

Form 3160-3
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM113898
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator DEVON ENERGY PRODUCTION COMPANY LP		8. Lease Name and Well No. STRANGER 33 FED 301H
3a. Address 333 WEST SHERIDAN AVE, OKLAHOMA CITY, OK 7310	3b. Phone No. (include area code) (405) 235-3611	9. API Well No. 30-025-54696
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SESE / 480 FSL / 431 FEL / LAT 32.08106 / LONG -103.467727 At proposed prod. zone SESW / 20 FSL / 1320 FWL / LAT 32.079787 / LONG -103.479141		10. Field and Pool, or Exploratory HARDIN TANK/BONE SPRING
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area SEC 33/T25S/R34E/NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 480 feet		12. County or Parish LEA
16. No of acres in lease		13. State NM
17. Spacing Unit dedicated to this well 640.0		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 48 feet		20. BLM/BIA Bond No. in file FED: NMB000801
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3322 feet		22. Approximate date work will start* 01/23/2026
23. Estimated duration 45 days		
24. Attachments		
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)		
1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM.
25. Signature (Electronic Submission)	Name (Printed/Typed) REBECCA DEAL / Ph: (405) 235-3611	Date 09/19/2024
Title Regulatory Professional		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959	Date 03/06/2025
Title Assistant Field Manager Lands & Minerals		
Office Carlsbad Field Office		
Application approval 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. Conditions of approval, if any, are attached.		
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.		

(Continued on page 2)

*(Instructions on page 2)



C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July, 2024	
			Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
				<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled		

WELL LOCATION INFORMATION

API Number 30-025-54696	Pool Code 96661	Pool Name HARDIN TANK;BONE SPRING
Property Code 325475	Property Name STRANGER 33 FED	Well Number 301H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Ground Level Elevation 3322.2'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	33	25-S	34-E		480' S	431' E	32.081060	103.467727	LEA

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	33	25-S	34-E		20' S	1320' W	32.079787	103.479141	LEA

Dedicated Acres 640	Infill or Defining Well INFILL	Defining Well API Stranger 33 Fed 301H	Overlapping Spacing Unit (Y/N) N	Consolidation Code
Order Numbers			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	33	25S	34E		50 FSL	1320 FEL	32.0798756	-103.4705973	LEA


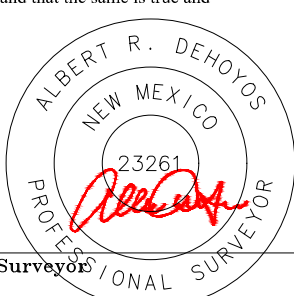
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	33	25-S	34-E		100' S	1320' E	32.080013	103.470596	LEA

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	33	25-S	34-E		100' S	1320' W	32.080007	103.479141	LEA

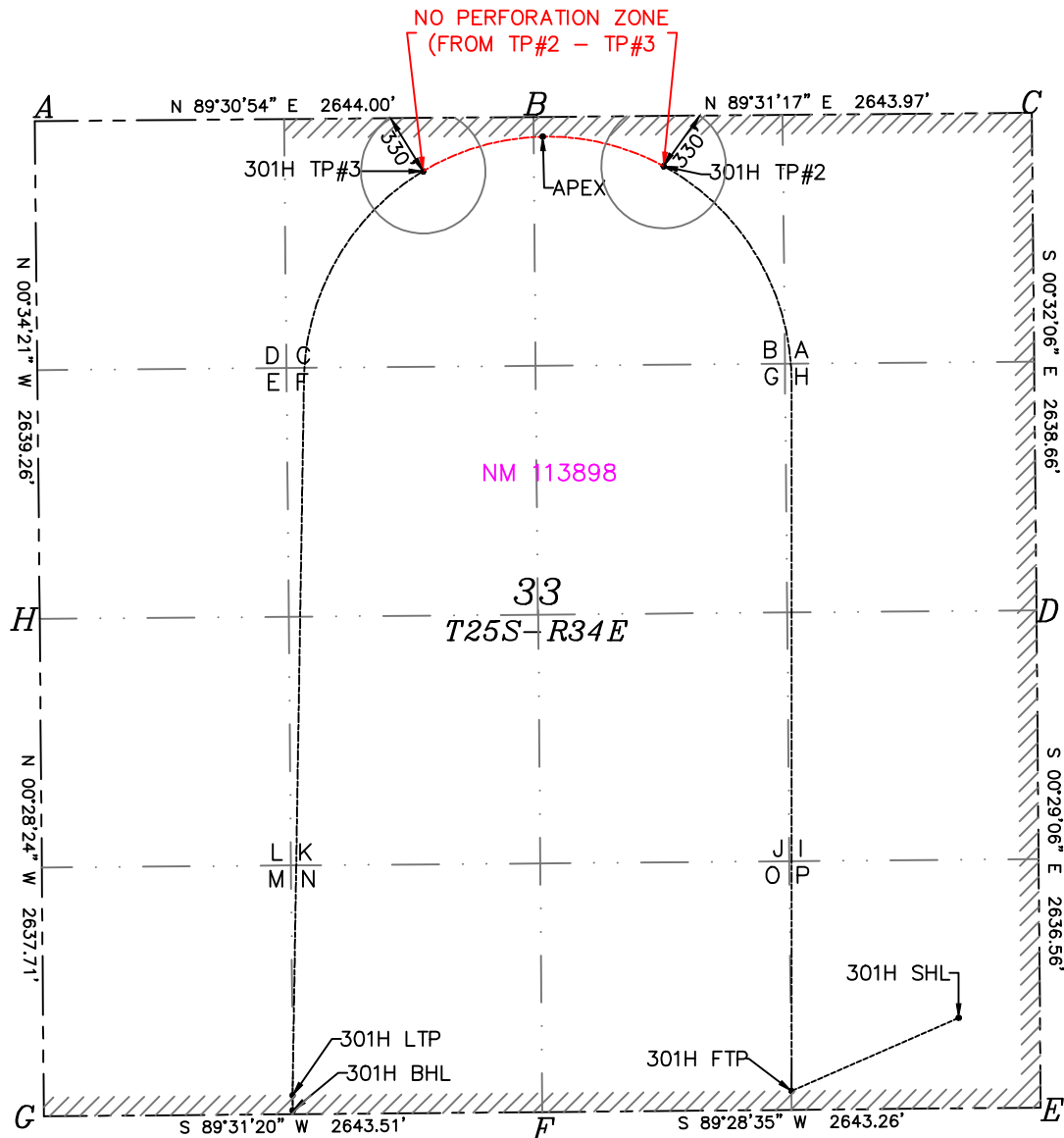
Spacing Unit Type		Horizontal	Vertical	Ground Floor Elevation:
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OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional 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 2/6/2025		Signature and Seal of Professional Surveyor 	
Printed Name Rebecca Deal, Regulatory Analyst Email Address rebecca.deal@dvn.com		Certificate Number 23261	Date of Survey 07/2024

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.

STRANGER 33 FED COM 301H TAKE POINT #2

EL: 3322.2'
 N: 394302.37
 E: 809433.40
 LAT: 32.081060
 LON: 103.467727

KICK OFF POINT

CALLS: 50 FSL 1320 FEL
 N: 393,864.41
 E: 808,547.70
 LAT: 32.0798756
 LON: -103.4705973

FIRST TAKE POINT

100' FSL 1320' FEL SEC. 33
 N: 393914.25
 E: 808547.74
 LAT: 32.080013
 LON: 103.470596

LAST TAKE POINT

267' FNL 1956' FEL SEC. 33
 N: 398818.21
 E: 807868.66
 LAT: 32.093507
 LON: 103.472662

TAKE POINT #3

283' FNL 2057' FWL SEC. 33
 N: 398791.52
 E: 806593.76
 LAT: 32.093461
 LON: 103.476779

BOTTOM OF HOLE

N: 393811.13
 E: 805901.75
 LAT: 32.079787
 LON: 103.479141

A=N: 399056.87 E: 804533.79
 B=N: 399079.26 E: 807177.70
 C=N: 399101.34 E: 809821.58
 D=N: 396462.79 E: 809846.22
 E=N: 393826.32 E: 809868.53
 F=N: 393802.16 E: 807225.38
 G=N: 393780.12 E: 804581.96
 H=N: 396417.74 E: 804560.17

State of New Mexico
Energy, Minerals and Natural Resources DepartmentSubmit Electronically
Via E-permittingOil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505**NATURAL GAS MANAGEMENT PLAN**

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description**Effective May 25, 2021****I. Operator:** Devon Energy Production Company, L.P. **OGRID:** 6137 **Date:** 08 / 22 / 2024**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
See Attached						

IV. Central Delivery Point Name: STRANGER 34 CTB 1 [See 19.15.27.9(D)(1) NMAC]**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
See Attached						

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:



Printed Name: Jeff Walla

Title: Surface Land and Regulatory Manager

E-mail Address:

Date:

Phone:

OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)

Approved By:

Title:

Approval Date:

Conditions of Approval:

STRANGER 34 CTB 1

Well Name	API	SHL - STR & Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
STRANGER 33 FED 100H		33-25S-34E, 480 FSL & 2585 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 101H		33-25S-34E, 480 FSL & 401 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 103H		33-25S-34E, 480 FSL & 755 FWL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 110H		33-25S-34E, 480 FSL & 2642 FWL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 111H		33-25S-34E, 480 FSL & 491 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 113H		33-25S-34E, 480 FSL & 815 FWL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 300H		33-25S-34E, 480 FSL & 2555 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 301H		33-25S-34E, 480 FSL & 431 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 302H		33-25S-34E, 480 FSL & 371 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 303H		33-25S-34E, 480 FSL & 725 FWL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 311H		33-25S-34E, 480 FSL & 2615 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 312H		33-25S-34E, 480 FSL & 491 FEL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 313H		33-25S-34E, 480 FSL & 785 FWL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd
STRANGER 33 FED 314H		33-25S-34E, 480 FSL & 845 FWL	(+/-) 2080 bopd	(+/-) 7280 mcf/d	(+/-) 2500 bwpd

Well Name	API	Anticipated Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
STRANGER 33 FED 100H		2/15/2026	3/17/2026	7/15/2026	7/15/2026	7/15/2026
STRANGER 33 FED 101H		2/23/2026	3/25/2026	7/23/2026	7/23/2026	7/23/2026
STRANGER 33 FED 103H		2/24/2026	3/26/2026	7/24/2026	7/24/2026	7/24/2026
STRANGER 33 FED 110H		2/25/2026	3/27/2026	7/25/2026	7/25/2026	7/25/2026
STRANGER 33 FED 111H		2/26/2026	3/28/2026	7/26/2026	7/26/2026	7/26/2026
STRANGER 33 FED 113H		2/27/2026	3/29/2026	7/27/2026	7/27/2026	7/27/2026
STRANGER 33 FED 300H		1/31/2026	3/2/2026	6/30/2026	6/30/2026	6/30/2026
STRANGER 33 FED 301H		1/23/2026	2/22/2026	6/22/2026	6/22/2026	6/22/2026
STRANGER 33 FED 302H		2/8/2026	3/10/2026	7/8/2026	7/8/2026	7/8/2026
STRANGER 33 FED 303H		2/9/2026	3/11/2026	7/9/2026	7/9/2026	7/9/2026
STRANGER 33 FED 311H		2/10/2026	3/12/2026	7/10/2026	7/10/2026	7/10/2026
STRANGER 33 FED 312H		2/11/2026	3/13/2026	7/11/2026	7/11/2026	7/11/2026
STRANGER 33 FED 313H		2/12/2026	3/14/2026	7/12/2026	7/12/2026	7/12/2026
STRANGER 33 FED 314H		2/13/2026	3/15/2026	7/13/2026	7/13/2026	7/13/2026

*Dates and Volumes are subject to change



VI. Separation Equipment

Devon Energy Production Company, L.P. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. Devon utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.



VII. Operational Practices

Devon Energy Production Company, L. P. will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, Devon will utilize flares and/or combustors to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, Devon will employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, Devon will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares and/or combustors will be used to capture and control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, Devon will turn operations to onsite separation vessels and flow to the gathering pipeline.
- During production operations, Devon will take every practical effort to minimize waste of natural gas through venting and flaring by:
 - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
 - Utilizing a closed-loop capture system to collect and route produced gas to sales line via low pressure compression, or to a flare/combustor
 - Flaring in lieu of venting, where technically feasible
 - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
 - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
 - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
 - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications
 - Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible



VIII. Best Management Practices during Maintenance

Devon Energy Production Company, L.P. will utilize best management practices to minimize venting during active and planned maintenance activities. Devon is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. Devon will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.



Devon Energy Production Company, L.P.
333 W. Sheridan Avenue
Oklahoma City, Oklahoma
73102
Phone: (405) 228-4800

WASTE MINIMIZATION PLAN

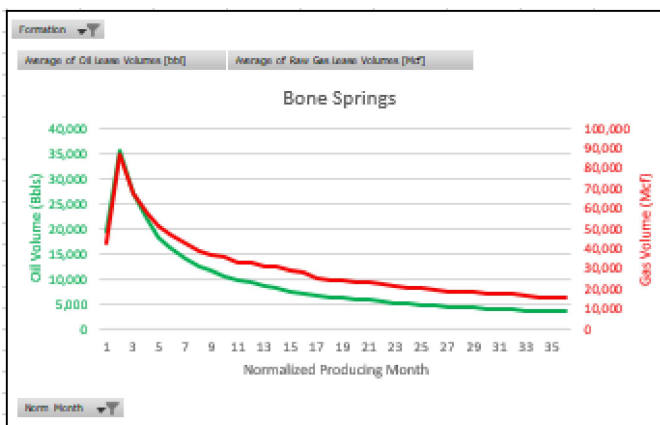
Per 89 FR 25378 - Waste Prevention, Production Subject to Royalties, and Resource Conservation, requirements:

- (1) initial oil production estimates and decline,
- (2) initial gas production estimates and decline,
- (3) certification that the operator has an executed gas sales contract to sell 100 percent of the produced oil-well gas, and
- (4) any other information demonstrating the operator's plans to avoid the waste of gas.

(1), (2) 3 year Oil and Gas decline curves: Bone Spring and Wolfcamp formation decline curves below supply Year 1, 2, 3 cumulative values for oil and gas, in range format; based on peak IP rates for oil and gas based on Devon Energy Production Company, L.P. operated wells ID post 1/2019, 10K LL norm, P90-10 ranges, annualized rates. Please refer to NGMP for table of initial oil and gas volumes.

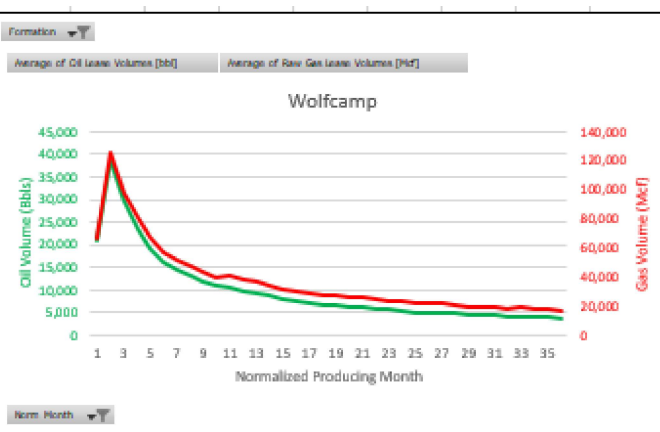
Bone Spring

Formation	BONE SPRINGS	
Row Labels	Average of Oil Lease Volumes [bbl]	Average of Raw Gas Lease Volumes [McF]
1	19,315	42,932
2	35,635	89,628
3	27,075	87,925
4	21,878	57,655
5	10,060	51,655
6	16,520	48,275
7	13,959	42,295
8	12,424	38,596
9	15,573	37,287
10	10,659	35,824
11	3,741	33,569
12	9,337	33,054
13	8,588	30,966
14	8,233	30,838
15	7,655	29,293
16	7,196	27,837
17	6,769	25,681
18	6,391	24,902
19	6,288	24,863
20	6,018	23,768
21	5,776	23,300
22	5,411	22,178
23	5,101	21,196
24	5,029	20,989
25	4,740	20,122
26	4,638	19,322
27	4,478	19,023
28	4,424	18,634
29	4,341	18,595
30	4,184	18,194
31	4,105	17,970
32	3,938	17,446
33	3,792	16,732
34	3,649	16,145
35	3,576	15,671
36	3,596	15,727
Grand Total	9,261	30,347



Wolfcamp

Formation	WOLFCAMP	
Row Labels	Average of Oil Lease Volumes [bbl]	Average of Raw Gas Lease Volumes [McF]
1	20,500	68,190
2	26,616	125,577
3	29,291	97,071
4	23,540	81,028
5	19,277	67,504
6	16,103	57,289
7	14,454	51,967
8	13,013	47,238
9	11,979	43,092
10	10,914	40,210
11	10,409	40,238
12	9,779	37,823
13	9,240	36,371
14	8,824	34,674
15	7,883	31,771
16	7,462	29,739
17	7,017	28,445
18	6,847	27,460
19	6,616	27,761
20	6,189	26,312
21	6,154	26,419
22	5,916	25,044
23	5,670	24,134
24	5,393	23,334
25	5,150	22,182
26	5,074	22,068
27	4,986	21,678
28	4,824	21,024
29	4,637	19,897
30	4,480	19,172
31	4,373	18,370
32	4,238	18,642
33	4,251	18,901
34	3,995	17,906
35	3,930	17,596
36	3,815	16,957
Grand Total	9,855	37,008



(3) Certification (NGMP Section 3 – Certification): Operator (Devon Energy Production Company, L.P.) will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system;

(4) Addl waste avoidance information: Refer to NGMP Sec. VII. Operational Practices & VIII. Best Management Practices during Maintenance

Devon Energy

APD VARIANCE DATA

OPERATOR NAME: Devon Energy

1. SUMMARY OF Variance:

Devon Energy respectfully requests approval for the following additions to the drilling plan:

1. Potential utilization of a spudder rig to pre-set surface casing.

2. Description of Operations

1. A spudder rig contractor may move in their rig to drill the surface hole section and pre-set surface casing on this well.
 - a. After drilling the surface hole section, the rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. Rig will utilize fresh water based mud to drill surface hole to TD.
2. The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
3. A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wingvalves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
5. Drilling operation will be performed with the big rig. At that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The BLM will be contacted / notified 24 hours before the big rig moves back on to the pad with the pre-set surface casing.
6. Devon Energy will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
7. Once the rig is removed, Devon Energy will secure the wellhead area by placing a guard rail around the cellar area.

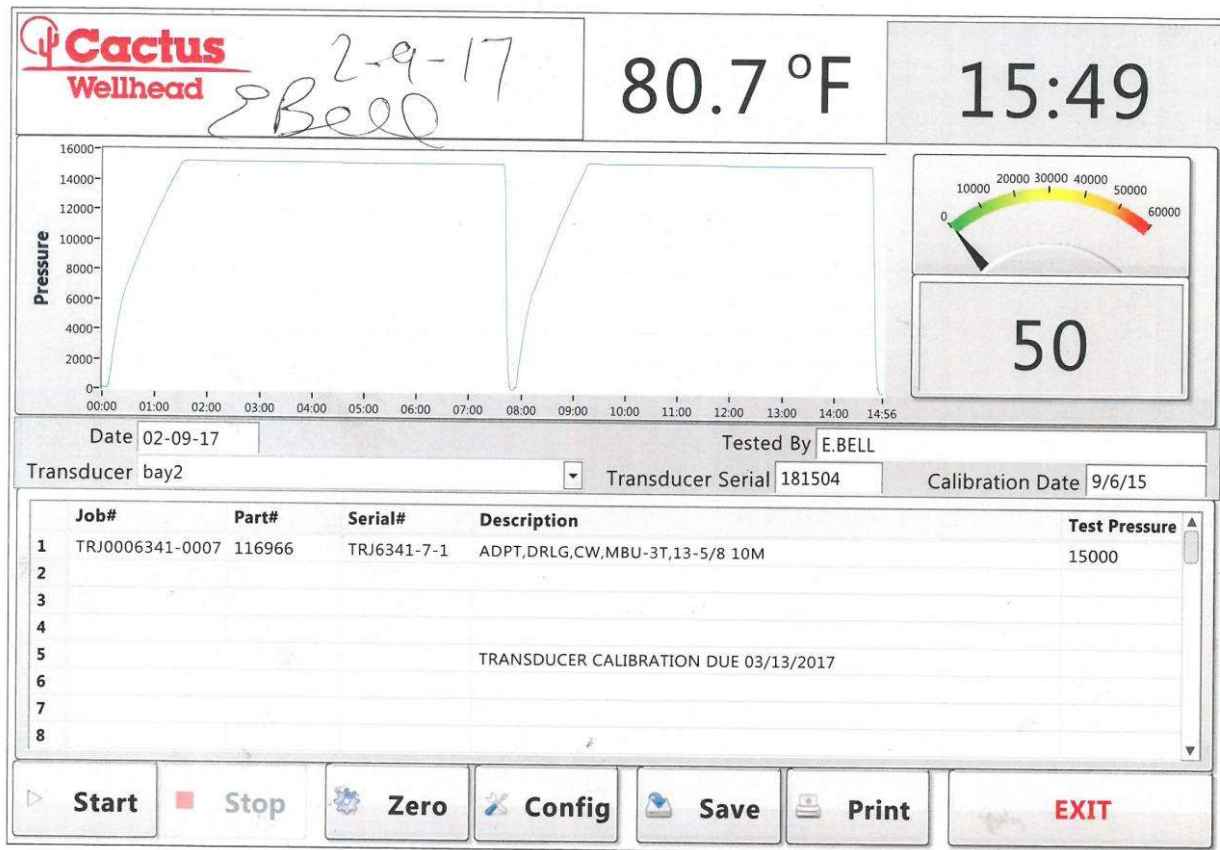
BOP Break Test Variance – Intermediate Casing

Devon Energy will perform a full BOP test per OOGO2.III.A.2.i before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, before the expiration of the allotted 14-days for 5M intermediate batch drilling or when the drilling rig is fully mobilized to a new well pad, whichever is sooner.

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. This test will include the Top Pipe Rams, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and Shell of BOP to 5M for 10 minutes. 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 and no deeper than the Bone Springs Formation where 5M BOP tests are required. The initial BOP test will follow OOGO2.III.A.2.i, and subsequent tests following a skid will only test connections that are broken. The annular preventer will be tested to 100% working pressure. This variance will meet or exceed OOGO2.III.A.2.i per the following: Devon Energy will perform a full BOP test per OOGO2.III.A.2.i before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, or before the expiration of the allotted 14-days for 5M intermediate batch drilling, whichever is sooner. We will utilize a 200' TVD tolerance between intermediate shoes as the cutoff for a full BOP test. 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.

Well Control Response:

1. Primary barrier remains fluid
2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
 1. Annular first
 2. If annular were to not hold, Upper pipe rams second (which were tested on the skid BOP test)
 3. If the Upper Pipe Rams were to not hold, Lower Pipe Rams would be third



STRANGER 33 FED 301H

1. Geologic Formations

TVD of target	10910	Pilot hole depth	N/A
MD at TD:	22882	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	840		
Salt	1220		
Base of Salt	5030		
Delaware	5295		
Cherry Canyon	6330		
Brushy Canyon	7935		
Bone Spring 1st	10480		
2nd BLSM	10700		

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

STRANGER 33 FED 301H

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	865	0	865
12 1/4	9 5/8	40	J-55	BTC	0	5395	0	5395
8 3/4	5 1/2	20	P110	DWC / C-IS+	0	22882	0	10910

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

3. Cementing Program (3-String Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft ³ /sack)	Slurry Description
Surface	664	Surf	13.2	1.4	Lead: Class C Cement + additives
Int 1	598	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	4895	13.2	1.4	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	777	Surf	9.0	3.3	Squeeze Lead: Class C Cement + additives
	598	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	4895	13.2	1.4	Tail: Class H / C + additives
Production	482	4895	9.0	3.3	Lead: Class H / C + additives
	2333	10789	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%

STRANGER 33 FED 301H

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
Int 1	13-5/8"	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*		

STRANGER 33 FED 301H

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 submitted 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	Specify what type and where?
BH pressure at deepest TVD	5106
Abnormal temperature	No

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

Hydrogen 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	H ₂ S is present
Y	H ₂ S plan attached.

STRANGER 33 FED 301H

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 nipped 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

WCDSC Permian NM

Lea County (NAD83 New Mexico East)

Sec 33-T25S-R34E

STRANGER 33 FED 301H

WA022528220

Wellbore #1

Plat R1 (1320FEL-1320FWL) 2BSLM LOWER

Anticollision Summary Report

21 January, 2025

Anticollision Summary Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Reference Site:	Sec 33-T25S-R34E	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM_5000.17
Reference Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER	Offset TVD Reference:	Offset Datum

Reference	Plat R1 (1320FEL-1320FWL) 2BSLM LC		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD + Stations Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	0.00 to 21,938.05ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum centre distance of 10,000.00ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	1/21/2025		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	21,938.05	Plat R1 (1320FEL-1320FWL) 2BSLM LOW	MWD+IFR1+FDIR	OWSG MWD + IFR1 + FDIR Correction

Summary						
Site Name	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Sec 33-T25S-R34E						
STRANGER 33 FED 100H - Wellbore #1 - Plat R1 (1980	16,926.58	14,185.70	950.00	851.69	9.663	CC, ES
STRANGER 33 FED 100H - Wellbore #1 - Plat R1 (1980	21,938.05	20,318.78	1,155.89	983.13	6.691	SF
STRANGER 33 FED 101H - Wellbore #1 - Plat R1 (660F	1,500.00	1,500.00	30.04	19.43	2.830	Alert, CC
STRANGER 33 FED 101H - Wellbore #1 - Plat R1 (660F	1,600.00	1,600.40	30.61	19.31	2.709	Alert, ES, SF
STRANGER 33 FED 103H - Wellbore #1 - Permit Plan 1	16,958.75	15,383.18	957.80	850.97	8.965	CC, ES
STRANGER 33 FED 103H - Wellbore #1 - Permit Plan 1	21,938.05	20,259.14	1,164.60	1,002.43	7.181	SF
Stranger 33 Fed 11H - Wellbore #1 - Surveys	2,333.28	2,332.26	245.64	231.75	17.681	CC, ES
Stranger 33 Fed 11H - Wellbore #1 - Surveys	10,200.00	10,129.32	836.72	768.17	12.206	SF
Stranger 33 Fed 13H - Wellbore #1 - Final Surveys (Tota	7,969.42	7,951.31	485.18	430.57	8.884	CC
Stranger 33 Fed 13H - Wellbore #1 - Final Surveys (Tota	9,957.53	9,939.00	487.31	419.54	7.191	ES
Stranger 33 Fed 13H - Wellbore #1 - Final Surveys (Tota	10,050.00	10,029.04	489.18	420.80	7.154	SF
STRANGER 33 FED 300H - Wellbore #1 (U-Turn) - Plat	16,848.00	15,680.45	550.10	450.45	5.521	CC, ES
STRANGER 33 FED 300H - Wellbore #1 (U-Turn) - Plat	16,900.00	15,689.03	552.49	451.13	5.451	SF
STRANGER 33 FED 302H - Wellbore #1 - Plat R1 (440F	1,500.00	1,500.80	60.09	49.47	5.659	CC
STRANGER 33 FED 302H - Wellbore #1 - Plat R1 (440F	1,504.45	1,505.26	60.09	49.44	5.643	ES
STRANGER 33 FED 302H - Wellbore #1 - Plat R1 (440F	1,700.00	1,701.23	64.18	52.22	5.366	SF
STRANGER 33 FED 303H - Wellbore #1 (U-Turn) - Plat	16,805.54	17,088.69	641.60	533.11	5.914	CC, ES
STRANGER 33 FED 303H - Wellbore #1 (U-Turn) - Plat	16,900.00	17,064.75	648.12	537.50	5.859	SF
Stranger 33 Fed 6H - Wellbore #1 - Final Surveys (total d	10,030.47	9,997.10	948.29	880.28	13.944	CC
Stranger 33 Fed 6H - Wellbore #1 - Final Surveys (total d	10,050.00	10,016.73	948.35	880.21	13.917	ES
Stranger 33 Fed 6H - Wellbore #1 - Final Surveys (total d	10,250.00	10,213.24	956.76	887.35	13.784	SF
Stranger 33 Fed 7H - Wellbore #1 - Final Surveys (SDI)	9,962.16	9,966.85	98.88	29.18	1.419	Major Risk, CC, ES, SF
Stranger 33 Fed 9H - Wellbore #1 - Final Surveys (total d	21,858.05	10,484.28	812.87	714.80	8.289	CC, ES
Stranger 33 Fed 9H - Wellbore #1 - Final Surveys (total d	21,859.94	10,484.22	812.87	714.80	8.289	SF

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Summary Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Reference Site:	Sec 33-T25S-R34E	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM_5000.17
Reference Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL:3322.20+26ft @ 3348.20ft

Offset Depths are relative to Offset Datum

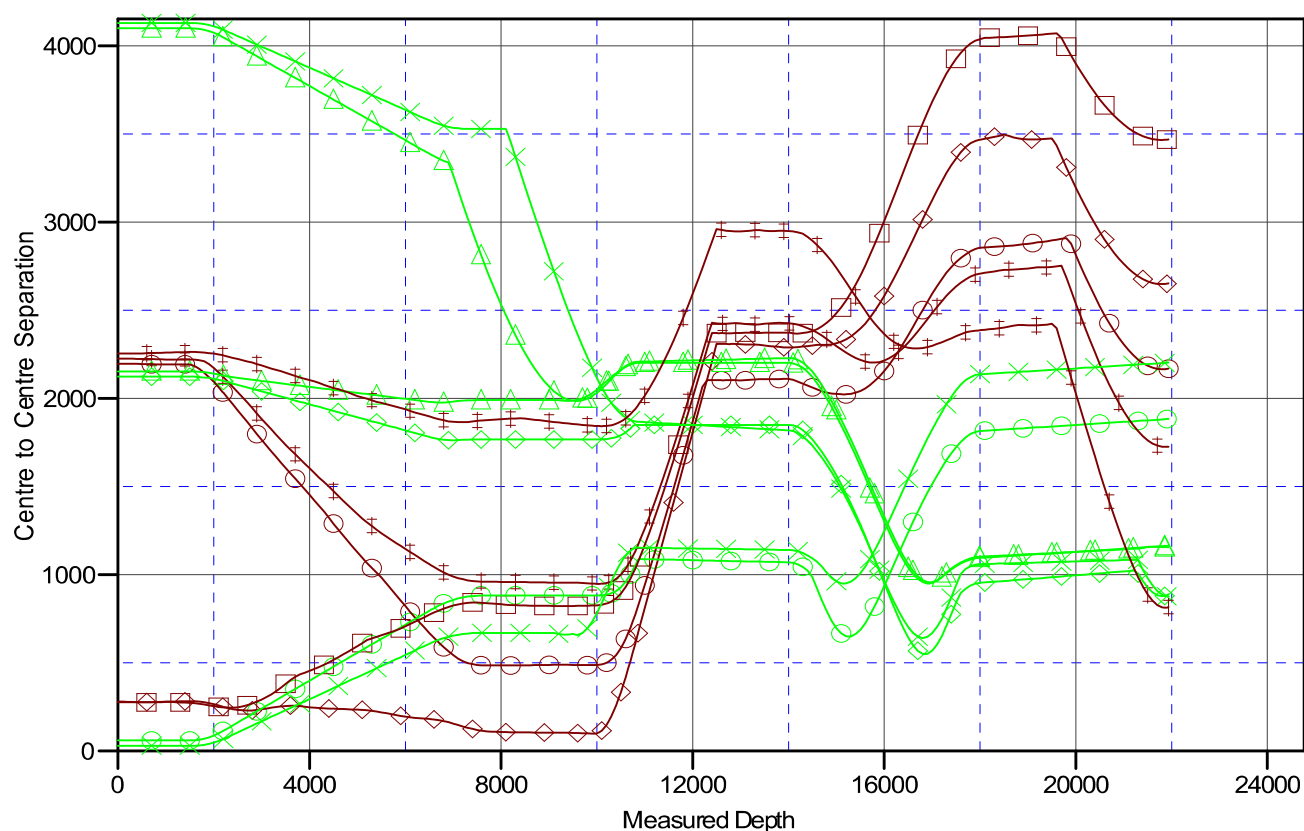
Central Meridian is -104.3333333

Coordinates are relative to: STRANGER 33 FED 301H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone

Grid Convergence at Surface is: 0.46°

Ladder Plot

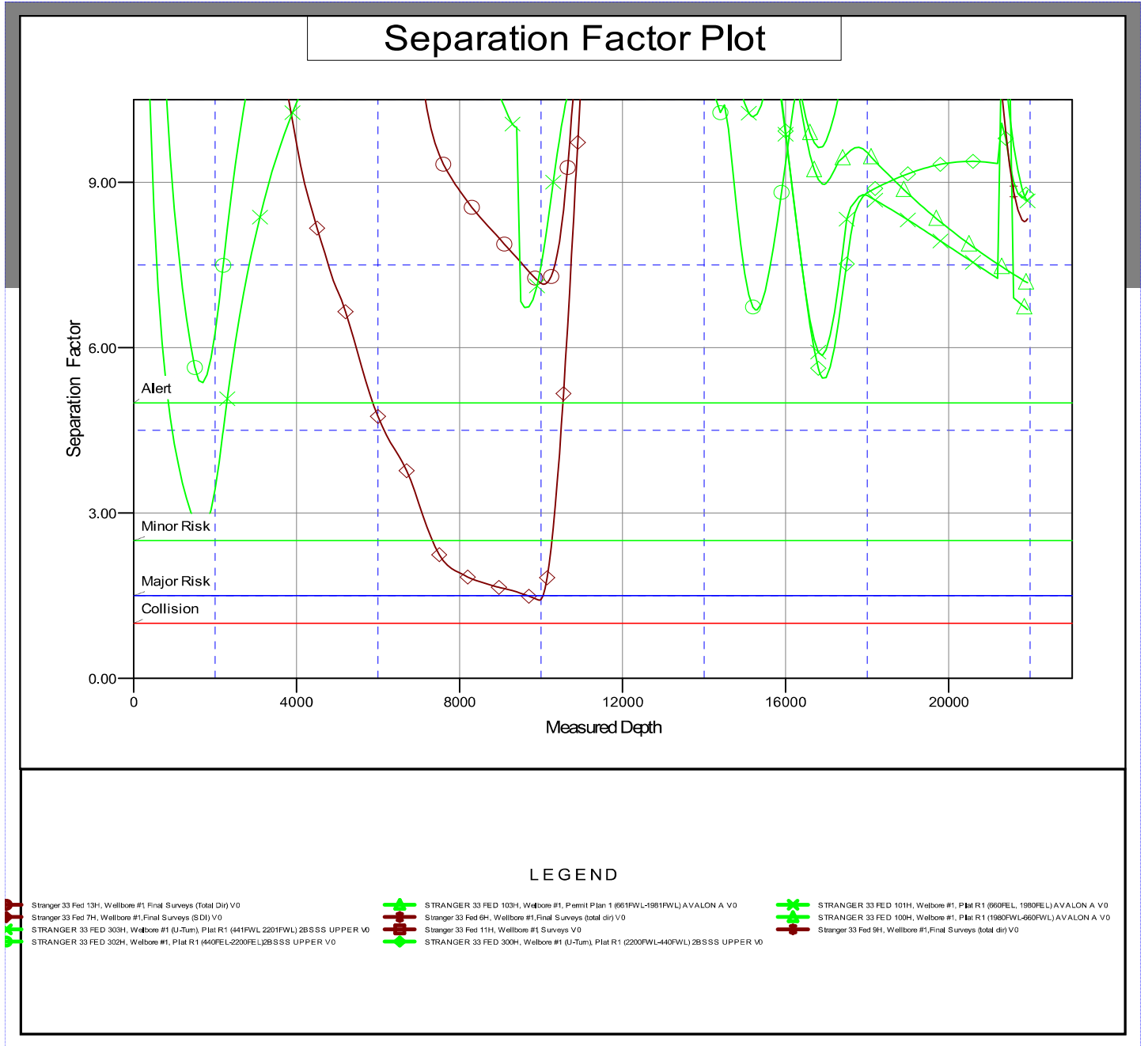


Anticollision Summary Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Project:	Lea County (NAD83 New Mexico East)	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Reference Site:	Sec 33-T25S-R34E	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site Error:	0.00 ft	North Reference:	Grid
Reference Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM_5000.17
Reference Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER	Offset TVD Reference:	Offset Datum

Reference Depths are relative to GL:3322.20+26ft @ 3348.20ft
Offset Depths are relative to Offset Datum
Central Meridian is -104.3333333

Coordinates are relative to: STRANGER 33 FED 301H
Coordinate System is US State Plane 1983, New Mexico Eastern Zone
Grid Convergence at Surface is: 0.46°



C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION

API Number	Pool Code 96661	Pool Name HARDIN TANK;BONE SPRING
Property Code	Property Name STRANGER 33 FED	Well Number 301H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Ground Level Elevation 3322.2'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL P	Section 33	Township 25-S	Range 34-E	Lot	Ft. from N/S 480' S	Ft. from E/W 431' E	Latitude 32.081060	Longitude 103.467727	County LEA
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Bottom Hole Location

UL M	Section 33	Township 25-S	Range 34-E	Lot	Ft. from N/S 20' S	Ft. from E/W 1320' W	Latitude 32.079787	Longitude 103.479141	County LEA
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Dedicated Acres 640	Infill or Defining Well INFILL	Defining Well API Stranger 33 Fed 301H	Overlapping Spacing Unit (Y/N) N	Consolidation Code
Order Numbers			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section 33	Township 25S	Range 34E	Lot	Ft. from N/S 50 FSL	Ft. from E/W 1320 FEL	Latitude 32.0798756	Longitude -103.4705973	County LEA
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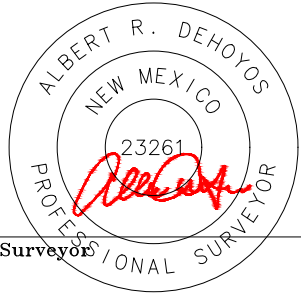

First Take Point (FTP)

UL P	Section 33	Township 25-S	Range 34-E	Lot	Ft. from N/S 100' S	Ft. from E/W 1320' E	Latitude 32.080013	Longitude 103.470596	County LEA
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Last Take Point (LTP)

UL M	Section 33	Township 25-S	Range 34-E	Lot	Ft. from N/S 100' S	Ft. from E/W 1320' W	Latitude 32.080007	Longitude 103.479141	County LEA
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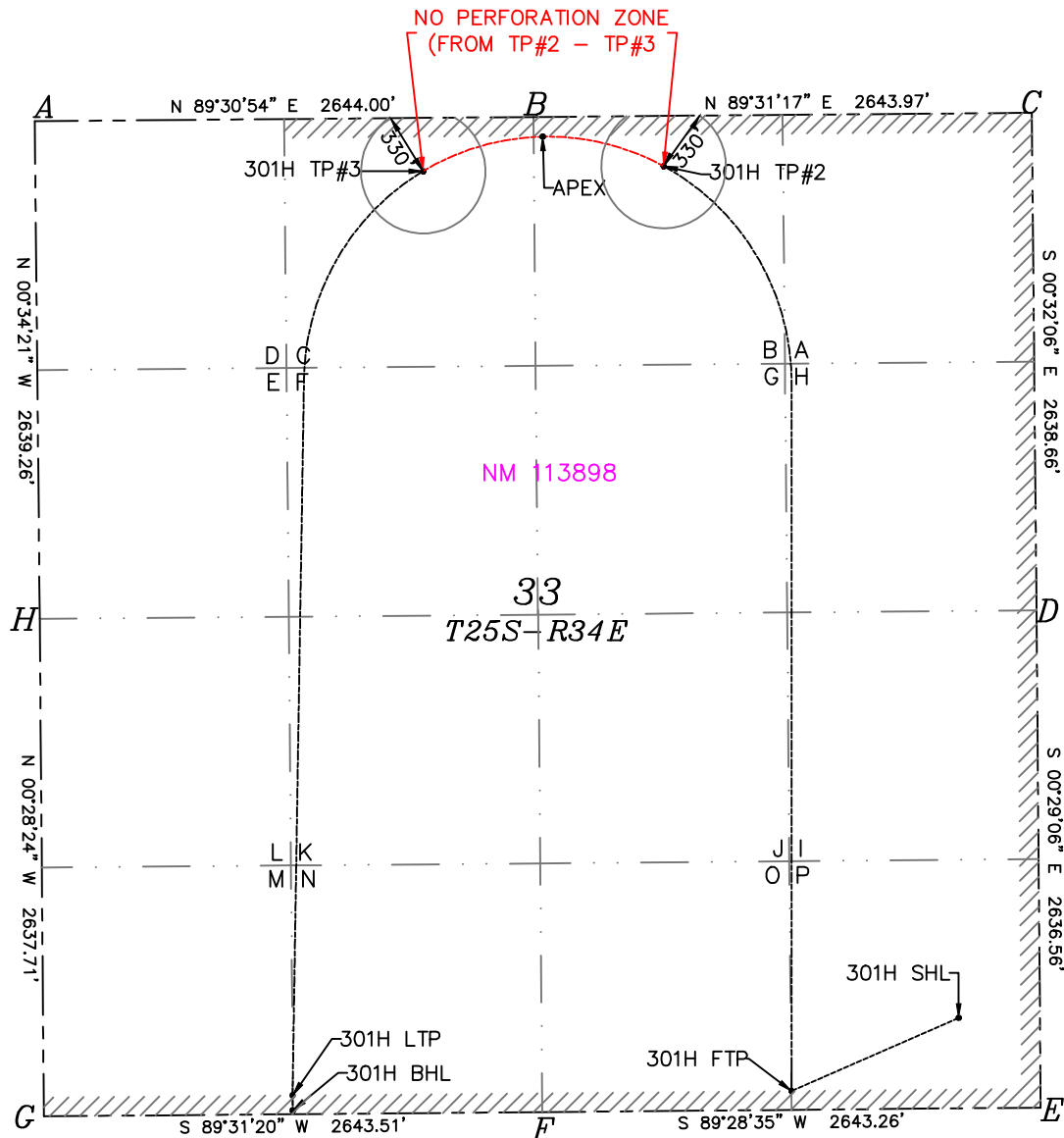
Spacing Unit Type		Horizontal	Vertical	Ground Floor Elevation:
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OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional 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 2/6/2025	Signature and Seal of Professional Surveyor	
Printed Name Rebecca Deal, Regulatory Analyst	Email Address rebecca.deal@dmn.com	Certificate Number 23261	Date of Survey 07/2024

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.

STRANGER 33 FED COM 301H TAKE POINT #2

EL: 3322.2'
 N: 394302.37
 E: 809433.40
 LAT: 32.081060
 LON: 103.467727

KICK OFF POINT

CALLS: 50 FSL 1320 FEL
 N: 393,864.41
 E: 808,547.70
 LAT: 32.0798756
 LON: -103.4705973

FIRST TAKE POINT

100' FSL 1320' FEL SEC. 33
 N: 393914.25
 E: 808547.74
 LAT: 32.080013
 LON: 103.470596

LAST TAKE POINT

100' FSL 1320' FWL SEC. 33
 N: 393891.12
 E: 805901.09
 LAT: 32.080007
 LON: 103.479141

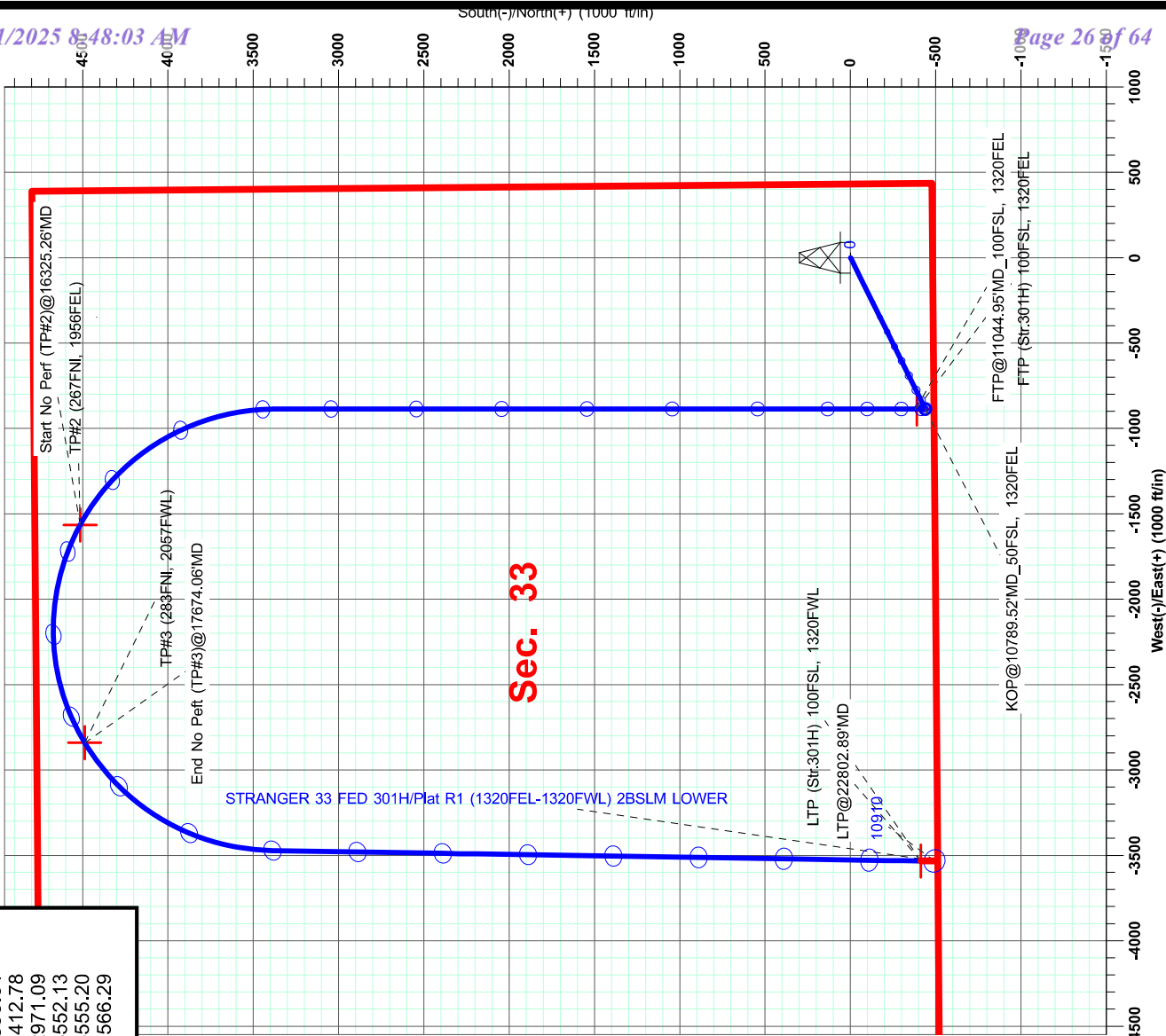
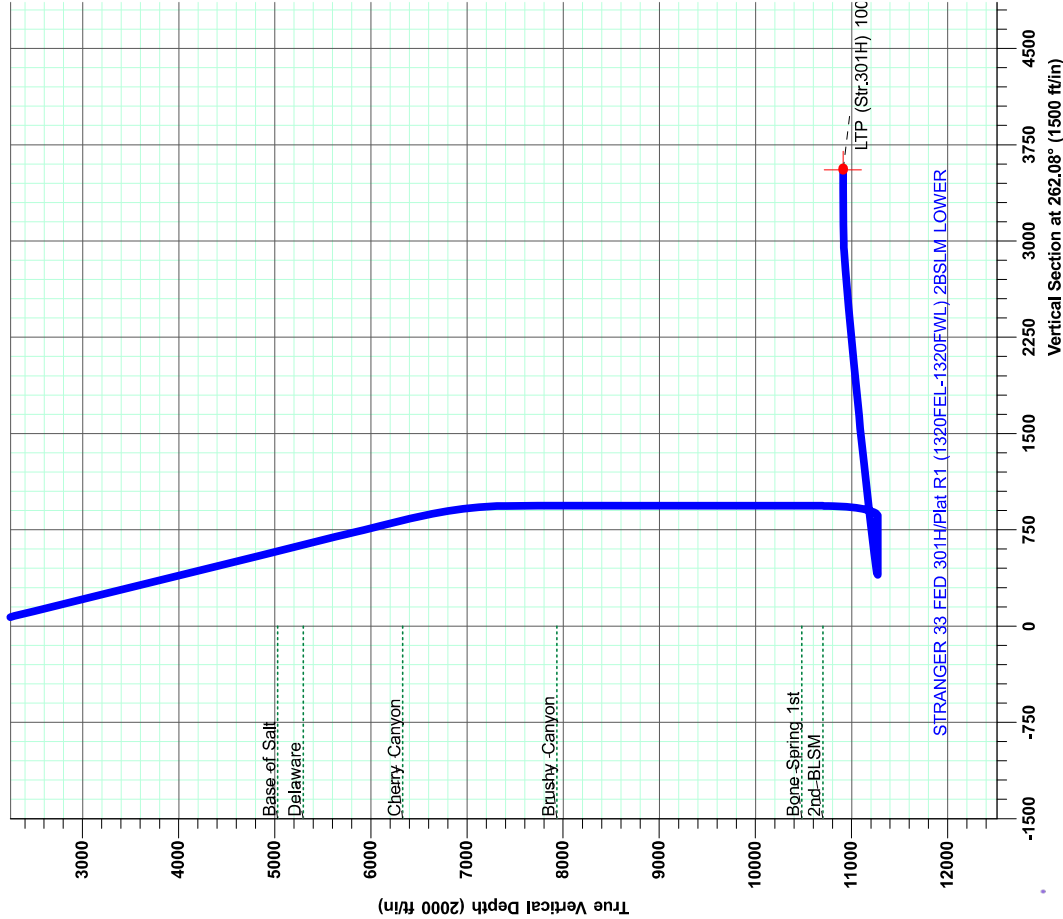
BOTTOM OF HOLE

N: 393811.13
 E: 805901.75
 LAT: 32.079787
 LON: 103.479141

A=N: 399056.87 E: 804533.79
 B=N: 399079.26 E: 807177.70
 C=N: 399101.34 E: 809821.58
 D=N: 396462.79 E: 809846.22
 E=N: 393826.32 E: 809868.53
 F=N: 393802.16 E: 807225.38
 G=N: 393780.12 E: 804581.96
 H=N: 396417.74 E: 804560.17

SECTION DETAILS
STRANGER 33 FED 301H

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	VSect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00
2233.70	11.01	243.68	2229.20	-31.14	-62.97	1.50	66.66
6488.96	11.01	243.68	6406.20	-391.28	-791.12	0.00	837.51
7589.52	0.00	0.00	7500.00	-438.00	-885.57	1.00	937.50
0789.52	0.00	0.00	10700.00	-438.00	-885.57	0.00	937.50
1689.52	90.00	0.00	11272.96	134.96	-885.57	10.00	858.51
4922.52	90.00	0.00	11272.96	3367.96	-885.57	0.00	412.78
9001.64	90.13	180.92	10918.33	3389.07	-3471.49	4.39	2971.09
2781.35	90.13	180.92	10910.02	-390.14	-3532.07	0.00	3552.13
2802.46	90.00	180.00	10910.00	-411.25	-3532.24	4.39	3555.20
2882.89	90.00	180.00	10910.00	-491.68	-3532.24	0.00	3566.29



STRANGER 33 FED 301H
Lea County (NAD83 New Mexico East)
Northing: 394302.41
Easting: 809433.28
Lat: 32.0810600
Long: -103.4677270
Plat R1 (1320FEL-1320FWL) 2BSLM LOWER



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

Drilling Plan Data Report

03/10/2025

APD ID: 10400101127

Submission Date: 09/19/2024

Highlighted data
reflects the most
recent changes

Operator Name: DEVON ENERGY PRODUCTION COMPANY LP

Well Name: STRANGER 33 FED

Well Number: 301H

Well Type: OIL WELL

Well Work Type: Drill

[Show Final Text](#)

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15165302	---	3321	0	0	OTHER : SURFACE	NONE	N
15165303	RUSTLER	2461	860	860	SANDSTONE	NONE	N
15165304	TOP OF SALT	2111	1210	1210	SALT	NONE	N
15165305	BASE OF SALT	-1734	5055	5055	ANHYDRITE	NATURAL GAS, OIL	N
15165315	LAMAR	-1999	5320	5320	SANDSTONE	NATURAL GAS, OIL	N
15165307	CHERRY CANYON	-3114	6435	6435	SANDSTONE	NATURAL GAS, OIL	N
15165308	BRUSHY CANYON	-4639	7960	7960	SANDSTONE	NATURAL GAS, OIL	N
15165309	BONE SPRING	-6129	9450	9450	SANDSTONE	NATURAL GAS, OIL	N
15165316	BONE SPRING 1ST	-7159	10480	10480	SANDSTONE	NATURAL GAS, OIL	N
15165319	BONE SPRING 2ND	-7379	10700	10700	LIMESTONE	NATURAL GAS, OIL	Y
15165311	BONE SPRING 2ND	-7729	11050	11050	SANDSTONE	NATURAL GAS, OIL	N
15165318	BONE SPRING 3RD	-8219	11540	11540	LIMESTONE	NATURAL GAS, OIL	N
15165312	BONE SPRING 3RD	-8819	12140	12140	SANDSTONE	NATURAL GAS, OIL	N
15165313	WOLFCAMP	-9259	12580	12580	SHALE	NATURAL GAS, OIL	N

Section 2 - Blowout Prevention



Commitment Runs Deep



Design Plan
Operation and Maintenance Plan
Closure Plan

SENM - Closed Loop Systems
June 2010

I. Design Plan

Devon uses MI SWACO closed loop system (CLS). The MI SWACO CLS is designed to maintain drill solids at or below 5%. The equipment is arranged to progressively remove solids from the largest to the smallest size. Drilling fluids can thus be reused and savings is realized on mud and disposal costs. Dewatering may be required with the centrifuges to insure removal of ultra fine solids.

The drilling location is constructed to allow storm water to flow to a central sump normally the cellar. This insures no contamination leaves the drilling pad in the event of a spill. Storm water is reused in the mud system or stored in a reserve fluid tank farm until it can be reused. All lubricants, oils, or chemicals are removed immediately from the ground to prevent the contamination of storm water. An oil trap is normally installed on the sump if an oil spill occurs during a storm.

A tank farm is utilized to store drilling fluids including fresh water and brine fluids. The tank farm is constructed on a 20 ml plastic lined, bermed pad to prevent the contamination of the drilling site during a spill. Fluids from other sites may be stored in these tanks for processing by the solids control equipment and reused in the mud system. At the end of the well the fluids are transported from the tank farm to an adjoining well or to the next well for the rig.

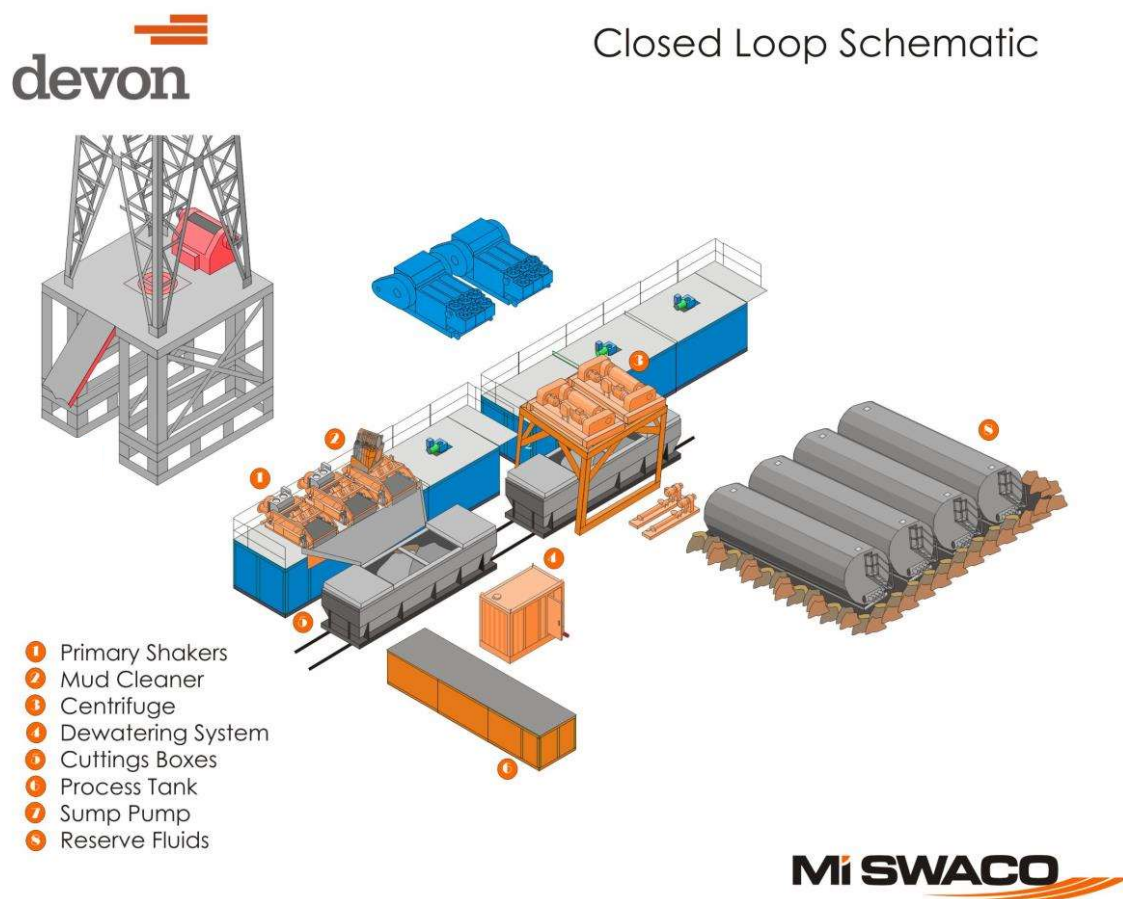
Prior to installing a closed-loop system on site, the topsoil, if present, will be stripped and stockpiled for use as the final cover or fill at the time of closure.

Signs will be posted on the fence surrounding the closed-loop system unless the closed-loop system is located on a site where there is an existing well, that is operated by Devon.

II. Operations and Maintenance Plan

Primary Shakers: The primary shakers make the first removal of drill solids from the drilling mud as it leaves the well bore. The shakers are sized to handle maximum drilling rate at optimal screen size. The shakers normally remove solids down to 74 microns.

Mud Cleaner: The Mud Cleaner cleans the fluid after it leaves the shakers. A set of hydrocyclones are sized to handle 1.25 to 1.5 times the maximum circulating rate. This ensures all the fluid is being processed to an average cut point of 25 microns. The wet discharged is dewatered on a shaker equipped with ultra fine mesh screens and generally cut at 40 microns.



Centrifuges: The centrifuges can be one or two in number depending on the well geometry or depth of well. The centrifuges are sized to maintain low gravity solids at 5% or below. They may or may not need a dewatering system to enhance the removal rates. The centrifuges can make a cut point of 8-10 microns depending on bowl speed, feed rate, solids loading and other factors.

The centrifuge system is designed to work on the active system and be flexible to process incoming fluids from other locations. This set-up is also dependant on well factors.

Dewatering System: The dewatering system is a chemical mixing and dosing system designed to enhance the solids removal of the centrifuge. Not commonly used in shallow wells. It may contain pH adjustment, coagulant mixing and dosing, and polymer mixing and dosing. Chemical flocculation binds ultra fine solids into a mass that is within the centrifuge operating design. The

dewatering system improves the centrifuge cut point to infinity or allows for the return of clear water or brine fluid. This ability allows for the ultimate control of low gravity solids.

Cuttings Boxes: Cuttings boxes are utilized to capture drill solids that are discarded from the solids control equipment. These boxes are set upon a rail system that allows for the removal and replacement of a full box of cuttings with an empty one. They are equipped with a cover that insures no product is spilled into the environment during the transportation phase.

Process Tank: (Optional) The process tank allows for the holding and process of fluids that are being transferred into the mud system. Additionally, during times of lost circulation the process tank may hold active fluids that are removed for additional treatment. It can further be used as a mixing tank during well control conditions.

Sump and Sump Pump: The sump is used to collect storm water and the pump is used to transfer this fluid to the active system or to the tank for to hold in reserve. It can also be used to collect fluids that may escape during spills. The location contains drainage ditches that allow the location fluids to drain to the sump.

Reserve Fluids (Tank Farm): A series of frac tanks are used to replace the reserve pit. These are steel tanks that are equipped with a manifold system and a transfer pump. These tanks can contain any number of fluids used during the drilling process. These can include fresh water, cut brine, and saturated salt fluid. The fluid can be from the active well or reclaimed fluid from other locations. A 20 ml liner and berm system is employed to ensure the fluids do not migrate to the environment during a spill.

If a leak develops, the appropriate division district office will be notified within 48 hours of the discovery and the leak will be addressed. Spill prevention is accomplished by maintaining pump packing, hoses, and pipe fittings to insure no leaks are occurring. During an upset condition the source of the spill is isolated and repaired as soon as it is discovered. Free liquid is removed by a diaphragm pump and returned to the mud system. Loose topsoil may be used to stabilize the spill and the contaminated soil is excavated and placed in the cuttings boxes. After the well is finished and the rig has moved, the entire location is scrapped and testing will be performed to determine if a release has occurred.

All trash is kept in a wire mesh enclosure and removed to an approved landfill when full. All spent motor oils are kept in separate containers and they are removed and sent to an approved recycling center. Any spilled lubricants, pipe

dope, or regulated chemicals are removed from soil and sent to landfills approved for these products.

These operations are monitored by Mi Swaco service technicians. Daily logs are maintained to ensure optimal equipment operation and maintenance. Screen and chemical use is logged to maintain inventory control. Fluid properties are monitored and recorded and drilling mud volumes are accounted for in the mud storage farm. This data is kept for end of well review to insure performance goals are met. Lessons learned are logged and used to help with continuous improvement.

A MI SWACO field supervisor manages from 3-5 wells. They are responsible for training personnel, supervising installations, and inspecting sites for compliance of MI SWACO safety and operational policy.

III. Closure Plan

A maximum 340' X 340' caliche pad is built per well. All of the trucks and steel tanks fit on this pad. All fluid cuttings go to the steel tanks to be hauled by various trucking companies to an agency approved disposal.

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

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 33-T25S-R34E				
Site Position:		Northing:	399,056.87 usft	Latitude:	32.0942355
From:	Map	Easting:	804,533.73 usft	Longitude:	-103.4834238
Position Uncertainty:	0.00 ft	Slot Radius:	13.20 in		

Well	STRANGER 33 FED 301H					
Well Position	+N/-S	0.00 ft	Northing:	394,302.40 usft	Latitude:	32.0810600
	+E/-W	0.00 ft	Easting:	809,433.27 usft	Longitude:	-103.4677270
Position Uncertainty		0.50 ft	Wellhead Elevation:	ft	Ground Level:	3,322.20 ft
Grid Convergence:		0.46 °				

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2015	8/14/2024	6.11	59.85	47,130.80775194

Design	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.00	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.00	0.00	0.00	262.08	

Plan Survey Tool Program	Date	2/5/2025			
Depth From	Depth To	Survey (Wellbore)	Tool Name	Remarks	
(ft)	(ft)				
1	0.00	22,882.46 Plat R1 (1320FEL-1320FWL) 2B	MWD+IFR1+FDIR OWSG MWD + IFR1 + FDIR C		

Planning Report - Geographic

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Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

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	
2,233.70	11.01	243.68	2,229.20	-31.14	-62.97	1.50	1.50	0.00	243.68	
6,488.96	11.01	243.68	6,406.20	-391.28	-791.12	0.00	0.00	0.00	0.00	
7,589.52	0.00	0.00	7,500.00	-438.00	-885.57	1.00	-1.00	0.00	180.00	
10,789.52	0.00	0.00	10,700.00	-438.00	-885.57	0.00	0.00	0.00	0.00	
11,689.52	90.00	0.00	11,272.96	134.96	-885.57	10.00	10.00	0.00	0.00	
14,922.52	90.00	0.00	11,272.96	3,367.96	-885.57	0.00	0.00	0.00	0.00	
19,001.64	90.13	180.92	10,918.33	3,389.07	-3,471.49	4.39	0.00	-4.39	-82.19	
22,781.35	90.13	180.92	10,910.02	-390.14	-3,532.07	0.00	0.00	0.00	0.00	
22,802.46	90.00	180.00	10,910.00	-411.25	-3,532.24	4.39	-0.60	-4.35	-97.81	LTP (Str.301H) 100FS
22,882.89	90.00	180.00	10,910.00	-491.68	-3,532.24	0.00	0.00	0.00	0.00	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

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	394,302.40	809,433.27	32.0810600	-103.4677270
100.00	0.00	0.00	100.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
200.00	0.00	0.00	200.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
300.00	0.00	0.00	300.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
400.00	0.00	0.00	400.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
500.00	0.00	0.00	500.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
600.00	0.00	0.00	600.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
700.00	0.00	0.00	700.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
800.00	0.00	0.00	800.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
840.00	0.00	0.00	840.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
Rustler									
900.00	0.00	0.00	900.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,000.00	0.00	0.00	1,000.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,100.00	0.00	0.00	1,100.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,200.00	0.00	0.00	1,200.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,220.00	0.00	0.00	1,220.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
Salt									
1,300.00	0.00	0.00	1,300.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,400.00	0.00	0.00	1,400.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,500.00	0.00	0.00	1,500.00	0.00	0.00	394,302.40	809,433.27	32.0810600	-103.4677270
1,600.00	1.50	243.68	1,599.99	-0.58	-1.17	394,301.82	809,432.10	32.0810585	-103.4677308
1,700.00	3.00	243.68	1,699.91	-2.32	-4.69	394,300.08	809,428.58	32.0810537	-103.4677422
1,800.00	4.50	243.68	1,799.69	-5.22	-10.55	394,297.18	809,422.72	32.0810459	-103.4677612
1,900.00	6.00	243.68	1,899.27	-9.28	-18.76	394,293.13	809,414.52	32.0810349	-103.4677878
2,000.00	7.50	243.68	1,998.57	-14.49	-29.29	394,287.92	809,403.98	32.0810209	-103.4678219
2,100.00	9.00	243.68	2,097.54	-20.85	-42.15	394,281.56	809,391.12	32.0810036	-103.4678636
2,200.00	10.50	243.68	2,196.09	-28.36	-57.33	394,274.05	809,375.94	32.0809833	-103.4679128
2,233.70	11.01	243.68	2,229.20	-31.14	-62.97	394,271.26	809,370.31	32.0809758	-103.4679311
2,300.00	11.01	243.68	2,294.28	-36.75	-74.31	394,265.65	809,358.96	32.0809606	-103.4679679
2,400.00	11.01	243.68	2,392.44	-45.22	-91.42	394,257.19	809,341.85	32.0809378	-103.4680233
2,500.00	11.01	243.68	2,490.60	-53.68	-108.54	394,248.72	809,324.74	32.0809149	-103.4680788
2,600.00	11.01	243.68	2,588.76	-62.15	-125.65	394,240.26	809,307.63	32.0808920	-103.4681342
2,700.00	11.01	243.68	2,686.92	-70.61	-142.76	394,231.80	809,290.51	32.0808691	-103.4681897
2,800.00	11.01	243.68	2,785.08	-79.07	-159.87	394,223.33	809,273.40	32.0808462	-103.4682452
2,900.00	11.01	243.68	2,883.24	-87.54	-176.98	394,214.87	809,256.29	32.0808233	-103.4683006
3,000.00	11.01	243.68	2,981.40	-96.00	-194.10	394,206.41	809,239.18	32.0808004	-103.4683561
3,100.00	11.01	243.68	3,079.56	-104.46	-211.21	394,197.94	809,222.07	32.0807776	-103.4684116
3,200.00	11.01	243.68	3,177.73	-112.93	-228.32	394,189.48	809,204.96	32.0807547	-103.4684670
3,300.00	11.01	243.68	3,275.89	-121.39	-245.43	394,181.02	809,187.84	32.0807318	-103.4685225
3,400.00	11.01	243.68	3,374.05	-129.85	-262.54	394,172.55	809,170.73	32.0807089	-103.4685779
3,500.00	11.01	243.68	3,472.21	-138.32	-279.65	394,164.09	809,153.62	32.0806860	-103.4686334
3,600.00	11.01	243.68	3,570.37	-146.78	-296.77	394,155.63	809,136.51	32.0806631	-103.4686889
3,700.00	11.01	243.68	3,668.53	-155.24	-313.88	394,147.16	809,119.40	32.0806402	-103.4687443
3,800.00	11.01	243.68	3,766.69	-163.71	-330.99	394,138.70	809,102.28	32.0806174	-103.4687998
3,900.00	11.01	243.68	3,864.85	-172.17	-348.10	394,130.24	809,085.17	32.0805945	-103.4688553
4,000.00	11.01	243.68	3,963.01	-180.63	-365.21	394,121.77	809,068.06	32.0805716	-103.4689107
4,100.00	11.01	243.68	4,061.17	-189.10	-382.33	394,113.31	809,050.95	32.0805487	-103.4689662
4,200.00	11.01	243.68	4,159.33	-197.56	-399.44	394,104.85	809,033.84	32.0805258	-103.4690216
4,300.00	11.01	243.68	4,257.49	-206.02	-416.55	394,096.38	809,016.73	32.0805029	-103.4690771
4,400.00	11.01	243.68	4,355.66	-214.49	-433.66	394,087.92	808,999.61	32.0804800	-103.4691326
4,500.00	11.01	243.68	4,453.82	-222.95	-450.77	394,079.46	808,982.50	32.0804571	-103.4691880
4,600.00	11.01	243.68	4,551.98	-231.41	-467.88	394,070.99	808,965.39	32.0804343	-103.4692435
4,700.00	11.01	243.68	4,650.14	-239.88	-485.00	394,062.53	808,948.28	32.0804114	-103.4692990
4,800.00	11.01	243.68	4,748.30	-248.34	-502.11	394,054.07	808,931.17	32.0803885	-103.4693544

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
4,900.00	11.01	243.68	4,846.46	-256.80	-519.22	394,045.60	808,914.06	32.0803656	-103.4694099	
5,000.00	11.01	243.68	4,944.62	-265.27	-536.33	394,037.14	808,896.94	32.0803427	-103.4694653	
5,086.98	11.01	243.68	5,030.00	-272.63	-551.21	394,029.78	808,882.06	32.0803228	-103.4695136	
Base of Salt										
5,100.00	11.01	243.68	5,042.78	-273.73	-553.44	394,028.68	808,879.83	32.0803198	-103.4695208	
5,200.00	11.01	243.68	5,140.94	-282.19	-570.55	394,020.21	808,862.72	32.0802969	-103.4695763	
5,300.00	11.01	243.68	5,239.10	-290.66	-587.67	394,011.75	808,845.61	32.0802741	-103.4696317	
5,356.94	11.01	243.68	5,295.00	-295.48	-597.41	394,006.93	808,835.86	32.0802610	-103.4696633	
Delaware										
5,400.00	11.01	243.68	5,337.26	-299.12	-604.78	394,003.28	808,828.50	32.0802512	-103.4696872	
5,500.00	11.01	243.68	5,435.43	-307.58	-621.89	393,994.82	808,811.38	32.0802283	-103.4697427	
5,600.00	11.01	243.68	5,533.59	-316.05	-639.00	393,986.36	808,794.27	32.0802054	-103.4697981	
5,700.00	11.01	243.68	5,631.75	-324.51	-656.11	393,977.89	808,777.16	32.0801825	-103.4698536	
5,800.00	11.01	243.68	5,729.91	-332.97	-673.23	393,969.43	808,760.05	32.0801596	-103.4699090	
5,900.00	11.01	243.68	5,828.07	-341.44	-690.34	393,960.97	808,742.94	32.0801367	-103.4699645	
6,000.00	11.01	243.68	5,926.23	-349.90	-707.45	393,952.50	808,725.83	32.0801139	-103.4700200	
6,100.00	11.01	243.68	6,024.39	-358.36	-724.56	393,944.04	808,708.71	32.0800910	-103.4700754	
6,200.00	11.01	243.68	6,122.55	-366.83	-741.67	393,935.58	808,691.60	32.0800681	-103.4701309	
6,300.00	11.01	243.68	6,220.71	-375.29	-758.78	393,927.11	808,674.49	32.0800452	-103.4701863	
6,400.00	11.01	243.68	6,318.87	-383.75	-775.90	393,918.65	808,657.38	32.0800223	-103.4702418	
6,411.34	11.01	243.68	6,330.00	-384.71	-777.84	393,917.69	808,655.44	32.0800197	-103.4702481	
Cherry Canyon										
6,488.96	11.01	243.68	6,406.20	-391.28	-791.12	393,911.12	808,642.16	32.0800019	-103.4702911	
6,500.00	10.90	243.68	6,417.04	-392.21	-793.00	393,910.19	808,640.28	32.0799994	-103.4702972	
6,600.00	9.90	243.68	6,515.39	-400.21	-809.17	393,902.19	808,624.10	32.0799778	-103.4703497	
6,700.00	8.90	243.68	6,614.05	-407.45	-823.80	393,894.96	808,609.47	32.0799582	-103.4703971	
6,800.00	7.90	243.68	6,712.98	-413.92	-836.89	393,888.48	808,596.38	32.0799407	-103.4704395	
6,900.00	6.90	243.68	6,812.15	-419.63	-848.43	393,882.78	808,584.85	32.0799253	-103.4704769	
7,000.00	5.90	243.68	6,911.52	-424.57	-858.41	393,877.84	808,574.86	32.0799119	-103.4705093	
7,100.00	4.90	243.68	7,011.08	-428.73	-866.84	393,873.67	808,566.44	32.0799007	-103.4705366	
7,200.00	3.90	243.68	7,110.78	-432.13	-873.71	393,870.27	808,559.57	32.0798915	-103.4705588	
7,300.00	2.90	243.68	7,210.61	-434.76	-879.02	393,867.65	808,554.26	32.0798844	-103.4705760	
7,400.00	1.90	243.68	7,310.52	-436.61	-882.76	393,865.80	808,550.51	32.0798794	-103.4705882	
7,500.00	0.90	243.68	7,410.49	-437.69	-884.95	393,864.72	808,548.33	32.0798765	-103.4705952	
7,589.52	0.00	0.00	7,500.00	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
7,600.00	0.00	0.00	7,510.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
7,700.00	0.00	0.00	7,610.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
7,800.00	0.00	0.00	7,710.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
7,900.00	0.00	0.00	7,810.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,000.00	0.00	0.00	7,910.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,024.52	0.00	0.00	7,935.00	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
Brushy Canyon										
8,100.00	0.00	0.00	8,010.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,200.00	0.00	0.00	8,110.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,300.00	0.00	0.00	8,210.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,400.00	0.00	0.00	8,310.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,500.00	0.00	0.00	8,410.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,600.00	0.00	0.00	8,510.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,700.00	0.00	0.00	8,610.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,800.00	0.00	0.00	8,710.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
8,900.00	0.00	0.00	8,810.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,000.00	0.00	0.00	8,910.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,100.00	0.00	0.00	9,010.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,200.00	0.00	0.00	9,110.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude	
9,300.00	0.00	0.00	9,210.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,400.00	0.00	0.00	9,310.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,500.00	0.00	0.00	9,410.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,600.00	0.00	0.00	9,510.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,700.00	0.00	0.00	9,610.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,800.00	0.00	0.00	9,710.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
9,900.00	0.00	0.00	9,810.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,000.00	0.00	0.00	9,910.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,100.00	0.00	0.00	10,010.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,200.00	0.00	0.00	10,110.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,300.00	0.00	0.00	10,210.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,400.00	0.00	0.00	10,310.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,500.00	0.00	0.00	10,410.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,569.52	0.00	0.00	10,480.00	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
Bone Spring 1st										
10,600.00	0.00	0.00	10,510.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,700.00	0.00	0.00	10,610.48	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
10,789.52	0.00	0.00	10,700.00	-438.00	-885.57	393,864.41	808,547.70	32.0798756	-103.4705973	
KOP@10789.52'MD_50FSL, 1320FEL - 2nd BLSM										
10,800.00	1.05	0.00	10,710.48	-437.90	-885.57	393,864.50	808,547.70	32.0798759	-103.4705973	
10,850.00	6.05	0.00	10,760.37	-434.81	-885.57	393,867.60	808,547.70	32.0798844	-103.4705972	
10,900.00	11.05	0.00	10,809.80	-427.38	-885.57	393,875.02	808,547.70	32.0799048	-103.4705970	
10,950.00	16.05	0.00	10,858.39	-415.67	-885.57	393,886.73	808,547.70	32.0799370	-103.4705967	
11,000.00	21.05	0.00	10,905.78	-399.77	-885.57	393,902.63	808,547.70	32.0799807	-103.4705963	
11,044.95	25.54	0.00	10,947.05	-382.00	-885.57	393,920.41	808,547.70	32.0800295	-103.4705958	
FTP@11044.95'MD_100FSL, 1320FEL										
11,050.00	26.05	0.00	10,951.60	-379.80	-885.57	393,922.60	808,547.70	32.0800356	-103.4705958	
11,100.00	31.05	0.00	10,995.51	-355.91	-885.57	393,946.49	808,547.70	32.0801012	-103.4705952	
11,150.00	36.05	0.00	11,037.17	-328.29	-885.57	393,974.11	808,547.70	32.0801772	-103.4705944	
11,200.00	41.05	0.00	11,076.26	-297.14	-885.57	394,005.26	808,547.70	32.0802628	-103.4705936	
11,250.00	46.05	0.00	11,112.49	-262.71	-885.57	394,039.70	808,547.70	32.0803574	-103.4705928	
11,300.00	51.05	0.00	11,145.58	-225.24	-885.57	394,077.16	808,547.70	32.0804604	-103.4705918	
11,350.00	56.05	0.00	11,175.27	-185.04	-885.57	394,117.37	808,547.70	32.0805709	-103.4705908	
11,400.00	61.05	0.00	11,201.35	-142.40	-885.57	394,160.01	808,547.70	32.0806881	-103.4705896	
11,450.00	66.05	0.00	11,223.62	-97.65	-885.57	394,204.76	808,547.70	32.0808111	-103.4705885	
11,500.00	71.05	0.00	11,241.90	-51.12	-885.57	394,251.28	808,547.70	32.0809390	-103.4705873	
11,550.00	76.05	0.00	11,256.06	-3.19	-885.57	394,299.22	808,547.70	32.0810708	-103.4705861	
11,600.00	81.05	0.00	11,265.98	45.80	-885.57	394,348.21	808,547.70	32.0812054	-103.4705848	
11,650.00	86.05	0.00	11,271.60	95.47	-885.57	394,397.88	808,547.70	32.0813419	-103.4705835	
11,689.52	90.00	0.00	11,272.96	134.96	-885.57	394,437.36	808,547.70	32.0814505	-103.4705825	
11,700.00	90.00	0.00	11,272.96	145.44	-885.57	394,447.84	808,547.70	32.0814793	-103.4705822	
11,800.00	90.00	0.00	11,272.96	245.44	-885.57	394,547.84	808,547.70	32.0817542	-103.4705796	
11,900.00	90.00	0.00	11,272.96	345.44	-885.57	394,647.84	808,547.70	32.0820290	-103.4705771	
12,000.00	90.00	0.00	11,272.96	445.44	-885.57	394,747.84	808,547.70	32.0823039	-103.4705745	
12,100.00	90.00	0.00	11,272.96	545.44	-885.57	394,847.84	808,547.70	32.0825787	-103.4705719	
12,200.00	90.00	0.00	11,272.96	645.44	-885.57	394,947.84	808,547.70	32.0828536	-103.4705693	
12,300.00	90.00	0.00	11,272.96	745.44	-885.57	395,047.84	808,547.70	32.0831285	-103.4705667	
12,400.00	90.00	0.00	11,272.96	845.44	-885.57	395,147.84	808,547.70	32.0834033	-103.4705641	
12,500.00	90.00	0.00	11,272.96	945.44	-885.57	395,247.84	808,547.70	32.0836782	-103.4705616	
12,600.00	90.00	0.00	11,272.96	1,045.44	-885.57	395,347.84	808,547.70	32.0839531	-103.4705590	
12,700.00	90.00	0.00	11,272.96	1,145.44	-885.57	395,447.84	808,547.70	32.0842279	-103.4705564	
12,800.00	90.00	0.00	11,272.96	1,245.44	-885.57	395,547.84	808,547.70	32.0845028	-103.4705538	
12,900.00	90.00	0.00	11,272.96	1,345.44	-885.57	395,647.84	808,547.70	32.0847777	-103.4705512	
13,000.00	90.00	0.00	11,272.96	1,445.44	-885.57	395,747.84	808,547.70	32.0850525	-103.4705486	

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

Planned Survey										
Measured			Vertical			Map		Map		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		Latitude	Longitude
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)			
13,100.00	90.00	0.00	11,272.96	1,545.44	-885.57	395,847.84	808,547.70		32.0853274	-103.4705461
13,200.00	90.00	0.00	11,272.96	1,645.44	-885.57	395,947.84	808,547.70		32.0856023	-103.4705435
13,300.00	90.00	0.00	11,272.96	1,745.44	-885.57	396,047.84	808,547.70		32.0858771	-103.4705409
13,400.00	90.00	0.00	11,272.96	1,845.44	-885.57	396,147.84	808,547.70		32.0861520	-103.4705383
13,500.00	90.00	0.00	11,272.96	1,945.44	-885.57	396,247.84	808,547.70		32.0864269	-103.4705357
13,600.00	90.00	0.00	11,272.96	2,045.44	-885.57	396,347.84	808,547.70		32.0867017	-103.4705331
13,700.00	90.00	0.00	11,272.96	2,145.44	-885.57	396,447.84	808,547.70		32.0869766	-103.4705306
13,800.00	90.00	0.00	11,272.96	2,245.44	-885.57	396,547.84	808,547.70		32.0872515	-103.4705280
13,900.00	90.00	0.00	11,272.96	2,345.44	-885.57	396,647.84	808,547.70		32.0875263	-103.4705254
14,000.00	90.00	0.00	11,272.96	2,445.44	-885.57	396,747.84	808,547.70		32.0878012	-103.4705228
14,100.00	90.00	0.00	11,272.96	2,545.44	-885.57	396,847.84	808,547.70		32.0880760	-103.4705202
14,200.00	90.00	0.00	11,272.96	2,645.44	-885.57	396,947.84	808,547.70		32.0883509	-103.4705177
14,300.00	90.00	0.00	11,272.96	2,745.44	-885.57	397,047.84	808,547.70		32.0886258	-103.4705151
14,400.00	90.00	0.00	11,272.96	2,845.44	-885.57	397,147.84	808,547.70		32.0889006	-103.4705125
14,500.00	90.00	0.00	11,272.96	2,945.44	-885.57	397,247.84	808,547.70		32.0891755	-103.4705099
14,600.00	90.00	0.00	11,272.96	3,045.44	-885.57	397,347.84	808,547.70		32.0894504	-103.4705073
14,700.00	90.00	0.00	11,272.96	3,145.44	-885.57	397,447.84	808,547.70		32.0897252	-103.4705047
14,800.00	90.00	0.00	11,272.96	3,245.44	-885.57	397,547.84	808,547.70		32.0900001	-103.4705022
14,900.00	90.00	0.00	11,272.96	3,345.44	-885.57	397,647.84	808,547.70		32.0902750	-103.4704996
14,922.52	90.00	0.00	11,272.96	3,367.96	-885.57	397,670.36	808,547.70		32.0903369	-103.4704990
15,000.00	90.46	356.63	11,272.65	3,445.39	-887.85	397,747.79	808,545.43		32.0905498	-103.4705043
15,100.00	91.06	352.28	11,271.32	3,544.89	-897.51	397,847.29	808,535.77		32.0908235	-103.4705330
15,200.00	91.64	347.93	11,268.97	3,643.35	-914.69	397,945.75	808,518.59		32.0910945	-103.4705859
15,300.00	92.22	343.57	11,265.59	3,740.20	-939.28	398,042.60	808,494.00		32.0913612	-103.4706628
15,400.00	92.79	339.22	11,261.22	3,834.86	-971.14	398,137.26	808,462.13		32.0916221	-103.4707632
15,500.00	93.33	334.85	11,255.88	3,926.78	-1,010.09	398,229.18	808,423.18		32.0918756	-103.4708866
15,600.00	93.86	330.49	11,249.60	4,015.42	-1,055.90	398,317.82	808,377.38		32.0921203	-103.4710322
15,700.00	94.37	326.12	11,242.42	4,100.26	-1,108.29	398,402.66	808,324.98		32.0923546	-103.4711992
15,800.00	94.85	321.74	11,234.37	4,180.81	-1,166.97	398,483.21	808,266.31		32.0925773	-103.4713866
15,900.00	95.31	317.35	11,225.51	4,256.59	-1,231.58	398,558.98	808,201.70		32.0927870	-103.4715932
16,000.00	95.73	312.96	11,215.89	4,327.15	-1,301.75	398,629.55	808,131.53		32.0929825	-103.4718180
16,100.00	96.12	308.57	11,205.56	4,392.08	-1,377.06	398,694.48	808,056.22		32.0931626	-103.4720595
16,200.00	96.47	304.17	11,194.58	4,451.01	-1,457.08	398,753.40	807,976.20		32.0933263	-103.4723163
16,300.00	96.79	299.76	11,183.03	4,503.58	-1,541.33	398,805.97	807,891.95		32.0934727	-103.4725870
16,325.26	96.86	298.64	11,180.03	4,515.81	-1,563.22	398,818.21	807,870.06		32.0935068	-103.4726573
Start No Perf (TP#2)@16325.26'MD										
16,400.00	97.07	295.34	11,170.96	4,549.48	-1,629.32	398,851.88	807,803.96		32.0936008	-103.4728699
16,500.00	97.30	290.93	11,158.45	4,588.46	-1,720.53	398,890.85	807,712.75		32.0937099	-103.4731634
16,600.00	97.49	286.50	11,145.58	4,620.27	-1,814.43	398,922.66	807,618.85		32.0937994	-103.4734658
16,700.00	97.64	282.08	11,132.41	4,644.73	-1,910.47	398,947.13	807,522.81		32.0938688	-103.4737752
16,800.00	97.74	277.65	11,119.02	4,661.70	-2,008.08	398,964.10	807,425.20		32.0939175	-103.4740900
16,900.00	97.80	273.22	11,105.50	4,671.08	-2,106.69	398,973.48	807,326.59		32.0939455	-103.4744081
17,000.00	97.81	268.79	11,091.92	4,672.82	-2,205.72	398,975.21	807,227.56		32.0939524	-103.4747278
17,100.00	97.77	264.36	11,078.36	4,666.90	-2,304.60	398,969.29	807,128.68		32.0939383	-103.4750473
17,200.00	97.69	259.93	11,064.90	4,653.35	-2,402.73	398,955.75	807,030.55		32.0939032	-103.4753645
17,300.00	97.56	255.50	11,051.62	4,632.26	-2,499.55	398,934.66	806,933.73		32.0938474	-103.4756776
17,400.00	97.39	251.08	11,038.60	4,603.76	-2,594.49	398,906.15	806,838.79		32.0937711	-103.4759849
17,500.00	97.18	246.66	11,025.92	4,568.00	-2,686.99	398,870.40	806,746.29		32.0936748	-103.4762845
17,600.00	96.92	242.24	11,013.64	4,525.20	-2,776.50	398,827.60	806,656.78		32.0935592	-103.4765746
17,674.06	96.70	238.97	11,004.86	4,489.12	-2,840.56	398,791.51	806,592.72		32.0934614	-103.4767824
End No Peft (TP#3)@17674.06'MD										
17,700.00	96.62	237.83	11,001.85	4,475.62	-2,862.51	398,778.01	806,570.77		32.0934247	-103.4768536
17,800.00	96.28	233.42	10,990.60	4,419.53	-2,944.50	398,721.92	806,488.78		32.0932724	-103.4771197
17,900.00	95.91	229.02	10,979.97	4,357.27	-3,022.00	398,659.67	806,411.28		32.0931029	-103.4773716

Planning Report - Geographic

Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

Planned Survey										
Measured			Vertical			Map	Map			
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting			
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude		Longitude
18,000.00	95.50	224.63	10,970.02	4,289.21	-3,094.55	398,591.60	806,338.73	32.0929174		-103.4776076
18,100.00	95.06	220.25	10,960.81	4,215.74	-3,161.72	398,518.13	806,271.56	32.0927170		-103.4778263
18,200.00	94.59	215.87	10,952.39	4,137.29	-3,223.13	398,439.69	806,210.15	32.0925027		-103.4780266
18,300.00	94.10	211.49	10,944.81	4,054.34	-3,278.41	398,356.73	806,154.87	32.0922759		-103.4782072
18,400.00	93.58	207.12	10,938.11	3,967.35	-3,327.23	398,269.75	806,106.05	32.0920378		-103.4783671
18,500.00	93.04	202.76	10,932.34	3,876.85	-3,369.32	398,179.25	806,063.96	32.0917900		-103.4785053
18,600.00	92.48	198.40	10,927.53	3,783.36	-3,404.42	398,085.76	806,028.86	32.0915338		-103.4786210
18,700.00	91.91	194.04	10,923.70	3,687.44	-3,432.32	397,989.83	806,000.96	32.0912707		-103.4787136
18,800.00	91.32	189.69	10,920.88	3,589.64	-3,452.87	397,892.03	805,980.41	32.0910024		-103.4787824
18,900.00	90.73	185.34	10,919.09	3,490.53	-3,465.94	397,792.93	805,967.34	32.0907303		-103.4788272
19,001.64	90.13	180.92	10,918.33	3,389.07	-3,471.49	397,691.47	805,961.79	32.0904515		-103.4788477
19,100.00	90.13	180.92	10,918.11	3,290.73	-3,473.07	397,593.13	805,960.21	32.0901812		-103.4788553
19,200.00	90.13	180.92	10,917.89	3,190.74	-3,474.67	397,493.14	805,958.61	32.0899064		-103.4788630
19,300.00	90.13	180.92	10,917.68	3,090.75	-3,476.27	397,393.15	805,957.01	32.0896316		-103.4788708
19,400.00	90.13	180.92	10,917.46	2,990.77	-3,477.87	397,293.17	805,955.41	32.0893568		-103.4788785
19,500.00	90.13	180.92	10,917.24	2,890.78	-3,479.48	397,193.18	805,953.80	32.0890820		-103.4788862
19,600.00	90.13	180.92	10,917.02	2,790.79	-3,481.08	397,093.19	805,952.20	32.0888072		-103.4788939
19,700.00	90.13	180.92	10,916.80	2,690.81	-3,482.68	396,993.21	805,950.60	32.0885324		-103.4789017
19,800.00	90.13	180.92	10,916.58	2,590.82	-3,484.28	396,893.22	805,949.00	32.0882576		-103.4789094
19,900.00	90.13	180.92	10,916.36	2,490.83	-3,485.89	396,793.23	805,947.39	32.0879829		-103.4789171
20,000.00	90.13	180.92	10,916.14	2,390.84	-3,487.49	396,693.24	805,945.79	32.0877081		-103.4789249
20,100.00	90.13	180.92	10,915.92	2,290.86	-3,489.09	396,593.26	805,944.19	32.0874333		-103.4789326
20,200.00	90.13	180.92	10,915.70	2,190.87	-3,490.70	396,493.27	805,942.59	32.0871585		-103.4789403
20,300.00	90.13	180.92	10,915.48	2,090.88	-3,492.30	396,393.28	805,940.98	32.0868837		-103.4789481
20,400.00	90.13	180.92	10,915.26	1,990.90	-3,493.90	396,293.30	805,939.38	32.0866089		-103.4789558
20,500.00	90.13	180.92	10,915.04	1,890.91	-3,495.50	396,193.31	805,937.78	32.0863341		-103.4789635
20,600.00	90.13	180.92	10,914.82	1,790.92	-3,497.11	396,093.32	805,936.17	32.0860593		-103.4789713
20,700.00	90.13	180.92	10,914.60	1,690.94	-3,498.71	395,993.34	805,934.57	32.0857845		-103.4789790
20,800.00	90.13	180.92	10,914.38	1,590.95	-3,500.31	395,893.35	805,932.97	32.0855097		-103.4789867
20,900.00	90.13	180.92	10,914.16	1,490.96	-3,501.91	395,793.36	805,931.37	32.0852349		-103.4789945
21,000.00	90.13	180.92	10,913.94	1,390.98	-3,503.52	395,693.38	805,929.76	32.0849601		-103.4790022
21,100.00	90.13	180.92	10,913.72	1,290.99	-3,505.12	395,593.39	805,928.16	32.0846853		-103.4790099
21,200.00	90.13	180.92	10,913.50	1,191.00	-3,506.72	395,493.40	805,926.56	32.0844105		-103.4790177
21,300.00	90.13	180.92	10,913.28	1,091.01	-3,508.33	395,393.42	805,924.96	32.0841357		-103.4790254
21,400.00	90.13	180.92	10,913.06	991.03	-3,509.93	395,293.43	805,923.35	32.0838609		-103.4790331
21,500.00	90.13	180.92	10,912.84	891.04	-3,511.53	395,193.44	805,921.75	32.0835861		-103.4790408
21,600.00	90.13	180.92	10,912.62	791.05	-3,513.13	395,093.46	805,920.15	32.0833113		-103.4790486
21,700.00	90.13	180.92	10,912.40	691.07	-3,514.74	394,993.47	805,918.54	32.0830365		-103.4790563
21,800.00	90.13	180.92	10,912.18	591.08	-3,516.34	394,893.48	805,916.94	32.0827618		-103.4790640
21,900.00	90.13	180.92	10,911.96	491.09	-3,517.94	394,793.50	805,915.34	32.0824870		-103.4790718
22,000.00	90.13	180.92	10,911.74	391.11	-3,519.54	394,693.51	805,913.74	32.0822122		-103.4790795
22,100.00	90.13	180.92	10,911.52	291.12	-3,521.15	394,593.52	805,912.13	32.0819374		-103.4790872
22,200.00	90.13	180.92	10,911.30	191.13	-3,522.75	394,493.54	805,910.53	32.0816626		-103.4790950
22,300.00	90.13	180.92	10,911.08	91.15	-3,524.35	394,393.55	805,908.93	32.0813878		-103.4791027
22,400.00	90.13	180.92	10,910.86	-8.84	-3,525.95	394,293.56	805,907.33	32.0811130		-103.4791104
22,500.00	90.13	180.92	10,910.64	-108.83	-3,527.56	394,193.58	805,905.72	32.0808382		-103.4791182
22,600.00	90.13	180.92	10,910.42	-208.82	-3,529.16	394,093.59	805,904.12	32.0805634		-103.4791259
22,700.00	90.13	180.92	10,910.20	-308.80	-3,530.76	393,993.60	805,902.52	32.0802886		-103.4791336
22,781.35	90.13	180.92	10,910.02	-390.14	-3,532.07	393,912.26	805,901.21	32.0800651		-103.4791399
22,802.46	90.00	180.00	10,910.00	-411.25	-3,532.24	393,891.15	805,901.04	32.0800070		-103.4791410
22,802.89	90.00	180.00	10,910.00	-411.68	-3,532.24	393,890.73	805,901.04	32.0800059		-103.4791410
LTP@22802.89*MD										
22,882.89	90.00	180.00	10,910.00	-491.68	-3,532.24	393,810.73	805,901.04	32.0797860		-103.4791430

Planning Report - Geographic

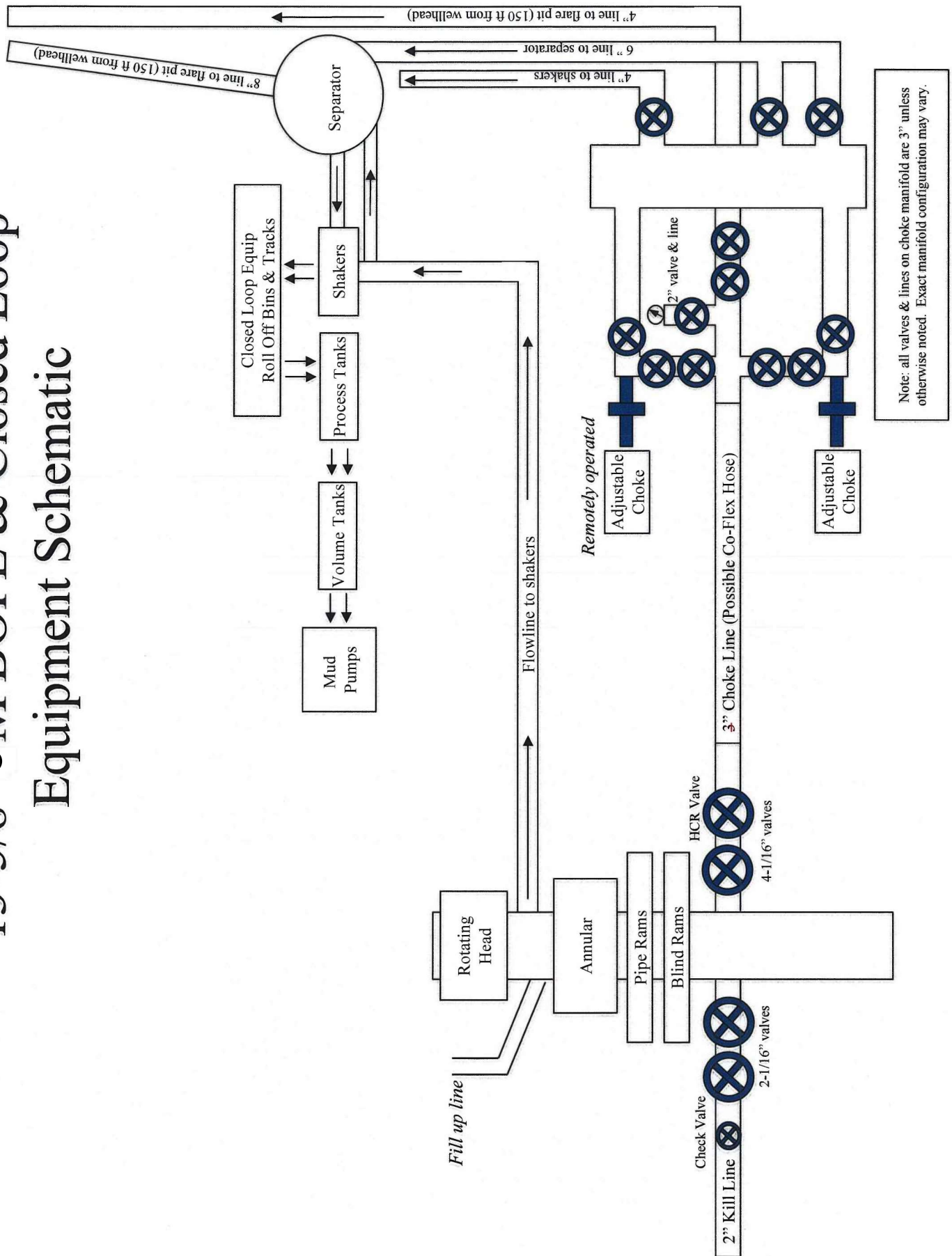
Database:	EDM_5000.17	Local Co-ordinate Reference:	Well STRANGER 33 FED 301H
Company:	WCDSC Permian NM	TVD Reference:	GL:3322.20+26ft @ 3348.20ft
Project:	Lea County (NAD83 New Mexico East)	MD Reference:	GL:3322.20+26ft @ 3348.20ft
Site:	Sec 33-T25S-R34E	North Reference:	Grid
Well:	STRANGER 33 FED 301H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plat R1 (1320FEL-1320FWL) 2BSLM LOWER		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
FTP (Str.301H) 100FSL, - plan misses target center by 966.84ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	-388.01	-885.57	393,914.40	808,547.70	32.0800130	-103.4705960
TP#2 (267FNI, 1956FEL - plan misses target center by 4779.18ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	4,515.81	-1,564.62	398,818.21	807,868.66	32.0935068	-103.4726619
TP#3 (283FNI, 2057FWL - plan misses target center by 5311.79ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E) - Point	0.00	0.00	0.00	4,489.12	-2,839.52	398,791.52	806,593.76	32.0934614	-103.4767790
LTP (Str.301H) 100FSL, - plan hits target center - Point	0.00	0.00	10,910.00	-411.25	-3,532.24	393,891.15	805,901.04	32.0800070	-103.4791410

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
840.00	840.00	Rustler				
1,220.00	1,220.00	Salt				
5,086.98	5,030.00	Base of Salt				
5,356.94	5,295.00	Delaware				
6,411.34	6,330.00	Cherry Canyon				
8,024.52	7,935.00	Brushy Canyon				
10,569.52	10,480.00	Bone Spring 1st				
10,789.52	10,700.00	2nd BLSM				

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
10,789.52	10,700.00	-438.00	-885.57	KOP@10789.52'MD_50FSL, 1320FEL
11,044.95	10,947.05	-382.00	-885.57	FTP@11044.95'MD_100FSL, 1320FEL
16,325.26	11,180.03	4,515.81	-1,563.22	Start No Perf (TP#2)@16325.26'MD
17,674.06	11,004.86	4,489.12	-2,840.56	End No Perf (TP#3)@17674.06'MD
22,802.89	10,910.00	-411.68	-3,532.24	LTP@22802.89'MD

13-5/8" 5M BOPE & Closed Loop Equipment Schematic



A multibowl wellhead may be used. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested.

Devon proposes using a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 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.

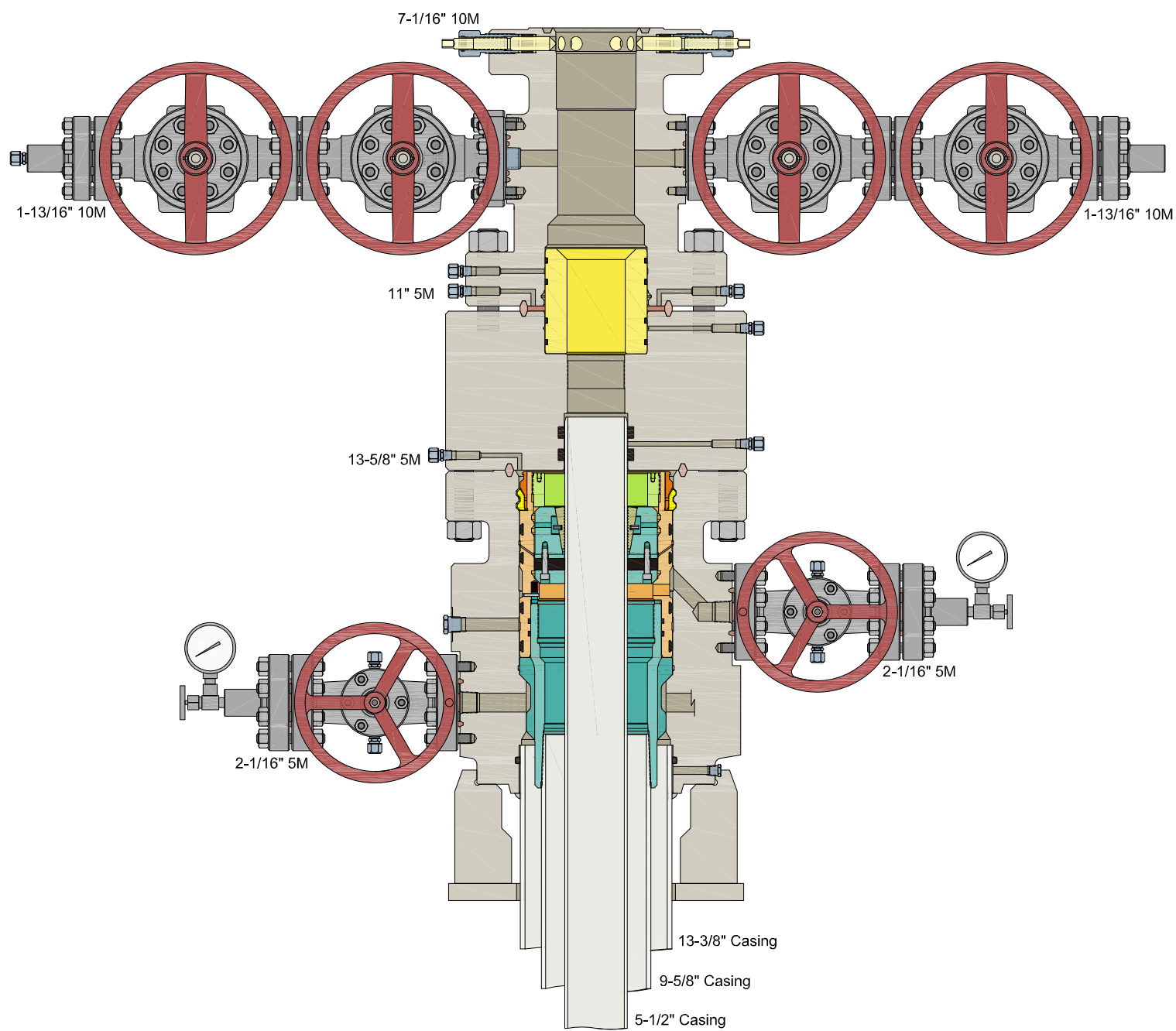
- Wellhead will be installed by wellhead representatives.
- If the welding is performed by a third party, the wellhead representative will monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- Wellhead representative will install the test plug for the initial BOP test.
- Wellhead company will install a solid steel body pack-off to completely isolate the lower head after cementing intermediate casing. After installation of the pack-off, the pack-off and the lower flange will be tested to 5M, as shown on the attached schematic. Everything above the pack-off will not have been altered whatsoever from the initial nipple up. Therefore the BOP components will not be retested at that time.
- If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head will be cut and top out operations will be conducted.
- Devon will pressure test all seals above and below the mandrel (but still above the casing) to full working pressure rating.
- Devon will test the casing to 0.22 psi/ft or 1500 psi, whichever is greater, as per Onshore Order #2.

After running the surface casing, a 13-5/8" BOP/BOPE system with a minimum rating of 5M will be installed on the wellhead system and will undergo a 250 psi low pressure test followed by a 5,000 psi high pressure test. The 5,000 psi high and 250 psi low test will cover testing requirements a maximum of 30 days, as per Onshore Order #2. If the well is not complete within 30 days of this BOP test, another full BOP test will be conducted, as per Onshore Order #2.

After running the intermediate casing with a mandrel hanger, the 13-5/8" BOP/BOPE system with a minimum rating of 5M will already be installed on the wellhead.

The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 5,000 psi WP.

Devon's proposed wellhead manufactures will be FMC Technologies, Cactus Wellhead, or Cameron.



Casing Assumptions and Load Cases

Surface

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Surface Casing Burst Design		
Load Case	External Pressure	Internal Pressure
Pressure Test	Formation Pore Pressure	Max mud weight of next hole-section plus Test psi
Drill Ahead	Formation Pore Pressure	Max mud weight of next hole section
Displace to Gas	Formation Pore Pressure	Dry gas from next casing point

Surface Casing Collapse Design		
Load Case	External Pressure	Internal Pressure
Full Evacuation	Water gradient in cement, mud above TOC	None
Cementing	Wet cement weight	Water (8.33ppg)

Surface Casing Tension Design	
Load Case	Assumptions
Overpull	100kips
Runing in hole	3 ft/s
Service Loads	N/A

Casing Assumptions and Load Cases

Intermediate

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Intermediate Casing Burst Design		
Load Case	External Pressure	Internal Pressure
Pressure Test	Formation Pore Pressure	Max mud weight of next hole-section plus Test psi
Drill Ahead	Formation Pore Pressure	Max mud weight of next hole section
Fracture @ Shoe	Formation Pore Pressure	Dry gas

Intermediate Casing Collapse Design		
Load Case	External Pressure	Internal Pressure
Full Evacuation	Water gradient in cement, mud above TOC	None
Cementing	Wet cement weight	Water (8.33ppg)

Intermediate Casing Tension Design	
Load Case	Assumptions
Overpull	100kips
Runing in hole	2 ft/s
Service Loads	N/A

Casing Assumptions and Load Cases

Production

All casing design assumptions were ran in Stress Check to determine safety factor which meet or exceed both Devon Energy and BLM minimum requirements. All casing strings will be filled while running in hole in order to not exceed collapse rating of the pipe.

Production Casing Burst Design		
Load Case	External Pressure	Internal Pressure
Pressure Test	Formation Pore Pressure	Fluid in hole (water or produced water) + test psi
Tubing Leak	Formation Pore Pressure	Packer @ KOP, leak below surface 8.6 ppg packer fluid
Stimulation	Formation Pore Pressure	Max frac pressure with heaviest frac fluid

Production Casing Collapse Design		
Load Case	External Pressure	Internal Pressure
Full Evacuation	Water gradient in cement, mud above TOC.	None
Cementing	Wet cement weight	Water (8.33ppg)

Production Casing Tension Design	
Load Case	Assumptions
Overpull	100kips
Runing in hole	2 ft/s
Service Loads	N/A

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company LP ▼
LOCATION:	Section 33, T.25 S., R.34 E., NMPM
COUNTY:	Lea County, New Mexico ▼

WELL NAME & NO.:	Stranger 33 Fed 301H
ATS/API ID:	ATS-24-3005
APD ID:	10400101127
Sundry ID:	N/a

COA

H2S	No ▼		
Potash	None ▼	None ▼	
Cave/Karst Potential	Low ▼		
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Other
Wellhead	Conventional and Multibowl ▼		
Other	<input type="checkbox"/> 4 String <input type="checkbox"/> 5 String	Capitan Reef None ▼	<input type="checkbox"/> WIPP
Other	Pilot Hole None ▼	<input type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze Int 1 ▼	Echo-Meter None ▼	Primary Cement Squeeze None ▼
Special Requirements	<input type="checkbox"/> Water Disposal/Injection	<input type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry	Waste Prevention Waste MP ▼	
Special Requirements Variance	<input checked="" type="checkbox"/> BOPE Break Testing <input type="checkbox"/> Offline BOPE Testing	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> 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 **950 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.

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.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.
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:

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)

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 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) 2/21/2025



**Devon Energy Center
333 West Sheridan Avenue
Oklahoma City, Oklahoma 73102-5015**

Hydrogen Sulfide (H₂S) Contingency Plan

For

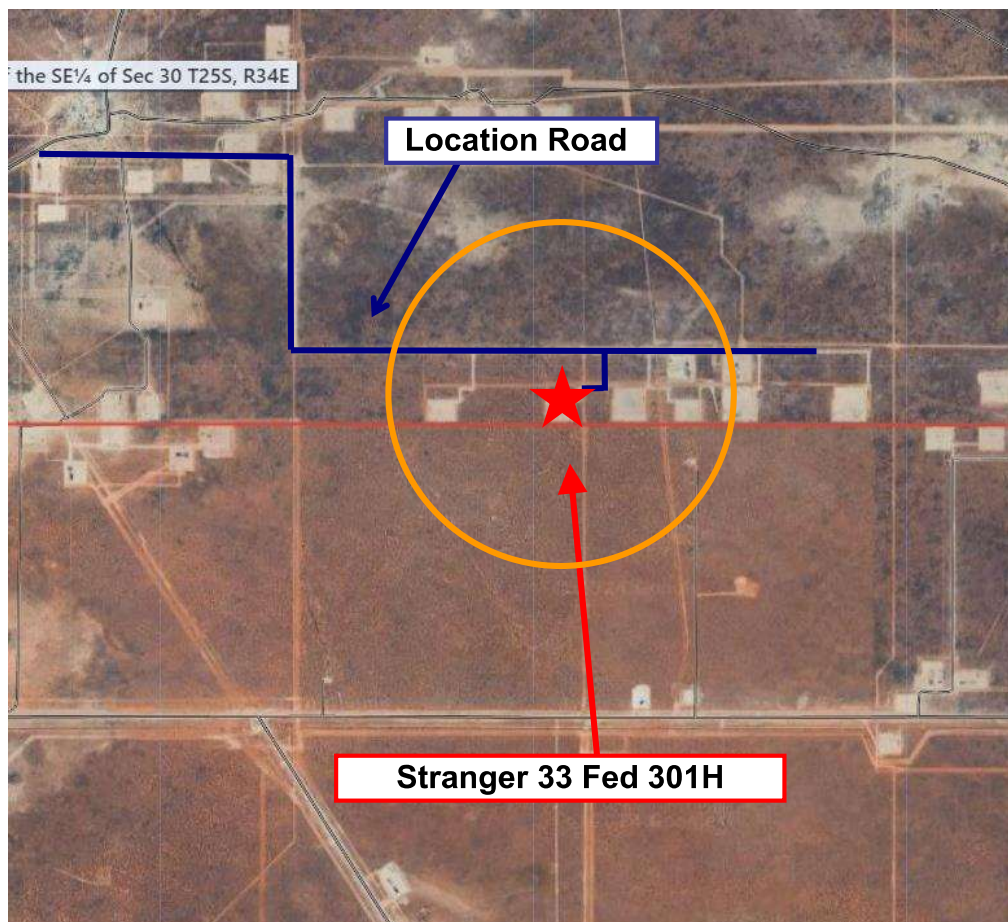
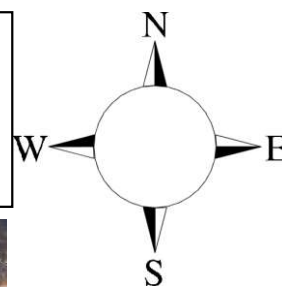
Stranger 33 Fed 301H

**Sec-33 T-25S R-34E
480' FSL & 431' FEL
LAT. = 32.081060' N (NAD83)
LONG = 103.467727' W**

Lea County NM

Stranger 33 Fed 301H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)
100 ppm H₂S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road. Crews should then block the entrance to the location from the lease road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the “buddy system” to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H₂S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan.

There will be weekly H₂S and well control drills for all personnel in each crew.

II. HYDROGEN SULFIDE TRAINING

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H₂S.

1. Well Control Equipment

- A. Flare line
- B. Choke manifold – Remotely Operated
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head.
- E. Mud/Gas Separator

2. Protective equipment for essential personnel:

30-minute SCBA units located at briefing areas, as indicated on well site diagram, with escape units available in the top doghouse. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. H₂S detection and monitoring equipment:

Portable H₂S monitors positioned on location for best coverage and response. These units have warning lights which activate when H₂S levels reach 10 ppm and audible sirens which activate at 10 ppm. Sensor locations:

- Bell nipple
- Possum Belly/Shale shaker
- Rig floor
- Choke manifold
- Cellar

Visual warning systems:

- A. Wind direction indicators as shown on well site diagram
- B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

4. Mud program:

The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

5. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H₂S trim.
- B. All elastomers used for packing and seals shall be H₂S trim.

6. Communication:

- A. Company personnel have/use cellular telephones in the field.
- B. Land line (telephone) communications at Office

7. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

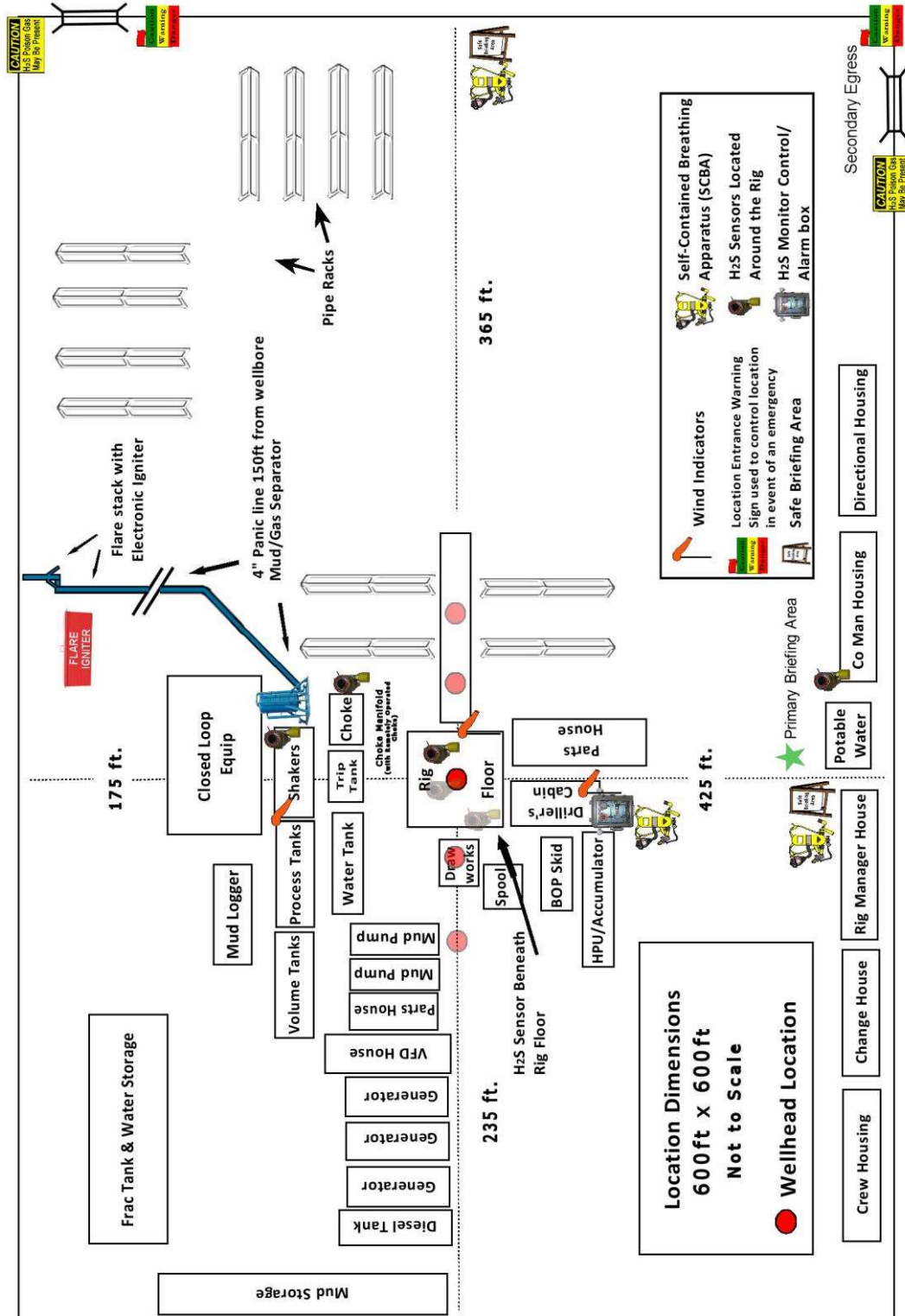
<u>Devon Energy Corp. Company Call List</u>			
Employee/Company Contact Representative	Position	Phone Number	After Hours Number
Jonathan Fisher (North)	Drilling Manager	832-967-7912	
Jason Hildebrand (South)	Drilling Manager	405-552-6514	
Rich Downey	Drilling VP	405-228-2415	
Josh Harvey	EHS Manager	405-228-2440	918-500-5536
Laura Wright	EHS Supervisor	405-552-5334	832-969-8145
Robert Glover	EHS Professional	575-703-5712	575-703-5712
Lane Frank	Lead EHS	580-579-7052	580-579-7052
Rickey Porter	Lead EHS	903-720-8315	903-720-8315
Ronnie Handy	Lead EHS	918-839-2046	918-839-2046
Brock Vise	Lead EHS	918-413-3291	918-413-3291

Agency Call List		
<u>Lea County (575)</u>	Hobbs	
	Lea County Communication Authority	397-9265
	State Police	885-3138
	City Police	397-9265
	Sheriff's Office	396-3611
	Ambulance	911
	Fire Department	397-9308
	LEPC (Local Emergency Planning Committee)	393-2870
	NMOCD	393-6161
	US Bureau of Land Management (Closed)	393-0002
<u>Eddy County (575)</u>	Carlsbad	
	State Police	885-3137
	City Police	885-2111
	Sheriff's Office	887-7551
	Ambulance	911
	Fire Department	885-3125
	LEPC (Local Emergency Planning Committee)	887-3798
	US Bureau of Land Management	234-5972
	NM Emergency Response Commission (Santa Fe)	(505) 476-9600
	24 HR	(505) 827-9126
	National Emergency Response Center	(800) 424-8802
	National Pollution Control Center: Direct	(703) 872-6000
	For Oil Spills	(800) 280-7118
	Emergency Services	
	Wild Well Control	(281) 784-4700
	Cudd Pressure Control	(915) 699-0139 (915) 563-3356
	Halliburton	(575) 746-2757
	B. J. Services	(575) 746-3569
	Native Air – Emergency Helicopter – Hobbs	(575) 347-9836
	For Air Ambulance - Eddy County Dispatch	(575)-616-7155
<u>Give GPS position:</u>	For Air Ambulance - Lea County (LCCA)	(575)-397-9265
	Poison Control (24/7)	(800) 222-1222
	Oil & Gas Pipeline 24 Hour Service	(800) 364-4366
	NOAA – Website - www.nhc.noaa.gov	
	National Pollution Control Center	202-795-6958
	NPCC – Oil Spills	800-280-7118

Prepared in conjunction with
Dave Small



Devon Energy - Well Pad Rig Location Layout Safety Equipment Location



Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oecd/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 441090

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 441090
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
wsalter	Cement is required to circulate on both surface and intermediate1 strings of casing.	3/11/2025
wsalter	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	3/11/2025
matthew.gomez	Notify the OCD 24 hours prior to casing & cement.	5/28/2025
matthew.gomez	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.	5/28/2025
matthew.gomez	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	5/28/2025
matthew.gomez	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	5/28/2025
matthew.gomez	File As Drilled C-102 and a directional Survey with C-104 completion packet.	5/28/2025
matthew.gomez	Administrative order required for non-standard spacing unit prior to production.	5/28/2025