272136	-103.5388251
5,000.00	8.00	145.43	4,969.40	-370.60	255.35	483,670.96	786,758.19	32.3271820	-103.5387998
5,100.00	8.00	145.43	5,068.42	-382.06	263.25	483,659.50	786,766.08	32.3271503	-103.5387745

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,200.00	8.00	145.43	5,167.45	-393.52	271.14	483,648.04	786,773.98	32.3271187	-103.5387492
5,300.00	8.00	145.43	5,266.48	-404.98	279.04	483,636.58	786,781.88	32.3270870	-103.5387239
5,400.00	8.00	145.43	5,365.50	-416.44	286.93	483,625.12	786,789.77	32.3270553	-103.5386986
5,500.00	8.00	145.43	5,464.53	-427.90	294.83	483,613.66	786,797.67	32.3270237	-103.5386733
5,577.42	8.00	145.43	5,541.20	-436.78	300.94	483,604.79	786,803.78	32.3269992	-103.5386538
5,600.00	7.84	145.43	5,563.56	-439.34	302.71	483,602.22	786,805.55	32.3269921	-103.5386481
5,700.00	7.14	145.43	5,662.71	-450.07	310.11	483,591.49	786,812.94	32.3269624	-103.5386244
5,800.00	6.44	145.43	5,762.01	-459.81	316.82	483,581.75	786,819.65	32.3269355	-103.5386029
5,900.00	5.74	145.43	5,861.44	-468.55	322.84	483,573.01	786,825.68	32.3269114	-103.5385837
6,000.00	5.04	145.43	5,961.00	-476.29	328.17	483,565.27	786,831.01	32.3268900	-103.5385666
6,100.00	4.34	145.43	6,060.66	-483.03	332.81	483,558.54	786,835.65	32.3268714	-103.5385517
6,200.00	3.64	145.43	6,160.42	-488.76	336.76	483,552.80	786,839.60	32.3268556	-103.5385391
6,300.00	2.94	145.43	6,260.25	-493.49	340.02	483,548.08	786,842.86	32.3268425	-103.5385286
6,400.00	2.24	145.43	6,360.15	-497.21	342.59	483,544.35	786,845.42	32.3268322	-103.5385204
6,500.00	1.54	145.43	6,460.09	-499.93	344.46	483,541.63	786,847.30	32.3268247	-103.5385144
6,600.00	0.84	145.43	6,560.07	-501.64	345.64	483,539.92	786,848.48	32.3268200	-103.5385106
6,700.00	0.14	145.43	6,660.07	-502.35	346.13	483,539.21	786,848.96	32.3268180	-103.5385091
6,720.28	0.00	0.00	6,680.35	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
6,800.00	0.00	0.00	6,760.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
6,900.00	0.00	0.00	6,860.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,000.00	0.00	0.00	6,960.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,100.00	0.00	0.00	7,060.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,200.00	0.00	0.00	7,160.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,300.00	0.00	0.00	7,260.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,400.00	0.00	0.00	7,360.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,500.00	0.00	0.00	7,460.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,600.00	0.00	0.00	7,560.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,700.00	0.00	0.00	7,660.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,800.00	0.00	0.00	7,760.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,900.00	0.00	0.00	7,860.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,000.00	0.00	0.00	7,960.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,100.00	0.00	0.00	8,060.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,200.00	0.00	0.00	8,160.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,300.00	0.00	0.00	8,260.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,400.00	0.00	0.00	8,360.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,500.00	0.00	0.00	8,460.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,600.00	0.00	0.00	8,560.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,700.00	0.00	0.00	8,660.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,800.00	0.00	0.00	8,760.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,900.00	0.00	0.00	8,860.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,000.00	0.00	0.00	8,960.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,100.00	0.00	0.00	9,060.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,176.47	0.00	0.00	9,136.54	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,200.00	2.82	359.64	9,160.06	-501.79	346.14	483,539.77	786,848.97	32.3268195	-103.5385090
9,225.00	5.82	359.64	9,184.98	-499.91	346.12	483,541.66	786,848.96	32.3268247	-103.5385090
9,250.00	8.82	359.64	9,209.78	-496.72	346.10	483,544.84	786,848.94	32.3268335	-103.5385090
9,275.00	11.82	359.64	9,234.37	-492.24	346.08	483,549.32	786,848.91	32.3268458	-103.5385090
9,300.00	14.82	359.64	9,258.69	-486.48	346.04	483,555.08	786,848.88	32.3268616	-103.5385090
9,325.00	17.82	359.64	9,282.68	-479.45	346.00	483,562.11	786,848.83	32.3268809	-103.5385090
9,350.00	20.82	359.64	9,306.27	-471.18	345.95	483,570.38	786,848.78	32.3269037	-103.5385089
9,375.00	23.82	359.64	9,329.40	-461.69	345.89	483,579.87	786,848.72	32.3269298	-103.5385089
9,400.00	26.82	359.64	9,351.99	-451.00	345.82	483,590.56	786,848.66	32.3269592	-103.5385088
9,425.00	29.82	359.64	9,374.00	-439.14	345.75	483,602.42	786,848.58	32.3269918	-103.5385088

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,450.00	32.82	359.64	9,395.35	-426.14	345.66	483,615.42	786,848.50	32.3270275	-103.5385087
9,475.00	35.82	359.64	9,415.99	-412.05	345.58	483,629.51	786,848.41	32.3270662	-103.5385087
9,500.00	38.82	359.64	9,435.87	-396.89	345.48	483,644.67	786,848.32	32.3271079	-103.5385086
9,525.00	41.82	359.64	9,454.93	-380.72	345.38	483,660.85	786,848.22	32.3271523	-103.5385086
9,550.00	44.82	359.64	9,473.12	-363.57	345.27	483,678.00	786,848.11	32.3271995	-103.5385085
9,575.00	47.82	359.64	9,490.38	-345.49	345.16	483,696.07	786,848.00	32.3272492	-103.5385084
9,600.00	50.82	359.64	9,506.67	-326.53	345.04	483,715.03	786,847.88	32.3273013	-103.5385084
9,625.00	53.82	359.64	9,521.95	-306.75	344.92	483,734.82	786,847.76	32.3273557	-103.5385083
9,650.00	56.82	359.64	9,536.17	-286.19	344.79	483,755.37	786,847.63	32.3274122	-103.5385082
9,675.00	59.82	359.64	9,549.30	-264.92	344.66	483,776.65	786,847.50	32.3274706	-103.5385081
9,700.00	62.82	359.64	9,561.29	-242.99	344.52	483,798.58	786,847.36	32.3275309	-103.5385080
9,725.00	65.82	359.64	9,572.13	-220.46	344.38	483,821.10	786,847.22	32.3275929	-103.5385080
9,750.00	68.82	359.64	9,581.76	-197.39	344.24	483,844.17	786,847.08	32.3276562	-103.5385079
9,775.00	71.82	359.64	9,590.18	-173.86	344.09	483,867.71	786,846.93	32.3277209	-103.5385078
9,800.00	74.82	359.64	9,597.35	-149.91	343.94	483,891.65	786,846.78	32.3277868	-103.5385077
9,825.00	77.82	359.64	9,603.26	-125.62	343.79	483,915.94	786,846.63	32.3278535	-103.5385076
9,850.00	80.82	359.64	9,607.89	-101.06	343.64	483,940.50	786,846.48	32.3279210	-103.5385075
9,875.00	83.82	359.64	9,611.23	-76.29	343.48	483,965.27	786,846.32	32.3279891	-103.5385074
9,900.00	86.82	359.64	9,613.27	-51.37	343.33	483,990.19	786,846.17	32.3280576	-103.5385073
9,926.47	90.00	359.64	9,614.01	-24.91	343.16	484,016.65	786,846.00	32.3281303	-103.5385072
10,000.00	90.00	359.64	9,614.01	48.61	342.71	484,090.17	786,845.54	32.3283324	-103.5385069
10,100.00	90.00	359.64	9,614.01	148.61	342.08	484,190.17	786,844.92	32.3286073	-103.5385065
10,200.00	90.00	359.64	9,614.01	248.61	341.46	484,290.17	786,844.30	32.3288822	-103.5385062
10,300.00	90.00	359.64	9,614.01	348.61	340.84	484,390.17	786,843.67	32.3291570	-103.5385058
10,400.00	90.00	359.64	9,614.01	448.60	340.21	484,490.16	786,843.05	32.3294319	-103.5385054
10,500.00	90.00	359.64	9,614.00	548.60	339.59	484,590.16	786,842.43	32.3297068	-103.5385050
10,600.00	90.00	359.64	9,614.00	648.60	338.97	484,690.16	786,841.80	32.3299816	-103.5385046
10,700.00	90.00	359.64	9,614.00	748.60	338.34	484,790.16	786,841.18	32.3302565	-103.5385042
10,800.00	90.00	359.64	9,614.00	848.60	337.72	484,890.16	786,840.56	32.3305314	-103.5385038
10,900.00	90.00	359.64	9,614.00	948.59	337.10	484,990.15	786,839.93	32.3308062	-103.5385035
11,000.00	90.00	359.64	9,614.00	1,048.59	336.47	485,090.15	786,839.31	32.3310811	-103.5385031
11,100.00	90.00	359.64	9,614.00	1,148.59	335.85	485,190.15	786,838.69	32.3313560	-103.5385027
11,200.00	90.00	359.64	9,614.00	1,248.59	335.23	485,290.15	786,838.06	32.3316308	-103.5385023
11,300.00	90.00	359.64	9,614.00	1,348.59	334.60	485,390.14	786,837.44	32.3319057	-103.5385019
11,400.00	90.00	359.64	9,614.00	1,448.58	333.98	485,490.14	786,836.82	32.3321806	-103.5385015
11,500.00	90.00	359.64	9,614.00	1,548.58	333.36	485,590.14	786,836.19	32.3324554	-103.5385012
11,600.00	90.00	359.64	9,614.00	1,648.58	332.73	485,690.14	786,835.57	32.3327303	-103.5385008
11,700.00	90.00	359.64	9,614.00	1,748.58	332.11	485,790.14	786,834.95	32.3330052	-103.5385004
11,800.00	90.00	359.64	9,614.00	1,848.58	331.49	485,890.13	786,834.33	32.3332800	-103.5385000
11,900.00	90.00	359.64	9,614.00	1,948.57	330.87	485,990.13	786,833.70	32.3335549	-103.5384996
12,000.00	90.00	359.64	9,614.00	2,048.57	330.24	486,090.13	786,833.08	32.3338298	-103.5384992
12,100.00	90.00	359.64	9,614.00	2,148.57	329.62	486,190.13	786,832.46	32.3341046	-103.5384989
12,200.00	90.00	359.64	9,614.00	2,248.57	329.00	486,290.13	786,831.83	32.3343795	-103.5384985
12,300.00	90.00	359.64	9,614.00	2,348.57	328.37	486,390.12	786,831.21	32.3346544	-103.5384981
12,400.00	90.00	359.64	9,614.00	2,448.57	327.75	486,490.12	786,830.59	32.3349292	-103.5384977
12,500.00	90.00	359.64	9,614.00	2,548.56	327.13	486,590.12	786,829.96	32.3352041	-103.5384973
12,600.00	90.00	359.64	9,614.00	2,648.56	326.50	486,690.12	786,829.34	32.3354790	-103.5384969
12,700.00	90.00	359.64	9,614.00	2,748.56	325.88	486,790.11	786,828.72	32.3357538	-103.5384965
12,800.00	90.00	359.64	9,614.00	2,848.56	325.26	486,890.11	786,828.09	32.3360287	-103.5384962
12,900.00	90.00	359.64	9,614.00	2,948.56	324.63	486,990.11	786,827.47	32.3363036	-103.5384958
13,000.00	90.00	359.64	9,614.00	3,048.55	324.01	487,090.11	786,826.85	32.3365784	-103.5384954
13,100.00	90.00	359.64	9,614.00	3,148.55	323.39	487,190.11	786,826.22	32.3368533	-103.5384950
13,200.00	90.00	359.64	9,614.00	3,248.55	322.76	487,290.10	786,825.60	32.3371282	-103.5384946

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,253.52	90.00	359.64	9,614.00	3,302.07	322.43	487,343.62	786,825.27	32.3372753	-103.5384944
13,300.00	90.93	359.64	9,613.62	3,348.55	322.14	487,390.10	786,824.98	32.3374030	-103.5384942
13,400.00	92.93	359.64	9,610.26	3,448.48	321.52	487,490.04	786,824.35	32.3376777	-103.5384939
13,410.26	93.13	359.64	9,609.71	3,458.73	321.45	487,500.29	786,824.29	32.3377059	-103.5384938
13,500.00	93.13	359.64	9,604.81	3,548.33	320.90	487,589.88	786,823.73	32.3379522	-103.5384935
13,600.00	93.13	359.64	9,599.34	3,648.18	320.27	487,689.73	786,823.11	32.3382266	-103.5384931
13,700.00	93.13	359.64	9,593.87	3,748.03	319.65	487,789.58	786,822.49	32.3385011	-103.5384927
13,800.00	93.13	359.64	9,588.40	3,847.88	319.03	487,889.43	786,821.86	32.3387755	-103.5384923
13,900.00	93.13	359.64	9,582.93	3,947.72	318.41	487,989.28	786,821.24	32.3390500	-103.5384919
14,000.00	93.13	359.64	9,577.46	4,047.57	317.78	488,089.13	786,820.62	32.3393245	-103.5384915
14,100.00	93.13	359.64	9,571.99	4,147.42	317.16	488,188.97	786,820.00	32.3395989	-103.5384912
14,154.72	93.13	359.64	9,569.00	4,202.06	316.82	488,243.61	786,819.66	32.3397491	-103.5384910
14,200.00	93.04	358.51	9,566.56	4,247.27	316.09	488,288.82	786,818.93	32.3398734	-103.5384922
14,300.00	92.81	356.02	9,561.46	4,347.01	311.33	488,388.57	786,814.17	32.3401476	-103.5385052
14,400.00	92.58	353.53	9,556.76	4,446.48	302.23	488,488.03	786,805.07	32.3404212	-103.5385323
14,500.00	92.35	351.04	9,552.46	4,545.48	288.82	488,587.03	786,791.66	32.3406936	-103.5385734
14,600.00	92.11	348.55	9,548.57	4,643.81	271.11	488,685.36	786,773.95	32.3409642	-103.5386283
14,700.00	91.87	346.06	9,545.10	4,741.30	249.14	488,782.85	786,751.98	32.3412326	-103.5386971
14,800.00	91.62	343.57	9,542.06	4,837.75	222.96	488,879.30	786,725.80	32.3414983	-103.5387796
14,900.00	91.37	341.08	9,539.45	4,932.99	192.61	488,974.54	786,695.45	32.3417607	-103.5388755
15,000.00	91.12	338.59	9,537.28	5,026.83	158.15	489,068.38	786,660.98	32.3420193	-103.5389849
15,104.93	90.85	335.98	9,535.47	5,123.61	117.64	489,165.16	786,620.48	32.3422861	-103.5391137
15,200.00	90.85	335.98	9,534.06	5,210.43	78.95	489,251.98	786,581.79	32.3425255	-103.5392369
15,305.01	90.85	335.98	9,532.50	5,306.34	36.21	489,347.89	786,539.05	32.3427900	-103.5393730
15,400.00	90.92	338.36	9,531.03	5,393.87	-0.64	489,435.42	786,502.20	32.3430314	-103.5394902
15,500.00	90.99	340.85	9,529.37	5,487.58	-35.48	489,529.13	786,467.36	32.3432896	-103.5396007
15,600.00	91.05	343.35	9,527.59	5,582.72	-66.20	489,624.27	786,436.64	32.3435518	-103.5396979
15,700.00	91.12	345.85	9,525.69	5,679.11	-92.74	489,720.66	786,410.09	32.3438172	-103.5397815
15,800.00	91.18	348.35	9,523.69	5,776.56	-115.06	489,818.11	786,387.78	32.3440855	-103.5398514
15,900.00	91.24	350.85	9,521.58	5,874.88	-133.10	489,916.43	786,369.74	32.3443562	-103.5399075
16,000.00	91.30	353.35	9,519.36	5,973.90	-146.83	490,015.45	786,356.01	32.3446286	-103.5399496
16,100.00	91.35	355.85	9,517.05	6,073.43	-156.23	490,114.97	786,346.61	32.3449023	-103.5399776
16,200.00	91.41	358.35	9,514.64	6,173.26	-161.28	490,214.81	786,341.56	32.3451769	-103.5399916
16,251.36	91.43	359.64	9,513.37	6,224.59	-162.18	490,266.14	786,340.66	32.3453180	-103.5399933
16,300.00	91.43	359.64	9,512.15	6,273.22	-162.49	490,314.77	786,340.35	32.3454516	-103.5399931
16,400.00	91.43	359.64	9,509.65	6,373.19	-163.12	490,414.74	786,339.72	32.3457264	-103.5399927
16,500.00	91.43	359.64	9,507.15	6,473.15	-163.75	490,514.70	786,339.08	32.3460012	-103.5399924
16,600.00	91.43	359.64	9,504.65	6,573.12	-164.39	490,614.67	786,338.45	32.3462760	-103.5399920
16,625.99	91.43	359.64	9,504.00	6,599.10	-164.55	490,640.65	786,338.29	32.3463474	-103.5399919
16,700.00	89.95	359.64	9,503.11	6,673.10	-165.02	490,714.65	786,337.82	32.3465508	-103.5399917
16,727.16	89.41	359.64	9,503.26	6,700.26	-165.18	490,741.81	786,337.65	32.3466254	-103.5399916
16,800.00	89.41	359.64	9,504.01	6,773.10	-165.64	490,814.64	786,337.20	32.3468256	-103.5399913
16,900.00	89.41	359.64	9,505.04	6,873.09	-166.26	490,914.64	786,336.58	32.3471005	-103.5399909
17,000.00	89.41	359.64	9,506.07	6,973.08	-166.89	491,014.63	786,335.95	32.3473753	-103.5399905
17,100.00	89.41	359.64	9,507.10	7,073.08	-167.51	491,114.62	786,335.33	32.3476502	-103.5399902
17,200.00	89.41	359.64	9,508.13	7,173.07	-168.13	491,214.61	786,334.71	32.3479250	-103.5399898
17,300.00	89.41	359.64	9,509.17	7,273.06	-168.75	491,314.61	786,334.08	32.3481999	-103.5399894
17,400.00	89.41	359.64	9,510.20	7,373.05	-169.38	491,414.60	786,333.46	32.3484747	-103.5399890
17,500.00	89.41	359.64	9,511.23	7,473.05	-170.00	491,514.59	786,332.84	32.3487496	-103.5399886
17,600.00	89.41	359.64	9,512.26	7,573.04	-170.62	491,614.58	786,332.21	32.3490244	-103.5399882
17,700.00	89.41	359.64	9,513.29	7,673.03	-171.25	491,714.58	786,331.59	32.3492993	-103.5399879
17,800.00	89.41	359.64	9,514.32	7,773.02	-171.87	491,814.57	786,330.97	32.3495741	-103.5399875
17,900.00	89.41	359.64	9,515.35	7,873.02	-172.49	491,914.56	786,330.34	32.3498490	-103.5399871

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
18,000.00	89.41	359.64	9,516.39	7,973.01	-173.12	492,014.55	786,329.72	32.3501239	-103.5399867
18,100.00	89.41	359.64	9,517.42	8,073.00	-173.74	492,114.55	786,329.10	32.3503987	-103.5399863
18,200.00	89.41	359.64	9,518.45	8,173.00	-174.36	492,214.54	786,328.48	32.3506736	-103.5399860
18,300.00	89.41	359.64	9,519.48	8,272.99	-174.99	492,314.53	786,327.85	32.3509484	-103.5399856
18,400.00	89.41	359.64	9,520.51	8,372.98	-175.61	492,414.53	786,327.23	32.3512233	-103.5399852
18,500.00	89.41	359.64	9,521.54	8,472.97	-176.23	492,514.52	786,326.61	32.3514981	-103.5399848
18,600.00	89.41	359.64	9,522.57	8,572.97	-176.85	492,614.51	786,325.98	32.3517730	-103.5399844
18,700.00	89.41	359.64	9,523.61	8,672.96	-177.48	492,714.50	786,325.36	32.3520478	-103.5399841
18,800.00	89.41	359.64	9,524.64	8,772.95	-178.10	492,814.50	786,324.74	32.3523227	-103.5399837
18,900.00	89.41	359.64	9,525.67	8,872.94	-178.72	492,914.49	786,324.11	32.3525975	-103.5399833
19,000.00	89.41	359.64	9,526.70	8,972.94	-179.35	493,014.48	786,323.49	32.3528724	-103.5399829
19,100.00	89.41	359.64	9,527.73	9,072.93	-179.97	493,114.47	786,322.87	32.3531472	-103.5399825
19,200.00	89.41	359.64	9,528.76	9,172.92	-180.59	493,214.47	786,322.24	32.3534221	-103.5399821
19,300.00	89.41	359.64	9,529.79	9,272.92	-181.22	493,314.46	786,321.62	32.3536969	-103.5399818
19,400.00	89.41	359.64	9,530.83	9,372.91	-181.84	493,414.45	786,321.00	32.3539718	-103.5399814
19,500.00	89.41	359.64	9,531.86	9,472.90	-182.46	493,514.44	786,320.38	32.3542466	-103.5399810
19,600.00	89.41	359.64	9,532.89	9,572.89	-183.09	493,614.44	786,319.75	32.3545215	-103.5399806
19,700.00	89.41	359.64	9,533.92	9,672.89	-183.71	493,714.43	786,319.13	32.3547963	-103.5399802
19,800.00	89.41	359.64	9,534.95	9,772.88	-184.33	493,814.42	786,318.51	32.3550712	-103.5399799
19,900.00	89.41	359.64	9,535.98	9,872.87	-184.96	493,914.41	786,317.88	32.3553460	-103.5399795
20,000.00	89.41	359.64	9,537.01	9,972.86	-185.58	494,014.41	786,317.26	32.3556209	-103.5399791
20,100.00	89.41	359.64	9,538.04	10,072.86	-186.20	494,114.40	786,316.64	32.3558957	-103.5399787
20,200.00	89.41	359.64	9,539.08	10,172.85	-186.82	494,214.39	786,316.01	32.3561706	-103.5399783
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20,500.00	89.41	359.64	9,542.17	10,472.83	-188.69	494,514.37	786,314.14	32.3569951	-103.5399772
20,600.00	89.41	359.64	9,543.20	10,572.82	-189.32	494,614.36	786,313.52	32.3572700	-103.5399768
20,700.00	89.41	359.64	9,544.23	10,672.81	-189.94	494,714.35	786,312.90	32.3575448	-103.5399764
20,800.00	89.41	359.64	9,545.26	10,772.81	-190.56	494,814.35	786,312.27	32.3578197	-103.5399760
20,900.00	89.41	359.64	9,546.30	10,872.80	-191.19	494,914.34	786,311.65	32.3580945	-103.5399757
21,000.00	89.41	359.64	9,547.33	10,972.79	-191.81	495,014.33	786,311.03	32.3583694	-103.5399753
21,100.00	89.41	359.64	9,548.36	11,072.79	-192.43	495,114.32	786,310.41	32.3586442	-103.5399749
21,162.17	89.41	359.64	9,549.00	11,134.95	-192.82	495,176.49	786,310.02	32.3588151	-103.5399747
21,200.00	89.41	359.64	9,549.39	11,172.78	-193.06	495,214.32	786,309.78	32.3589191	-103.5399745
21,242.17	89.41	359.64	9,549.83	11,214.94	-193.32	495,256.48	786,309.52	32.3590350	-103.5399743

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-025-54681	7321	BRINNINSTOOL;BONE SPRING
Property Code	**Property Name**	**Well Number**
333116	SERPENTINE 2-26 STATE FEDERAL COM	33H
OGRID No.	**Operator Name**	**Ground Level Elevation**
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.	3547.5'

Surface Owner: ☒State ☐Fee ☐Tribal ☐Federal **Mineral Owner:** ☐State ☐Fee ☐Tribal ☒Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	2	23-S	33-E		638' S	1543' E	32.328206	103.539618	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	26	22-S	33-E		1300' S	1650' E	32.359035	103.539974	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
679.58	☒ ☐	30-025-50074	N	C
Order Numbers N/A			**Well setbacks are under Common Ownership:** ☐Yes ☒No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	2	23-S	33-E		133' S	1200' E	32.326812	103.538509	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	2	23-S	33-E		303' S	1200' E	32.327280	103.538508	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	26	22-S	33-E		1220' S	1650' E	32.358815	103.539975	LEA

	Spacing Unit Type Horizontal ☒ Vertical ☐	Ground Floor Elevation: N/A

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

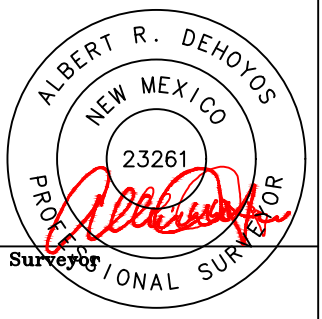
Signature Rebecca Deal **Date** 6/14/2025

Printed Name Rebecca Deal, Regulatory Analyst

Email Address rebecca.deal@dvn.com

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under supervision, and that the same is true and correct to the best of my belief.



Signature and Seal of Professional Surveyor

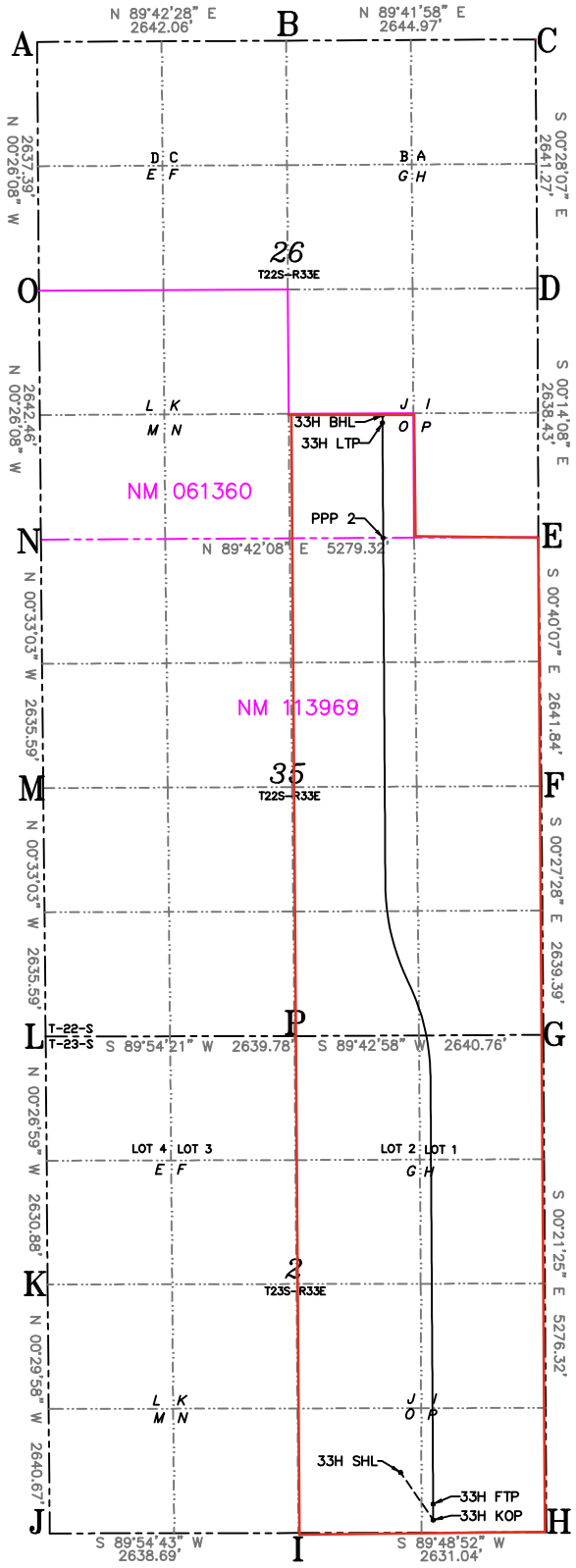
Certificate Number	Date of Survey
23261	03/21/2025

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

SURFACE HOLE LOCATION GEODETIC COORDINATES NAD 83 NMSP EAST SURFACE LOCATION 638' FSL 1543' FEL SEC. 2 EL:3547.5' N:484041.56/E:786502.84 LAT:32.328206/LON:103.539718
KICK OFF POINT 133' FSL 1200' FEL SEC. 2 N:483537.19/E:786848.99 LAT:32.326812/LON:103.538509
FIRST TAKE POINT 303' FSL 1200' FEL SEC. 2 N:483707.18/E:786847.93 LAT:32.327280/LON:103.538508
LAST TAKE POINT 1220' FSL 1650' FEL SEC. 26 N:495176.51/E:786310.02 LAT:32.358815/LON:103.539975
BOTTOM OF HOLE 1300' FSL 1650' FEL SEC. 26 N:495256.67/E:786309.69 LAT:32.359035/LON:103.539974
PPP2 0' FNL 1647' FEL SEC. 26 N:493956.69/E:786317.62 LAT:32.355462/LON:103.539979



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D=N:496603.66	E:787954.17
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G=N:488684.30	E:788016.94
H=N:483408.08	E:788049.82
I= N:483399.55	E:785418.79
J=N:483395.50	E:782780.10
K=N:486036.07	E:782757.08
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M=N:491302.34	E:782711.10
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P=N:488671.21	E:785376.21

Section 2 - Blowout Preventer Testing Procedure

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. The initial BOP test will follow 43 CFR 3172, and subsequent tests following a skid will only test connections that are broken. This test will at minimum include the Top Pipe Ram, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and BOP shell of the 10M BOPE to 5M for 10 minutes. Additional pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections. This variance will meet or exceed 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 before drilling out of the intermediate casing string(s) and starting the production hole, testing the Annular during initial BOP testing to a minimum of 70% RWP and higher than MASP, and pressure testing at a 21-day interval frequency. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. In the event break testing is not utilized, then a full BOPE test would be conducted.

Devon Energy requests to perform offline BOP stump testing and offline BOPE testing. All pressure-containing and pressure-controlling seals will be tested either online or offline as denoted in the table below and per BLM approval during initial BOP test following test pressure requirements set forth in 43 CFR 3172. Remaining components not tested offline or on the stump will be tested within 72-hours when the BOP is connected to the wellhead. If stump testing exceeds 72-hour window prior to connecting to the wellhead, the BLM will be notified and either stump testing restarted, or the BOP being tested online. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. In the event stump testing is not utilized, then a full BOPE test would be conducted.

Components	Offline	Offline, BOPE	Break	Online
Upper Rams		X	X	X
Blind Rams		X		X
Lower Rams				X
Outside Kill Valve		X	X	X
Inside Kill Valve		X	X	X
Kill Line Check Valve		X	X	X
Inside Choke Valve		X	X	X
HCR		X	X	X
Kill Line	X			X
Annular		X		X
Choke Manifold Valves and Hose	X			X
Mudline (Mud Pumps, Rig Floor Valves, Kelly Hose, Mud Line)	X			X
Standpipe Valve	X			X
IBOP (Upper and Lower)	X			X

Devon requests offline BOPE testing for the following components: Upper Rams, Blind Rams, Kill Valves, Choke Valves, and Annular
- Remaining well control equipment components will either be tested offline or online, per BLM approval
- Remaining BOPE will be tested online within 72-hours form completing the offline BOPE component testing
- Notify the BLM if the online BOPE testing exceeds 72-hours
- All Full Tests not completed "Offline" or "Offline, BOPE" are required to be complete Online

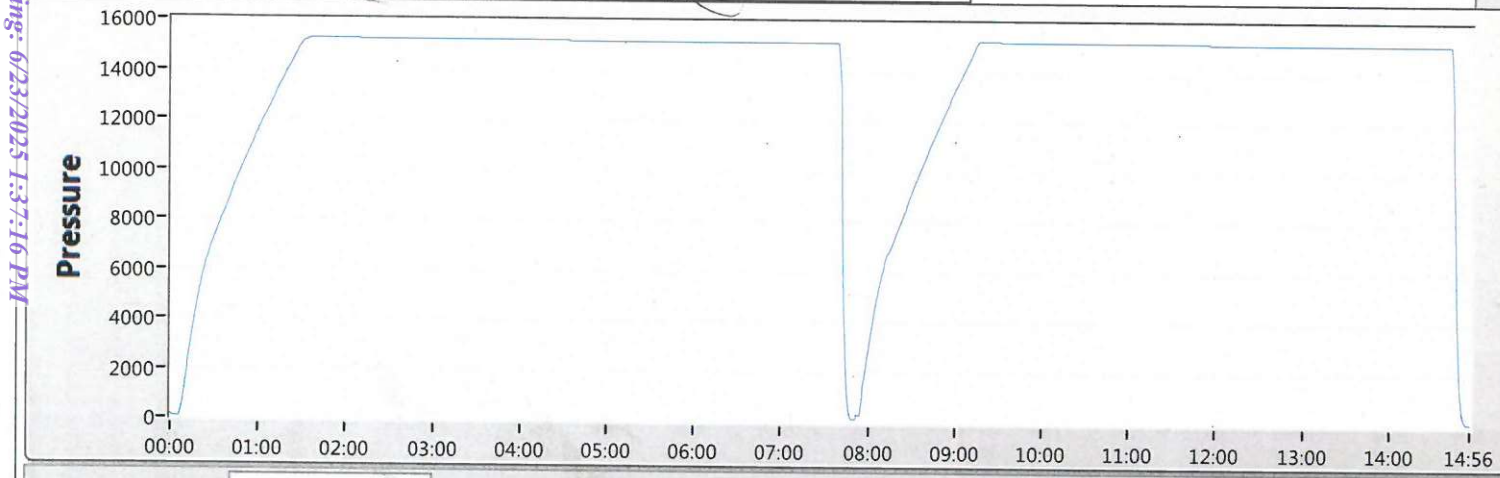
Devon requests Break testing as stated above for 5K tests, not including production hole
- Annular Preventer will be tested to minimum of 70% RWP and higher than MASP during initial BOP test
- Pressure testing is required for pressure-containing connections if the integrity of a pressure seal is broken during a break test
- Full Tests required when entering production hole

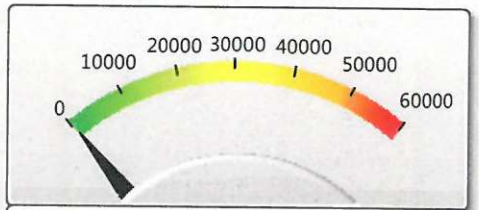
Cactus Wellhead

2-9-17 EBell

80.7 °F

15:49





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Date 02-09-17

Tested By E.BELL

Transducer bay2

Transducer Serial 181504

Calibration Date 9/6/15

	Job#	Part#	Serial#	Description	Test Pressure
1	TRJ0006341-0007	116966	TRJ6341-7-1	ADPT,DRLG,CW,MBU-3T,13-5/8 10M	15000
2					
3					
4					
5				TRANSDUCER CALIBRATION DUE 03/13/2017	
6					
7					
8					

Start | Stop | Zero | Config | Save | Print | EXIT

SERPENTINE 2 35 STATE FEDERAL COM 33H

1. Geologic Formations

TVD of target	9549	Pilot hole depth	N/A
MD at TD:	21242	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	952		
Salt	1233		
Base of Salt	5068		
Delaware	5068		
Cherry Canyon	5918		
Brushy Canyon	7319		
1st Bone Spring Lime	8981		
Avalon	9400		

*H2S, water flows, loss of circulation, abnormal pressures, etc.

SERPENTINE 2 35 STATE FEDERAL COM 33H

2. Casing Program

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
17 1/2	13 3/8	54 1/2	J-55	BTC	0	977	0	977
12 1/4	9 5/8	40	J-55	BTC	0	5168	0	5168
8 3/4	5 1/2	20	P110	DWC / C-IS+	0	21242	0	9549

•All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.

SERPENTINE 2 35 STATE FEDERAL COM 33H

3. Cementing Program (3-String Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	746	Surf	13.2	1.4	Lead: Class C Cement + additives
Int 1	572	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	4668	13.2	1.4	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	744	Surf	9.0	3.3	Squeeze Lead: Class C Cement + additives
	572	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	4668	13.2	1.4	Tail: Class H / C + additives
Production	384	4668	9.0	3.3	Lead: Class H /C + additives
	2328	9176	13.2	1.4	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements

Casing String	% Excess
Surface	50%
Intermediate	30%
Production	10%

SERPENTINE 2 35 STATE FEDERAL COM 33H

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
Int 1	13-58"	5M	Annular	X	50% of rated working pressure
			Blind Ram	X	5M
			Pipe Ram		
			Double Ram	X	
			Other*		
Production	13-5/8"	5M	Annular	X	50% of rated working pressure
			Blind Ram	X	5M
			Pipe Ram		
			Double Ram	X	
			Other*		
			Annular (5M)		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		

SERPENTINE 2 35 STATE FEDERAL COM 33H

5. Mud Program (Three String Design)

Section	Type	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	Brine	10-10.5
Production	WBM	8.5-9

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing	
X	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the Completion Report and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Additional logs planned		Interval
	Resistivity	
	Density	
X	CBL	Production casing
X	Mud log	KOP to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	4469
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

1 Spudder rig will move in and batch drill surface hole.
   a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.
2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).
3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pad.
6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
7 Drilling operations will be performed with drilling rig. At that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
   a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan

_____ Other, describe

Well Name: SERPENTINE 2 26 STATE FED COM

Well Location: T23S / R33E / SEC 2 / SWSE / 32.328206 / -103.539618

County or Parish/State: LEA / NM

Well Number: 33H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM113969

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: DEVON ENERGY PRODUCTION COMPANY LP

LONG VO Digitally signed by LONG VO Date: 2025.06.16 09:30:45 -05'00'

Notice of Intent

Sundry ID: 2858145

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 06/14/2025

Time Sundry Submitted: 03:48

Date proposed operation will begin: 06/14/2025

Procedure Description: API 30-025-54681. Engineering Only - Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: KOP change from 45 FSL & 1650 FEL to 133 FSL & 1200 FEL, both 2-23S-33E FTP change from 100 FSL & 1650 FEL to 303 FSL & 1200 FEL, both 2-23S-33E Spacing, SHL, LTP, and BHL remain unchanged. TVD/MD Change from 9500'/14,698' to 9549'/21,242' Casing program change: Minor Production Casing depth change. Production cement volume changes to accommodate casing change. Stump variance request included. Please see attached revised C-102, drilling & directional plans, and supporting documentation.

NOI Attachments

Procedure Description

Plan_1_Geo_Report__1_Rev__20250614154449.pdf

SERPENTINE_2_26_STATE_FEDERAL_COM_33H_C_102_WB_NOIpdf_20250614152726.pdf

Break_Test_Variance_Offline_BOP_2_3_2025_20250614152724.pdf

SERPENTINE_2_35_STATE_FEDERAL_COM_33H_6_13_2025__1__20250614152722.pdf

Well Name: SERPENTINE 2 26 STATE FED COM	**Well Location:** T23S / R33E / SEC 2 / SWSE / 32.328206 / -103.539618	**County or Parish/State:** LEA / NM
Well Number: 33H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM113969	**Unit or CA Name:**	**Unit or CA Number:**
US Well Number:	**Operator:** DEVON ENERGY PRODUCTION COMPANY LP	

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: REBECCA DEAL

Signed on: JUN 14, 2025 03:29 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Professional

Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY **State:** OK

Phone: (405) 228-8429

Email address: REBECCA.DEAL@DVN.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

APPROVED by Long Vo
Petroleum Engineer
Carlsbad Field Office
575-988-50402
LVO@BLM.GOV

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**Devon Energy Production Company LP**
LOCATION:	Section 2, T.23 S., R.33 E., NMPM
COUNTY:	Lea County, New Mexico

WELL NAME & NO.:	**Serpentine 2 26 State Fed Com 33H**
ATS/API ID:	**3002554681**
APD ID:	**10400099895**
Sundry ID:	**2858145**

COA

H2S	No		
Potash		None	
Cave/Karst Potential	Low		
Cave/Karst Potential	☐ Critical		
Variance	☐ None	☑ Flex Hose	☐ Other
Wellhead	Conventional and Multibowl		
Other	☐ 4 String ☐ 5 String	Capitan Reef: None	☐ WIPP
Other	Pilot Hole: None	☐ Open Annulus	
Cementing	Contingency Squeeze: Int 1	Echo-Meter: None	Primary Cement Squeeze: None
Special Requirements	☐ Water Disposal/Injection	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry	Waste Prevention: Waste MP	
Special Requirements Variance	☑ BOPE Break Testing ☑ Offline BOPE Testing	☑ Offline Cementing	☐ Casing Clearance

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1150 feet** (a minimum of **25 feet (Lea County)** into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be **17 1/2** inch in diameter.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

    Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

Operator has proposed to pump down **13-3/8"** X **9-5/8"** annulus after primary cementing stage. Operator must run a CBL from TD of the **9-5/8"** casing to surface. Submit results to the BLM. Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

- ❖ In Ochoa Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   - Cement should tie-back at least **500 feet** into the previous casing string. Operator shall provide method of verification.
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
     Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

Option 1:

a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi. **Annular which shall be tested to 2100 (70% Working Pressure) psi.**

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

a. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

   a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
   b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.

c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in **43 CFR part 3170 Subpart 3171**
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

BOPE Break Testing Variance (Approved)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-689-5981 Lea County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21**-day intervals.

- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline BOPE Testing

Operator has been **(Approved)** to test the BOPE offline.

The BOPE offline testing shall be stationary during pressure testing.

Online BOPE testing should commence within 72 hours of offline BOPE testing completion. Notify the BLM if interval exceeds 72 hours.

Notify the BLM 4hrs prior to offline BOPE testing at **Lea County: 575-689-5981**.

Offline Cementing

Operator has been **(Approved)** to pump the proposed cement program offline in the **Intermediate(s) interval**.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at **Lea County: 575-689-5981**.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☑ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke

manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be

initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and

disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Long Vo (LVO) 6/16/2025

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM113969

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
SERPENTINE 2 26 STATE FED COM/33H

2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP

9. API Well No.

3a. Address 333 WEST SHERIDAN AVE, OKLAHOMA CITY,

3b. Phone No. *(include area code)* (405) 235-3611

10. Field and Pool or Exploratory Area
BRINNINSTOOL/BONE SPRING

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SEC 2/T23S/R33E/NMP

11. Country or Parish, State
LEA/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

API 30-025-54681. Engineering Only - Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD:
KOP change from 45 FSL & 1650 FEL to 133 FSL & 1200 FEL, both 2-23S-33E
FTP change from 100 FSL & 1650 FEL to 303 FSL & 1200 FEL, both 2-23S-33E
Spacing, SHL, LTP, and BHL remain unchanged.
TVD/MD Change from 9500/14,698 to 9549/21,242
Casing program change: Minor Production Casing depth change. Production cement volume changes to accommodate casing change. Stump variance request included.
Please see attached revised C-102, drilling & directional plans, and supporting documentation.

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*
REBECCA DEAL / Ph: (405) 228-8429

Title Regulatory Professional

Signature (Electronic Submission)

Date 06/14/2025

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: SWSE / 638 FSL / 1543 FEL / TWSP: 23S / RANGE: 33E / SECTION: 2 / LAT: 32.328206 / LONG: -103.539618 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 157 FSL / 1657 FEL / TWSP: 22S / RANGE: 33E / SECTION: 35 / LAT: 32.3413857 / LONG: -103.5399719 (TVD: 9500 feet, MD: 14700 feet)

BHL: SWSE / 1300 FSL / 1650 FEL / TWSP: 22S / RANGE: 33E / SECTION: 26 / LAT: 32.359035 / LONG: -103.539974 (TVD: 9500 feet, MD: 21121 feet)

WCDSC Permian NM

Lea County (NAD83 New Mexico East)
Sec 02-T23S-R33E
SERPENTINE 2 26 STATE FEDERAL COM 33H
WA022495087
Wellbore #1

Plan: MS DIR V1 (1650FEL) AVALON B

Standard Planning Report - Geographic

13 June, 2025

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Project	Lea County (NAD83 New Mexico East)		
Map System:	US State Plane 1983	**System Datum:**	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 02-T23S-R33E				
Site Position:		**Northing:**	488,666.43 usft	**Latitude:**	32.3409939
From:	Map	**Easting:**	782,735.71 usft	**Longitude:**	-103.5517032
Position Uncertainty:	5.00 ft	**Slot Radius:**	13.20 in		

Well	SERPENTINE 2 26 STATE FEDERAL COM 33H					
Well Position	**+N/-S**	0.00 ft	**Northing:**	484,041.56 usft	**Latitude:**	32.3282058
	+E/-W	0.00 ft	**Easting:**	786,502.84 usft	**Longitude:**	-103.5396175
Position Uncertainty		0.50 ft	**Wellhead Elevation:**	ft	**Ground Level:**	3,545.70 ft
Grid Convergence:		0.42 °				

Wellbore	Wellbore #1				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2015	12/31/2019	6.67	60.13	47,741.41141181

Design	MS DIR V1 (1650FEL) AVALON B			
Audit Notes:				
Version:	**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	0.00	0.00	0.00	359.01

Plan Survey Tool Program **Date** 6/13/2025

	Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,242.17	MS DIR V1 (1650FEL) AVALON	MWD+HDGM OWSG MWD + HDGM	

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,033.33	8.00	145.43	2,031.60	-30.61	21.09	1.50	1.50	0.00	145.43	
5,577.42	8.00	145.43	5,541.20	-436.78	300.94	0.00	0.00	0.00	0.00	
6,720.28	0.00	0.00	6,680.35	-502.37	346.14	0.70	-0.70	0.00	180.00	
9,176.47	0.00	0.00	9,136.54	-502.37	346.14	0.00	0.00	0.00	0.00	
9,926.47	90.00	359.64	9,614.01	-24.91	343.16	12.00	12.00	-0.05	359.64	
13,253.52	90.00	359.64	9,614.00	3,302.07	322.43	0.00	0.00	0.00	0.00	
13,410.26	93.13	359.64	9,609.71	3,458.73	321.45	2.00	2.00	0.00	0.00	
14,154.72	93.13	359.64	9,569.00	4,202.06	316.82	0.00	0.00	0.00	0.00	
15,104.93	90.85	335.98	9,535.47	5,123.61	117.64	2.50	-0.24	-2.49	-95.02	
15,305.01	90.85	335.98	9,532.50	5,306.34	36.21	0.00	0.00	0.00	0.00	
16,251.36	91.43	359.64	9,513.37	6,224.59	-162.18	2.50	0.06	2.50	88.37	
16,625.99	91.43	359.64	9,504.00	6,599.10	-164.55	0.00	0.00	0.00	0.00	
16,727.16	89.41	359.64	9,503.26	6,700.26	-165.18	2.00	-2.00	0.01	179.85	
21,162.17	89.41	359.64	9,549.00	11,134.95	-192.82	0.00	0.00	0.00	0.00	
21,242.17	89.41	359.64	9,549.83	11,214.94	-193.32	0.00	0.00	0.00	0.00	

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
100.00	0.00	0.00	100.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
200.00	0.00	0.00	200.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
300.00	0.00	0.00	300.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
400.00	0.00	0.00	400.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
500.00	0.00	0.00	500.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
600.00	0.00	0.00	600.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
700.00	0.00	0.00	700.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
800.00	0.00	0.00	800.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
900.00	0.00	0.00	900.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,000.00	0.00	0.00	1,000.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,100.00	0.00	0.00	1,100.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,200.00	0.00	0.00	1,200.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,300.00	0.00	0.00	1,300.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,400.00	0.00	0.00	1,400.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,500.00	0.00	0.00	1,500.00	0.00	0.00	484,041.56	786,502.84	32.3282058	-103.5396175
1,600.00	1.50	145.43	1,599.99	-1.08	0.74	484,040.48	786,503.58	32.3282028	-103.5396151
1,700.00	3.00	145.43	1,699.91	-4.31	2.97	484,037.25	786,505.81	32.3281939	-103.5396080
1,800.00	4.50	145.43	1,799.69	-9.70	6.68	484,031.86	786,509.52	32.3281790	-103.5395961
1,900.00	6.00	145.43	1,899.27	-17.23	11.87	484,024.33	786,514.71	32.3281582	-103.5395795
2,000.00	7.50	145.43	1,998.57	-26.91	18.54	484,014.65	786,521.38	32.3281315	-103.5395581
2,033.33	8.00	145.43	2,031.60	-30.61	21.09	484,010.95	786,523.93	32.3281213	-103.5395500
2,100.00	8.00	145.43	2,097.62	-38.25	26.36	484,003.31	786,529.19	32.3281001	-103.5395331
2,200.00	8.00	145.43	2,196.65	-49.71	34.25	483,991.85	786,537.09	32.3280685	-103.5395078
2,300.00	8.00	145.43	2,295.67	-61.17	42.15	483,980.39	786,544.99	32.3280368	-103.5394825
2,400.00	8.00	145.43	2,394.70	-72.63	50.04	483,968.93	786,552.88	32.3280052	-103.5394572
2,500.00	8.00	145.43	2,493.73	-84.09	57.94	483,957.47	786,560.78	32.3279735	-103.5394320
2,600.00	8.00	145.43	2,592.75	-95.55	65.84	483,946.01	786,568.67	32.3279418	-103.5394067
2,700.00	8.00	145.43	2,691.78	-107.01	73.73	483,934.55	786,576.57	32.3279102	-103.5393814
2,800.00	8.00	145.43	2,790.81	-118.47	81.63	483,923.09	786,584.47	32.3278785	-103.5393561
2,900.00	8.00	145.43	2,889.83	-129.93	89.53	483,911.63	786,592.36	32.3278469	-103.5393308
3,000.00	8.00	145.43	2,988.86	-141.39	97.42	483,900.17	786,600.26	32.3278152	-103.5393055
3,100.00	8.00	145.43	3,087.89	-152.85	105.32	483,888.71	786,608.16	32.3277835	-103.5392802
3,200.00	8.00	145.43	3,186.91	-164.31	113.22	483,877.25	786,616.05	32.3277519	-103.5392549
3,300.00	8.00	145.43	3,285.94	-175.78	121.11	483,865.79	786,623.95	32.3277202	-103.5392297
3,400.00	8.00	145.43	3,384.97	-187.24	129.01	483,854.33	786,631.85	32.3276886	-103.5392044
3,500.00	8.00	145.43	3,484.00	-198.70	136.90	483,842.87	786,639.74	32.3276569	-103.5391791
3,600.00	8.00	145.43	3,583.02	-210.16	144.80	483,831.41	786,647.64	32.3276252	-103.5391538
3,700.00	8.00	145.43	3,682.05	-221.62	152.70	483,819.94	786,655.53	32.3275936	-103.5391285
3,800.00	8.00	145.43	3,781.08	-233.08	160.59	483,808.48	786,663.43	32.3275619	-103.5391032
3,900.00	8.00	145.43	3,880.10	-244.54	168.49	483,797.02	786,671.33	32.3275303	-103.5390779
4,000.00	8.00	145.43	3,979.13	-256.00	176.39	483,785.56	786,679.22	32.3274986	-103.5390526
4,100.00	8.00	145.43	4,078.16	-267.46	184.28	483,774.10	786,687.12	32.3274669	-103.5390274
4,200.00	8.00	145.43	4,177.18	-278.92	192.18	483,762.64	786,695.02	32.3274353	-103.5390021
4,300.00	8.00	145.43	4,276.21	-290.38	200.07	483,751.18	786,702.91	32.3274036	-103.5389768
4,400.00	8.00	145.43	4,375.24	-301.84	207.97	483,739.72	786,710.81	32.3273719	-103.5389515
4,500.00	8.00	145.43	4,474.26	-313.30	215.87	483,728.26	786,718.70	32.3273403	-103.5389262
4,600.00	8.00	145.43	4,573.29	-324.76	223.76	483,716.80	786,726.60	32.3273086	-103.5389009
4,700.00	8.00	145.43	4,672.32	-336.22	231.66	483,705.34	786,734.50	32.3272770	-103.5388756
4,800.00	8.00	145.43	4,771.34	-347.68	239.56	483,693.88	786,742.39	32.3272453	-103.5388504
4,900.00	8.00	145.43	4,870.37	-359.14	247.45	483,682.42	786,750.29	32.3272136	-103.5388251
5,000.00	8.00	145.43	4,969.40	-370.60	255.35	483,670.96	786,758.19	32.3271820	-103.5387998
5,100.00	8.00	145.43	5,068.42	-382.06	263.25	483,659.50	786,766.08	32.3271503	-103.5387745

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,200.00	8.00	145.43	5,167.45	-393.52	271.14	483,648.04	786,773.98	32.3271187	-103.5387492
5,300.00	8.00	145.43	5,266.48	-404.98	279.04	483,636.58	786,781.88	32.3270870	-103.5387239
5,400.00	8.00	145.43	5,365.50	-416.44	286.93	483,625.12	786,789.77	32.3270553	-103.5386986
5,500.00	8.00	145.43	5,464.53	-427.90	294.83	483,613.66	786,797.67	32.3270237	-103.5386733
5,577.42	8.00	145.43	5,541.20	-436.78	300.94	483,604.79	786,803.78	32.3269992	-103.5386538
5,600.00	7.84	145.43	5,563.56	-439.34	302.71	483,602.22	786,805.55	32.3269921	-103.5386481
5,700.00	7.14	145.43	5,662.71	-450.07	310.11	483,591.49	786,812.94	32.3269624	-103.5386244
5,800.00	6.44	145.43	5,762.01	-459.81	316.82	483,581.75	786,819.65	32.3269355	-103.5386029
5,900.00	5.74	145.43	5,861.44	-468.55	322.84	483,573.01	786,825.68	32.3269114	-103.5385837
6,000.00	5.04	145.43	5,961.00	-476.29	328.17	483,565.27	786,831.01	32.3268900	-103.5385666
6,100.00	4.34	145.43	6,060.66	-483.03	332.81	483,558.54	786,835.65	32.3268714	-103.5385517
6,200.00	3.64	145.43	6,160.42	-488.76	336.76	483,552.80	786,839.60	32.3268556	-103.5385391
6,300.00	2.94	145.43	6,260.25	-493.49	340.02	483,548.08	786,842.86	32.3268425	-103.5385286
6,400.00	2.24	145.43	6,360.15	-497.21	342.59	483,544.35	786,845.42	32.3268322	-103.5385204
6,500.00	1.54	145.43	6,460.09	-499.93	344.46	483,541.63	786,847.30	32.3268247	-103.5385144
6,600.00	0.84	145.43	6,560.07	-501.64	345.64	483,539.92	786,848.48	32.3268200	-103.5385106
6,700.00	0.14	145.43	6,660.07	-502.35	346.13	483,539.21	786,848.96	32.3268180	-103.5385091
6,720.28	0.00	0.00	6,680.35	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
6,800.00	0.00	0.00	6,760.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
6,900.00	0.00	0.00	6,860.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,000.00	0.00	0.00	6,960.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,100.00	0.00	0.00	7,060.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,200.00	0.00	0.00	7,160.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,300.00	0.00	0.00	7,260.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,400.00	0.00	0.00	7,360.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,500.00	0.00	0.00	7,460.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,600.00	0.00	0.00	7,560.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,700.00	0.00	0.00	7,660.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,800.00	0.00	0.00	7,760.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
7,900.00	0.00	0.00	7,860.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,000.00	0.00	0.00	7,960.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,100.00	0.00	0.00	8,060.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,200.00	0.00	0.00	8,160.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,300.00	0.00	0.00	8,260.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,400.00	0.00	0.00	8,360.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,500.00	0.00	0.00	8,460.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,600.00	0.00	0.00	8,560.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,700.00	0.00	0.00	8,660.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,800.00	0.00	0.00	8,760.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
8,900.00	0.00	0.00	8,860.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,000.00	0.00	0.00	8,960.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,100.00	0.00	0.00	9,060.07	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,176.47	0.00	0.00	9,136.54	-502.37	346.14	483,539.19	786,848.98	32.3268180	-103.5385090
9,200.00	2.82	359.64	9,160.06	-501.79	346.14	483,539.77	786,848.97	32.3268195	-103.5385090
9,225.00	5.82	359.64	9,184.98	-499.91	346.12	483,541.66	786,848.96	32.3268247	-103.5385090
9,250.00	8.82	359.64	9,209.78	-496.72	346.10	483,544.84	786,848.94	32.3268335	-103.5385090
9,275.00	11.82	359.64	9,234.37	-492.24	346.08	483,549.32	786,848.91	32.3268458	-103.5385090
9,300.00	14.82	359.64	9,258.69	-486.48	346.04	483,555.08	786,848.88	32.3268616	-103.5385090
9,325.00	17.82	359.64	9,282.68	-479.45	346.00	483,562.11	786,848.83	32.3268809	-103.5385090
9,350.00	20.82	359.64	9,306.27	-471.18	345.95	483,570.38	786,848.78	32.3269037	-103.5385089
9,375.00	23.82	359.64	9,329.40	-461.69	345.89	483,579.87	786,848.72	32.3269298	-103.5385089
9,400.00	26.82	359.64	9,351.99	-451.00	345.82	483,590.56	786,848.66	32.3269592	-103.5385088
9,425.00	29.82	359.64	9,374.00	-439.14	345.75	483,602.42	786,848.58	32.3269918	-103.5385088

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,450.00	32.82	359.64	9,395.35	-426.14	345.66	483,615.42	786,848.50	32.3270275	-103.5385087
9,475.00	35.82	359.64	9,415.99	-412.05	345.58	483,629.51	786,848.41	32.3270662	-103.5385087
9,500.00	38.82	359.64	9,435.87	-396.89	345.48	483,644.67	786,848.32	32.3271079	-103.5385086
9,525.00	41.82	359.64	9,454.93	-380.72	345.38	483,660.85	786,848.22	32.3271523	-103.5385086
9,550.00	44.82	359.64	9,473.12	-363.57	345.27	483,678.00	786,848.11	32.3271995	-103.5385085
9,575.00	47.82	359.64	9,490.38	-345.49	345.16	483,696.07	786,848.00	32.3272492	-103.5385084
9,600.00	50.82	359.64	9,506.67	-326.53	345.04	483,715.03	786,847.88	32.3273013	-103.5385084
9,625.00	53.82	359.64	9,521.95	-306.75	344.92	483,734.82	786,847.76	32.3273557	-103.5385083
9,650.00	56.82	359.64	9,536.17	-286.19	344.79	483,755.37	786,847.63	32.3274122	-103.5385082
9,675.00	59.82	359.64	9,549.30	-264.92	344.66	483,776.65	786,847.50	32.3274706	-103.5385081
9,700.00	62.82	359.64	9,561.29	-242.99	344.52	483,798.58	786,847.36	32.3275309	-103.5385080
9,725.00	65.82	359.64	9,572.13	-220.46	344.38	483,821.10	786,847.22	32.3275929	-103.5385080
9,750.00	68.82	359.64	9,581.76	-197.39	344.24	483,844.17	786,847.08	32.3276562	-103.5385079
9,775.00	71.82	359.64	9,590.18	-173.86	344.09	483,867.71	786,846.93	32.3277209	-103.5385078
9,800.00	74.82	359.64	9,597.35	-149.91	343.94	483,891.65	786,846.78	32.3277868	-103.5385077
9,825.00	77.82	359.64	9,603.26	-125.62	343.79	483,915.94	786,846.63	32.3278535	-103.5385076
9,850.00	80.82	359.64	9,607.89	-101.06	343.64	483,940.50	786,846.48	32.3279210	-103.5385075
9,875.00	83.82	359.64	9,611.23	-76.29	343.48	483,965.27	786,846.32	32.3279891	-103.5385074
9,900.00	86.82	359.64	9,613.27	-51.37	343.33	483,990.19	786,846.17	32.3280576	-103.5385073
9,926.47	90.00	359.64	9,614.01	-24.91	343.16	484,016.65	786,846.00	32.3281303	-103.5385072
10,000.00	90.00	359.64	9,614.01	48.61	342.71	484,090.17	786,845.54	32.3283324	-103.5385069
10,100.00	90.00	359.64	9,614.01	148.61	342.08	484,190.17	786,844.92	32.3286073	-103.5385065
10,200.00	90.00	359.64	9,614.01	248.61	341.46	484,290.17	786,844.30	32.3288822	-103.5385062
10,300.00	90.00	359.64	9,614.01	348.61	340.84	484,390.17	786,843.67	32.3291570	-103.5385058
10,400.00	90.00	359.64	9,614.01	448.60	340.21	484,490.16	786,843.05	32.3294319	-103.5385054
10,500.00	90.00	359.64	9,614.00	548.60	339.59	484,590.16	786,842.43	32.3297068	-103.5385050
10,600.00	90.00	359.64	9,614.00	648.60	338.97	484,690.16	786,841.80	32.3299816	-103.5385046
10,700.00	90.00	359.64	9,614.00	748.60	338.34	484,790.16	786,841.18	32.3302565	-103.5385042
10,800.00	90.00	359.64	9,614.00	848.60	337.72	484,890.16	786,840.56	32.3305314	-103.5385038
10,900.00	90.00	359.64	9,614.00	948.59	337.10	484,990.15	786,839.93	32.3308062	-103.5385035
11,000.00	90.00	359.64	9,614.00	1,048.59	336.47	485,090.15	786,839.31	32.3310811	-103.5385031
11,100.00	90.00	359.64	9,614.00	1,148.59	335.85	485,190.15	786,838.69	32.3313560	-103.5385027
11,200.00	90.00	359.64	9,614.00	1,248.59	335.23	485,290.15	786,838.06	32.3316308	-103.5385023
11,300.00	90.00	359.64	9,614.00	1,348.59	334.60	485,390.14	786,837.44	32.3319057	-103.5385019
11,400.00	90.00	359.64	9,614.00	1,448.58	333.98	485,490.14	786,836.82	32.3321806	-103.5385015
11,500.00	90.00	359.64	9,614.00	1,548.58	333.36	485,590.14	786,836.19	32.3324554	-103.5385012
11,600.00	90.00	359.64	9,614.00	1,648.58	332.73	485,690.14	786,835.57	32.3327303	-103.5385008
11,700.00	90.00	359.64	9,614.00	1,748.58	332.11	485,790.14	786,834.95	32.3330052	-103.5385004
11,800.00	90.00	359.64	9,614.00	1,848.58	331.49	485,890.13	786,834.33	32.3332800	-103.5385000
11,900.00	90.00	359.64	9,614.00	1,948.57	330.87	485,990.13	786,833.70	32.3335549	-103.5384996
12,000.00	90.00	359.64	9,614.00	2,048.57	330.24	486,090.13	786,833.08	32.3338298	-103.5384992
12,100.00	90.00	359.64	9,614.00	2,148.57	329.62	486,190.13	786,832.46	32.3341046	-103.5384989
12,200.00	90.00	359.64	9,614.00	2,248.57	329.00	486,290.13	786,831.83	32.3343795	-103.5384985
12,300.00	90.00	359.64	9,614.00	2,348.57	328.37	486,390.12	786,831.21	32.3346544	-103.5384981
12,400.00	90.00	359.64	9,614.00	2,448.57	327.75	486,490.12	786,830.59	32.3349292	-103.5384977
12,500.00	90.00	359.64	9,614.00	2,548.56	327.13	486,590.12	786,829.96	32.3352041	-103.5384973
12,600.00	90.00	359.64	9,614.00	2,648.56	326.50	486,690.12	786,829.34	32.3354790	-103.5384969
12,700.00	90.00	359.64	9,614.00	2,748.56	325.88	486,790.11	786,828.72	32.3357538	-103.5384965
12,800.00	90.00	359.64	9,614.00	2,848.56	325.26	486,890.11	786,828.09	32.3360287	-103.5384962
12,900.00	90.00	359.64	9,614.00	2,948.56	324.63	486,990.11	786,827.47	32.3363036	-103.5384958
13,000.00	90.00	359.64	9,614.00	3,048.55	324.01	487,090.11	786,826.85	32.3365784	-103.5384954
13,100.00	90.00	359.64	9,614.00	3,148.55	323.39	487,190.11	786,826.22	32.3368533	-103.5384950
13,200.00	90.00	359.64	9,614.00	3,248.55	322.76	487,290.10	786,825.60	32.3371282	-103.5384946

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
13,253.52	90.00	359.64	9,614.00	3,302.07	322.43	487,343.62	786,825.27	32.3372753	-103.5384944
13,300.00	90.93	359.64	9,613.62	3,348.55	322.14	487,390.10	786,824.98	32.3374030	-103.5384942
13,400.00	92.93	359.64	9,610.26	3,448.48	321.52	487,490.04	786,824.35	32.3376777	-103.5384939
13,410.26	93.13	359.64	9,609.71	3,458.73	321.45	487,500.29	786,824.29	32.3377059	-103.5384938
13,500.00	93.13	359.64	9,604.81	3,548.33	320.90	487,589.88	786,823.73	32.3379522	-103.5384935
13,600.00	93.13	359.64	9,599.34	3,648.18	320.27	487,689.73	786,823.11	32.3382266	-103.5384931
13,700.00	93.13	359.64	9,593.87	3,748.03	319.65	487,789.58	786,822.49	32.3385011	-103.5384927
13,800.00	93.13	359.64	9,588.40	3,847.88	319.03	487,889.43	786,821.86	32.3387755	-103.5384923
13,900.00	93.13	359.64	9,582.93	3,947.72	318.41	487,989.28	786,821.24	32.3390500	-103.5384919
14,000.00	93.13	359.64	9,577.46	4,047.57	317.78	488,089.13	786,820.62	32.3393245	-103.5384915
14,100.00	93.13	359.64	9,571.99	4,147.42	317.16	488,188.97	786,820.00	32.3395989	-103.5384912
14,154.72	93.13	359.64	9,569.00	4,202.06	316.82	488,243.61	786,819.66	32.3397491	-103.5384910
14,200.00	93.04	358.51	9,566.56	4,247.27	316.09	488,288.82	786,818.93	32.3398734	-103.5384922
14,300.00	92.81	356.02	9,561.46	4,347.01	311.33	488,388.57	786,814.17	32.3401476	-103.5385052
14,400.00	92.58	353.53	9,556.76	4,446.48	302.23	488,488.03	786,805.07	32.3404212	-103.5385323
14,500.00	92.35	351.04	9,552.46	4,545.48	288.82	488,587.03	786,791.66	32.3406936	-103.5385734
14,600.00	92.11	348.55	9,548.57	4,643.81	271.11	488,685.36	786,773.95	32.3409642	-103.5386283
14,700.00	91.87	346.06	9,545.10	4,741.30	249.14	488,782.85	786,751.98	32.3412326	-103.5386971
14,800.00	91.62	343.57	9,542.06	4,837.75	222.96	488,879.30	786,725.80	32.3414983	-103.5387796
14,900.00	91.37	341.08	9,539.45	4,932.99	192.61	488,974.54	786,695.45	32.3417607	-103.5388755
15,000.00	91.12	338.59	9,537.28	5,026.83	158.15	489,068.38	786,660.98	32.3420193	-103.5389849
15,104.93	90.85	335.98	9,535.47	5,123.61	117.64	489,165.16	786,620.48	32.3422861	-103.5391137
15,200.00	90.85	335.98	9,534.06	5,210.43	78.95	489,251.98	786,581.79	32.3425255	-103.5392369
15,305.01	90.85	335.98	9,532.50	5,306.34	36.21	489,347.89	786,539.05	32.3427900	-103.5393730
15,400.00	90.92	338.36	9,531.03	5,393.87	-0.64	489,435.42	786,502.20	32.3430314	-103.5394902
15,500.00	90.99	340.85	9,529.37	5,487.58	-35.48	489,529.13	786,467.36	32.3432896	-103.5396007
15,600.00	91.05	343.35	9,527.59	5,582.72	-66.20	489,624.27	786,436.64	32.3435518	-103.5396979
15,700.00	91.12	345.85	9,525.69	5,679.11	-92.74	489,720.66	786,410.09	32.3438172	-103.5397815
15,800.00	91.18	348.35	9,523.69	5,776.56	-115.06	489,818.11	786,387.78	32.3440855	-103.5398514
15,900.00	91.24	350.85	9,521.58	5,874.88	-133.10	489,916.43	786,369.74	32.3443562	-103.5399075
16,000.00	91.30	353.35	9,519.36	5,973.90	-146.83	490,015.45	786,356.01	32.3446286	-103.5399496
16,100.00	91.35	355.85	9,517.05	6,073.43	-156.23	490,114.97	786,346.61	32.3449023	-103.5399776
16,200.00	91.41	358.35	9,514.64	6,173.26	-161.28	490,214.81	786,341.56	32.3451769	-103.5399916
16,251.36	91.43	359.64	9,513.37	6,224.59	-162.18	490,266.14	786,340.66	32.3453180	-103.5399933
16,300.00	91.43	359.64	9,512.15	6,273.22	-162.49	490,314.77	786,340.35	32.3454516	-103.5399931
16,400.00	91.43	359.64	9,509.65	6,373.19	-163.12	490,414.74	786,339.72	32.3457264	-103.5399927
16,500.00	91.43	359.64	9,507.15	6,473.15	-163.75	490,514.70	786,339.08	32.3460012	-103.5399924
16,600.00	91.43	359.64	9,504.65	6,573.12	-164.39	490,614.67	786,338.45	32.3462760	-103.5399920
16,625.99	91.43	359.64	9,504.00	6,599.10	-164.55	490,640.65	786,338.29	32.3463474	-103.5399919
16,700.00	89.95	359.64	9,503.11	6,673.10	-165.02	490,714.65	786,337.82	32.3465508	-103.5399917
16,727.16	89.41	359.64	9,503.26	6,700.26	-165.18	490,741.81	786,337.65	32.3466254	-103.5399916
16,800.00	89.41	359.64	9,504.01	6,773.10	-165.64	490,814.64	786,337.20	32.3468256	-103.5399913
16,900.00	89.41	359.64	9,505.04	6,873.09	-166.26	490,914.64	786,336.58	32.3471005	-103.5399909
17,000.00	89.41	359.64	9,506.07	6,973.08	-166.89	491,014.63	786,335.95	32.3473753	-103.5399905
17,100.00	89.41	359.64	9,507.10	7,073.08	-167.51	491,114.62	786,335.33	32.3476502	-103.5399902
17,200.00	89.41	359.64	9,508.13	7,173.07	-168.13	491,214.61	786,334.71	32.3479250	-103.5399898
17,300.00	89.41	359.64	9,509.17	7,273.06	-168.75	491,314.61	786,334.08	32.3481999	-103.5399894
17,400.00	89.41	359.64	9,510.20	7,373.05	-169.38	491,414.60	786,333.46	32.3484747	-103.5399890
17,500.00	89.41	359.64	9,511.23	7,473.05	-170.00	491,514.59	786,332.84	32.3487496	-103.5399886
17,600.00	89.41	359.64	9,512.26	7,573.04	-170.62	491,614.58	786,332.21	32.3490244	-103.5399882
17,700.00	89.41	359.64	9,513.29	7,673.03	-171.25	491,714.58	786,331.59	32.3492993	-103.5399879
17,800.00	89.41	359.64	9,514.32	7,773.02	-171.87	491,814.57	786,330.97	32.3495741	-103.5399875
17,900.00	89.41	359.64	9,515.35	7,873.02	-172.49	491,914.56	786,330.34	32.3498490	-103.5399871

Planning Report - Geographic

Database:	EDM_5000.17	**Local Co-ordinate Reference:**	Well SERPENTINE 2 26 STATE FEDERAL COM 33H
Company:	WCDSC Permian NM	**TVD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Project:	Lea County (NAD83 New Mexico East)	**MD Reference:**	GL:3545.70+26ft @ 3571.70ft (H&P265)
Site:	Sec 02-T23S-R33E	**North Reference:**	Grid
Well:	SERPENTINE 2 26 STATE FEDERAL COM 33H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	MS DIR V1 (1650FEL) AVALON B		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
18,000.00	89.41	359.64	9,516.39	7,973.01	-173.12	492,014.55	786,329.72	32.3501239	-103.5399867
18,100.00	89.41	359.64	9,517.42	8,073.00	-173.74	492,114.55	786,329.10	32.3503987	-103.5399863
18,200.00	89.41	359.64	9,518.45	8,173.00	-174.36	492,214.54	786,328.48	32.3506736	-103.5399860
18,300.00	89.41	359.64	9,519.48	8,272.99	-174.99	492,314.53	786,327.85	32.3509484	-103.5399856
18,400.00	89.41	359.64	9,520.51	8,372.98	-175.61	492,414.53	786,327.23	32.3512233	-103.5399852
18,500.00	89.41	359.64	9,521.54	8,472.97	-176.23	492,514.52	786,326.61	32.3514981	-103.5399848
18,600.00	89.41	359.64	9,522.57	8,572.97	-176.85	492,614.51	786,325.98	32.3517730	-103.5399844
18,700.00	89.41	359.64	9,523.61	8,672.96	-177.48	492,714.50	786,325.36	32.3520478	-103.5399841
18,800.00	89.41	359.64	9,524.64	8,772.95	-178.10	492,814.50	786,324.74	32.3523227	-103.5399837
18,900.00	89.41	359.64	9,525.67	8,872.94	-178.72	492,914.49	786,324.11	32.3525975	-103.5399833
19,000.00	89.41	359.64	9,526.70	8,972.94	-179.35	493,014.48	786,323.49	32.3528724	-103.5399829
19,100.00	89.41	359.64	9,527.73	9,072.93	-179.97	493,114.47	786,322.87	32.3531472	-103.5399825
19,200.00	89.41	359.64	9,528.76	9,172.92	-180.59	493,214.47	786,322.24	32.3534221	-103.5399821
19,300.00	89.41	359.64	9,529.79	9,272.92	-181.22	493,314.46	786,321.62	32.3536969	-103.5399818
19,400.00	89.41	359.64	9,530.83	9,372.91	-181.84	493,414.45	786,321.00	32.3539718	-103.5399814
19,500.00	89.41	359.64	9,531.86	9,472.90	-182.46	493,514.44	786,320.38	32.3542466	-103.5399810
19,600.00	89.41	359.64	9,532.89	9,572.89	-183.09	493,614.44	786,319.75	32.3545215	-103.5399806
19,700.00	89.41	359.64	9,533.92	9,672.89	-183.71	493,714.43	786,319.13	32.3547963	-103.5399802
19,800.00	89.41	359.64	9,534.95	9,772.88	-184.33	493,814.42	786,318.51	32.3550712	-103.5399799
19,900.00	89.41	359.64	9,535.98	9,872.87	-184.96	493,914.41	786,317.88	32.3553460	-103.5399795
20,000.00	89.41	359.64	9,537.01	9,972.86	-185.58	494,014.41	786,317.26	32.3556209	-103.5399791
20,100.00	89.41	359.64	9,538.04	10,072.86	-186.20	494,114.40	786,316.64	32.3558957	-103.5399787
20,200.00	89.41	359.64	9,539.08	10,172.85	-186.82	494,214.39	786,316.01	32.3561706	-103.5399783
20,300.00	89.41	359.64	9,540.11	10,272.84	-187.45	494,314.38	786,315.39	32.3564454	-103.5399779
20,400.00	89.41	359.64	9,541.14	10,372.84	-188.07	494,414.38	786,314.77	32.3567203	-103.5399776
20,500.00	89.41	359.64	9,542.17	10,472.83	-188.69	494,514.37	786,314.14	32.3569951	-103.5399772
20,600.00	89.41	359.64	9,543.20	10,572.82	-189.32	494,614.36	786,313.52	32.3572700	-103.5399768
20,700.00	89.41	359.64	9,544.23	10,672.81	-189.94	494,714.35	786,312.90	32.3575448	-103.5399764
20,800.00	89.41	359.64	9,545.26	10,772.81	-190.56	494,814.35	786,312.27	32.3578197	-103.5399760
20,900.00	89.41	359.64	9,546.30	10,872.80	-191.19	494,914.34	786,311.65	32.3580945	-103.5399757
21,000.00	89.41	359.64	9,547.33	10,972.79	-191.81	495,014.33	786,311.03	32.3583694	-103.5399753
21,100.00	89.41	359.64	9,548.36	11,072.79	-192.43	495,114.32	786,310.41	32.3586442	-103.5399749
21,162.17	89.41	359.64	9,549.00	11,134.95	-192.82	495,176.49	786,310.02	32.3588151	-103.5399747
21,200.00	89.41	359.64	9,549.39	11,172.78	-193.06	495,214.32	786,309.78	32.3589191	-103.5399745
21,242.17	89.41	359.64	9,549.83	11,214.94	-193.32	495,256.48	786,309.52	32.3590350	-103.5399743

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
30-025-54681	7321	BRINNINSTOOL;BONE SPRING	
Property Code	**Property Name**		**Well Number**
333116	SERPENTINE 2-26 STATE FEDERAL COM		33H
OGRID No.	**Operator Name**		**Ground Level Elevation**
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.		3547.5'
Surface Owner: ☒State ☐Fee ☐Tribal ☐Federal		**Mineral Owner:** ☐State ☐Fee ☐Tribal ☒Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	2	23-S	33-E		638' S	1543' E	32.328206	103.539618	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	26	22-S	33-E		1300' S	1650' E	32.359035	103.539974	LEA

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
679.58	☒ ☐	30-025-50074	N	C
Order Numbers	NA		**Well setbacks are under Common Ownership:** ☐Yes ☒No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	2	23-S	33-E		133' S	1200' E	32.326812	103.538509	LEA

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	2	23-S	33-E		303' S	1200' E	32.327280	103.538508	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	26	22-S	33-E		1220' S	1650' E	32.358815	103.539975	LEA

	Spacing Unit Type Horizontal ☒ Vertical ☐	Ground Floor Elevation:
		NA

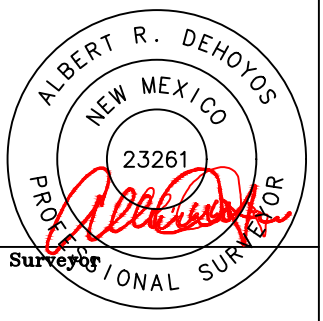
OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under supervision, and that the same is true and correct to the best of my belief.



Signature	Date	Signature and Seal of Professional Surveyor
Rebecca Deal	6/14/2025	

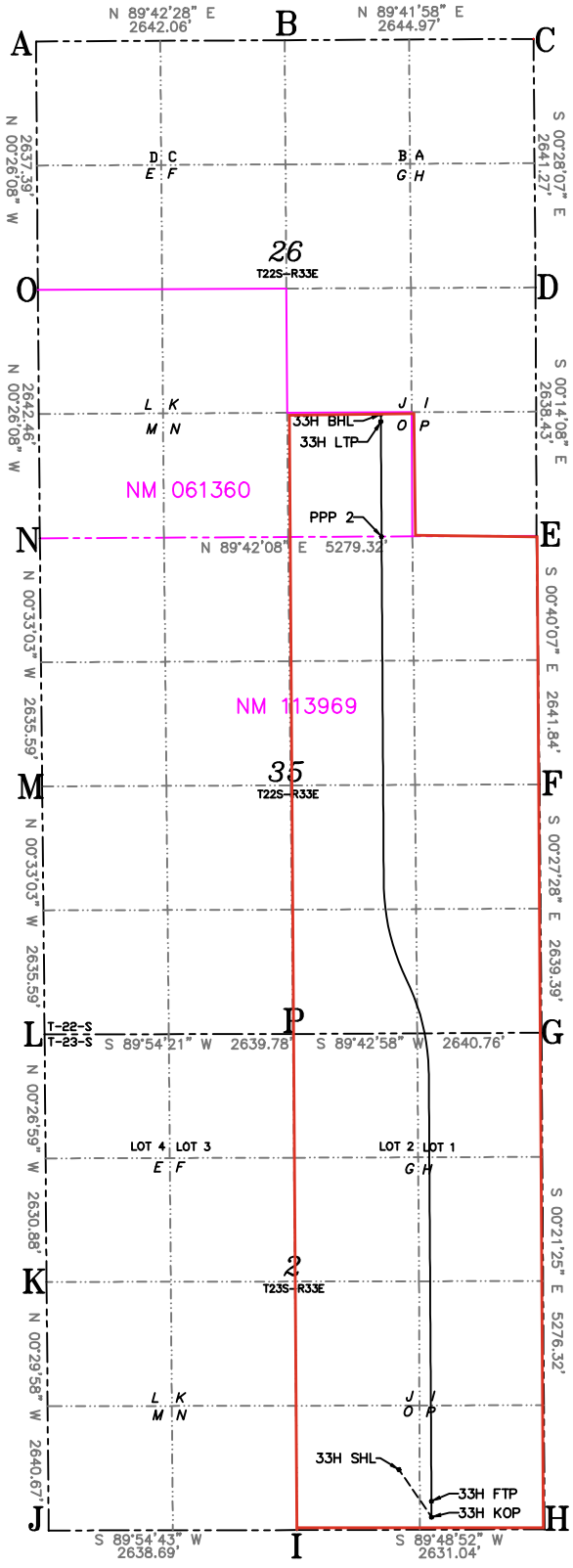
Printed Name	Certificate Number	Date of Survey
Rebecca Deal, Regulatory Analyst	23261	03/2025
Email Address		
rebecca.deal@dvn.com		

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

SURFACE HOLE LOCATION GEODETIC COORDINATES NAD 83 NMSP EAST SURFACE LOCATION 638' FSL 1543' FEL SEC. 2 EL:3547.5' N:484041.56/E:786502.84 LAT:32.328206/LON:103.539718
KICK OFF POINT 133' FSL 1200' FEL SEC. 2 N:483537.19/E:786848.99 LAT:32.326812/LON:103.538509
FIRST TAKE POINT 303' FSL 1200' FEL SEC. 2 N:483707.18/E:786847.93 LAT:32.327280/LON:103.538508
LAST TAKE POINT 1220' FSL 1650' FEL SEC. 26 N:495176.51/E:786310.02 LAT:32.358815/LON:103.539975
BOTTOM OF HOLE 1300' FSL 1650' FEL SEC. 26 N:495256.67/E:786309.69 LAT:32.359035/LON:103.539974
PPP2 0' FNL 1647' FEL SEC. 26 N:493956.69/E:786317.62 LAT:32.355462/LON:103.539979



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B=N:499230.97	E:785287.64
C=N:499244.84	E:787932.57
D=N:496603.66	E:787954.17
E=N:493965.26	E:787965.01
F=N:491323.60	E:787995.85
G=N:488684.30	E:788016.94
H=N:483408.08	E:788049.82
I= N:483399.55	E:785418.79
J=N:483395.50	E:782780.10
K=N:486036.07	E:782757.08
L=N:488666.88	E:782736.43
M=N:491302.34	E:782711.10
N=N:493937.81	E:782685.76
O=N:496580.19	E:782665.67
P=N:488671.21	E:785376.21

Section 2 - Blowout Preventer Testing Procedure

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. The initial BOP test will follow 43 CFR 3172, and subsequent tests following a skid will only test connections that are broken. This test will at minimum include the Top Pipe Ram, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and BOP shell of the 10M BOPE to 5M for 10 minutes. Additional pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections. This variance will meet or exceed 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 before drilling out of the intermediate casing string(s) and starting the production hole, testing the Annular during initial BOP testing to a minimum of 70% RWP and higher than MASP, and pressure testing at a 21-day interval frequency. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. In the event break testing is not utilized, then a full BOPE test would be conducted.

Devon Energy requests to perform offline BOP stump testing and offline BOPE testing. All pressure-containing and pressure-controlling seals will be tested either online or offline as denoted in the table below and per BLM approval during initial BOP test following test pressure requirements set forth in 43 CFR 3172. Remaining components not tested offline or on the stump will be tested within 72-hours when the BOP is connected to the wellhead. If stump testing exceeds 72-hour window prior to connecting to the wellhead, the BLM will be notified and either stump testing restarted, or the BOP being tested online. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. In the event stump testing is not utilized, then a full BOPE test would be conducted.

Components	Offline	Offline, BOPE	Break	Online
Upper Rams		X	X	X
Blind Rams		X		X
Lower Rams				X
Outside Kill Valve		X	X	X
Inside Kill Valve		X	X	X
Kill Line Check Valve		X	X	X
Inside Choke Valve		X	X	X
HCR		X	X	X
Kill Line	X			X
Annular		X		X
Choke Manifold Valves and Hose	X			X
Mudline (Mud Pumps, Rig Floor Valves, Kelly Hose, Mud Line)	X			X
Standpipe Valve	X			X
IBOP (Upper and Lower)	X			X

Devon requests offline BOPE testing for the following components: Upper Rams, Blind Rams, Kill Valves, Choke Valves, and Annular
- Remaining well control equipment components will either be tested offline or online, per BLM approval
- Remaining BOPE will be tested online within 72-hours form completing the offline BOPE component testing
- Notify the BLM if the online BOPE testing exceeds 72-hours
- All Full Tests not completed "Offline" or "Offline, BOPE" are required to be complete Online

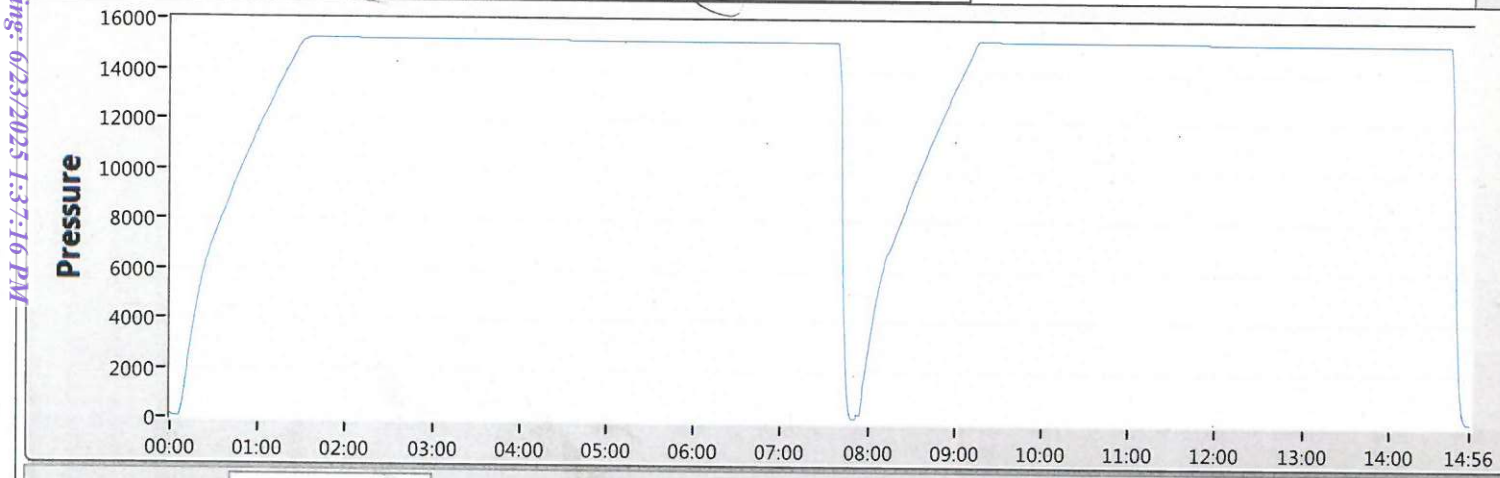
Devon requests Break testing as stated above for 5K tests, not including production hole
- Annular Preventer will be tested to minimum of 70% RWP and higher than MASP during initial BOP test
- Pressure testing is required for pressure-containing connections if the integrity of a pressure seal is broken during a break test
- Full Tests required when entering production hole

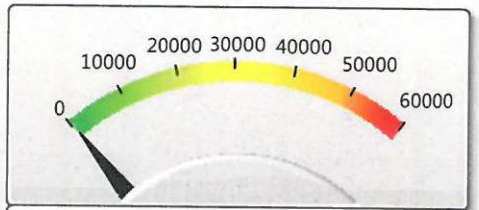
Cactus Wellhead

2-9-17 EBell

80.7 °F

15:49





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Date 02-09-17

Tested By E.BELL

Transducer bay2

Transducer Serial 181504

Calibration Date 9/6/15

	Job#	Part#	Serial#	Description	Test Pressure
1	TRJ0006341-0007	116966	TRJ6341-7-1	ADPT,DRLG,CW,MBU-3T,13-5/8 10M	15000
2					
3					
4					
5				TRANSDUCER CALIBRATION DUE 03/13/2017	
6					
7					
8					

Start | Stop | Zero | Config | Save | Print | EXIT

SERPENTINE 2 35 STATE FEDERAL COM 33H

1. Geologic Formations

TVD of target	9549	Pilot hole depth	N/A
MD at TD:	21242	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	952		
Salt	1233		
Base of Salt	5068		
Delaware	5068		
Cherry Canyon	5918		
Brushy Canyon	7319		
1st Bone Spring Lime	8981		
Avalon	9400		

*H2S, water flows, loss of circulation, abnormal pressures, etc.

SERPENTINE 2 35 STATE FEDERAL COM 33H

2. Casing Program

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
17 1/2	13 3/8	54 1/2	J-55	BTC	0	977	0	977
12 1/4	9 5/8	40	J-55	BTC	0	5168	0	5168
8 3/4	5 1/2	20	P110	DWC / C-IS+	0	21242	0	9549

•All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.

SERPENTINE 2 35 STATE FEDERAL COM 33H

3. Cementing Program (3-String Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	746	Surf	13.2	1.4	Lead: Class C Cement + additives
Int 1	572	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	4668	13.2	1.4	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	744	Surf	9.0	3.3	Squeeze Lead: Class C Cement + additives
	572	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	4668	13.2	1.4	Tail: Class H / C + additives
Production	384	4668	9.0	3.3	Lead: Class H /C + additives
	2328	9176	13.2	1.4	Tail: Class H / C + additives

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements

Casing String	% Excess
Surface	50%
Intermediate	30%
Production	10%

SERPENTINE 2 35 STATE FEDERAL COM 33H

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
Int 1	13-58"	5M	Annular	X	50% of rated working pressure
			Blind Ram	X	5M
			Pipe Ram		
			Double Ram	X	
			Other*		
Production	13-5/8"	5M	Annular	X	50% of rated working pressure
			Blind Ram	X	5M
			Pipe Ram		
			Double Ram	X	
			Other*		
			Annular (5M)		
			Blind Ram		
			Pipe Ram		
			Double Ram		
			Other*		

SERPENTINE 2 35 STATE FEDERAL COM 33H

5. Mud Program (Three String Design)

Section	Type	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	Brine	10-10.5
Production	WBM	8.5-9

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times.

What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

Logging, Coring and Testing	
X	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the Completion Report and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Additional logs planned		Interval
	Resistivity	
	Density	
X	CBL	Production casing
X	Mud log	KOP to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	4469
Abnormal temperature	No

Mitigation measure for abnormal conditions. Describe. Lost circulation material/sweeps/mud scavengers.

Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.	
N	H2S is present
Y	H2S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and pressure gauge installed for monitoring the well before walking to the next well.
3 The drilling rig will then batch drill the production hole sections on the wells with OBM, run/cement production casing, and install TA caps or tubing heads for completions.

NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

1 Spudder rig will move in and batch drill surface hole.
   a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.
2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).
3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pad.
6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
7 Drilling operations will be performed with drilling rig. At that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
   a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan

_____ Other, describe

Serpentine 2 26 State Fed Com 33H

13 3/8	surface csg in a	17 1/2	inch hole.		Design Factors			Surface			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50	j 55	btc	13.61	2.1	0.97	1,150	5	1.62	3.97	62,675
"B"			btc				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 1,409		Tail Cmt	does not	circ to sfc.	Totals:	1,150				62,675

Comparison of Proposed to Minimum Required Cement Volumes

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
17 1/2	0.6946	746	1044	799	31	9.00	1682	2M	1.56

Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.

9 5/8	casing inside the	13 3/8			Design Factors			Int 1			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	j 55	btc	3.05	0.91	0.88	5,168	1	1.67	1.53	206,720
"B"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 510					Totals:	5,168				206,720
	The cement volume(s) are intended to achieve a top of			0	ft from surface or a		1150				overlap.

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
12 1/4	0.3132	726	2103	1675	26	10.50	2364	3M	0.81
r D V Tool(s):						sum of sx	Σ CuFt		Σ%excess
t by stage % :		#VALUE!	#VALUE!			726	2103		26

Class 'C' tail cmt yld > 1.35

Burst Frac Gradient(s) for Segment(s): A, B, C, D = 0.76, b, c, d All > 0.70, OK.

5 1/2	casing inside the	9 5/8			Design Factors			Prod 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	p 110	dwc/c is+	3.82	2.71	3.22	21,242	3	6.08	5.11	424,840
"B"							0				0
"C"							0				0
"D"							0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig: 2,101					Totals:	21,242				424,840
	The cement volume(s) are intended to achieve a top of			4668	ft from surface or a		500				overlap.

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
8 3/4	0.2526	2712	4526	4191	8	9.00			1.23

Class 'C' tail cmt yld > 1.35

#N/A

0		5 1/2			Design Factors			<Choose Casing>			
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			0.00				0				0
"B"			0.00				0				0
	w/8.4#/g mud, 30min Sfc Csg Test psig:					Totals:	0				0
	Cmt vol calc below includes this csg, TOC intended			#N/A	ft from surface or a		#N/A				overlap.

Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd	Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE	Hole-Cplg
0		#N/A	#N/A	0	#N/A				

#N/A Capitan Reef est top XXXX.

Sante Fe Main Office
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General Information
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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

CONDITIONS

Action 475201

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 475201
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
matthew.gomez	Any previous COA's not addressed within the updated COA's still apply.	6/23/2025