

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

Well Name: BURTON FLAT 35-33 FED COM	Well Location: T20S / R28E / SEC 35 / SENW /	County or Parish/State:
Well Number: 333H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM082992	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2700339

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/28/2022

Time Sundry Submitted: 03:19

Date proposed operation will begin: 10/28/2022

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to change the BHL on the subject well. Please see attached revised C102, Drill plan, directional plan. Permitted BHL: SWNW, 2200 FNL, 20 FWL, 33-20S-28E Proposed BHL: SWNE, 2000 FNL, 2620 FEL, 33-20S-28E

NOI Attachments

Procedure Description

BURTON_FLAT_35_33_FED_COM_333H_Directional_Plan_10_28_22_20221028151830.pdf

WA018314449_BURTON_FLAT_35_33_FED_COM_333H_WL_R2_20221028151828.pdf

BURTON_FLAT_35_33_FED_COM_333H_10.28.22_20221028151821.pdf

Well Name: BURTON FLAT 35-33 FED COM
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Operator: DEVON ENERGY PRODUCTION COMPANY LP

Conditions of Approval

Additional

35_20_28_C_Sundry_ID_2700339_Burton_Flat_35_33_Fed_Com_333H_Eddy_NM82992_Devon_Energy_Production_Company_LP_13_22d_1_11_22_LV_20221104100338.pdf
 Burton_Flat_35_33_Fed_Com_333H_Sundry_ID_2700339_20221104100338.pdf

Operator

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

Operator Electronic Signature: CHELSEY GREEN
Signed on: OCT 28, 2022 03:18 PM
Name: DEVON ENERGY PRODUCTION COMPANY LP
Title: Regulatory Compliance Professional
Street Address: 333 West Sheridan Avenue
City: Oklahoma City **State:** OK
Phone: (405) 228-8595
Email address: Chelsey.Green@dvn.com

Field

Representative Name:
Street Address:
City: **State:** **Zip:**
Phone:
Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS
BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234
BLM POC Email Address: cwalls@blm.gov
Disposition: Approved
Disposition Date: 11/04/2022
Signature: Chris Walls

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

DISTRICT II
811 S. FIRST ST., ARTESIA, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

DISTRICT III
1000 RIO BRAZOS RD., AZTEC, NM 87410
Phone: (505) 334-6176 Fax: (505) 334-6170

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-50148	Pool Code 3713	Pool Name AVALON; BONE SPRING, EAST
Property Code 333516	Property Name BURTON FLAT 35-33 FED COM	
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	
		Well Number 333H
		Elevation 3210.8'

Surface Location

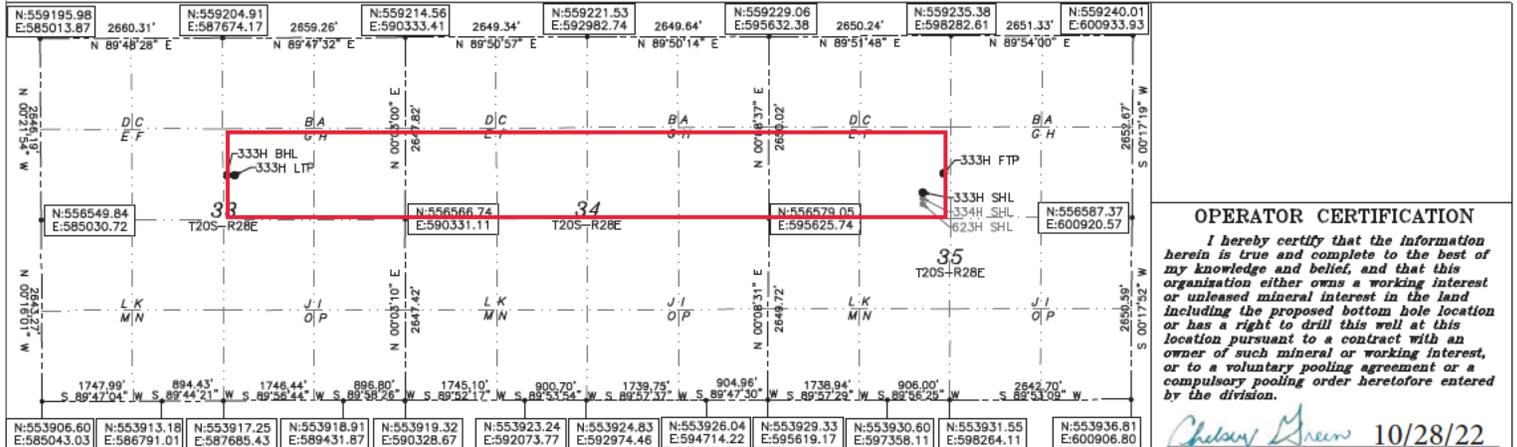
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	35	20-S	28-E		2307	NORTH	2182	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	33	20-S	28-E		2000	NORTH	2620	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and 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 such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Chelsey Green 10/28/22
Signature Date

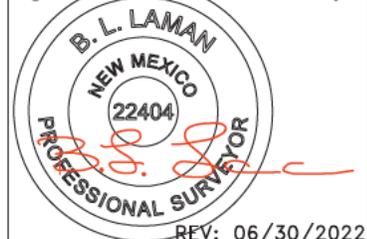
Chelsey Green
Printed Name
chelsey.green@dvn.com
E-mail Address

SURVEYOR CERTIFICATION

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

05/2021
Date of Survey

Signature & Seal of Professional Surveyor



REV: 06/30/2022

Certificate No. 22404 B.L. LAMAN
DRAWN BY: CM

BURTON FLAT 35-33 FED COM 333H

EL: 3210.8'
LAT: 32.530918
LON: 104.150100
N: 556927.14
E: 597808.10

FIRST TAKE POINT
2000' FNL 2548' FWL SEC. 35
LAT: 32.531763
LON: 104.148905
N: 557235.12
E: 598175.63

LAST TAKE POINT
2000' FNL 2540' FEL SEC. 33
LAT: 32.531726
LON: 104.182599
N: 557205.32
E: 587791.66

BOTTOM OF HOLE
LAT: 32.531725
LON: 104.182859
N: 557205.03
E: 587711.66

Intent As Drilled

API #		
Operator Name: DEVON ENERGY PRODUCTION COMPANY, LP.	Property Name: BURTON FLAT 35-33 FED COM	Well Number 333H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
F	35	20S	28E		2239	NORTH	2548	WEST	EDDY
Latitude 32.53101131					Longitude -104.14890865				NAD 83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
F	35	20-S	28-E		2000	NORTH	2548	WEST	EDDY
Latitude 32.531763					Longitude 104.148905				NAD 83

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
G	33	20-S	28-E		2000	NORTH	2540	EAST	EDDY
Latitude 32.531726					Longitude 104.182599				NAD 83

Is this well the defining well for the Horizontal Spacing Unit?

Is this well an infill well?

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

BURTON FLAT 35-33 FED COM 333H

1. Geologic Formations

TVD of target	8641	Pilot hole depth	N/A
MD at TD:	19199	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	85		
Salt	441		
Base of Salt	640		
Lamar	854		
Capitan Reef Top	1130		
Delaware	3012		
Cherry Canyon	3192		
Brushy Canyon	3792		
1st Bone Spring Lime	5350		
Bone Spring 1st	6685		
Bone Spring 2nd	7327		
3rd Bone Spring Lime	7627		
Bone Spring 3rd	8522		

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

BURTON FLAT 35-33 FED COM 333H

2. Casing Program

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
26	20	94.0	J-55	STC	0	110 MD	0	110 TVD
17 1/2	13 3/8	48.0	H40	BTC	0	1080 MD	0	1080 TVD
12 1/4	9 5/8	40.0	J-55	BTC	0	2987 MD	0	2987 TVD
8 3/4	5 1/2	17.0	P110	BTC	0	19199 MD	0	8641 TVD

- All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.
- The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

BURTON FLAT 35-33 FED COM 333H

3. Cementing Program (3-String Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft ³ /sack)	Slurry Description
Surface	260	Surf	13.2	1.4	Lead: Class C Cement + additives
Int	164	Surf	9.0	3.3	Lead: Class C Cement + additives
	339	500' above shoe	13.2	1.4	Tail: Class H / C + additives
Int 1	242	Surf	9.0	3.3	Lead: Class C Cement + additives
	154	500' above shoe	13.2	1.4	Tail: Class H / C + additives
Int 1 Intermediate Squeeze	As Needed	Surf	0.0	3.3	Squeeze Lead: Class C Cement + additives
	164	Surf	9.0	3.3	Lead: Class C Cement + additives
	339	500' above shoe	13.2	1.4	Tail: Class H / C + additives
Production	664	50' above Capitan	9.0	3.3	Lead: Class H / C + additives
	2101	KOP	13.2	1.4	Tail: Class H / C + additives

If a DV tool is ran the depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. Slurry weights will be adjusted based on estimated fracture gradient of the formation. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. If cement is not returned to surface during the primary cement job on the surface casing string, a planned top job will be conducted immediately after completion of the primary job.

Casing String	% Excess
Surface	50%
Intermediate and Intermediate 1	30%
Production	10%

BURTON FLAT 35-33 FED COM 333H

4. Pressure Control Equipment (Four String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Type	✓	Tested to:
Int			Annular		N/A
			Blind Ram		500psi
			Pipe Ram		
			Double Ram		
			Other* Diverter	X	
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 (5M)	X	50% of rated working pressure
			Blind Ram	X	5M
			Pipe Ram		
			Double Ram	X	
			Other*		

By definition, the diverter will only be used to divert flow from the well and not to shut in the well. Prior to drilling out, the diverter will be tested to 250 PSI to ensure functionality.

BURTON FLAT 35-33 FED COM 333H

5. Mud Program (Four String Design)

Section	Type	Weight (ppg)
Surface	WBM	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Intermediate 1	WBM	8.5-9
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
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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	4044
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 Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.

N	H2S is present
Y	H2S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, 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

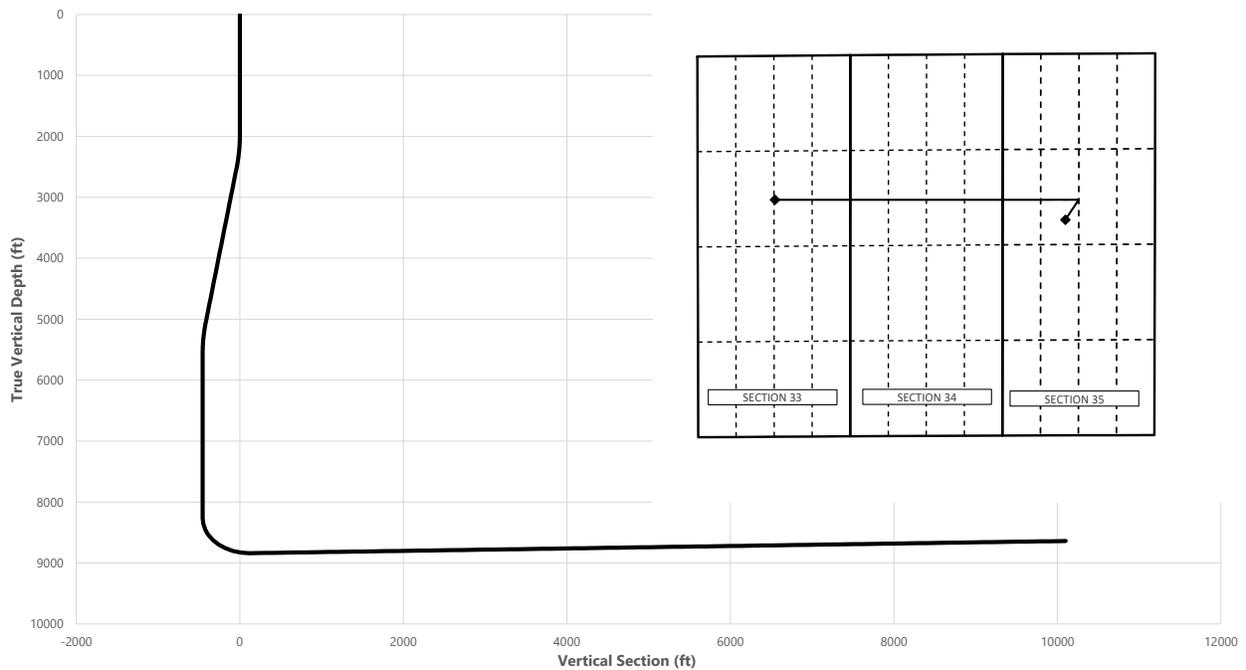
- Directional Plan
- Other, describe



Well: BURTON FLAT 35-33 FED COM 333H
 County: Eddy
 Wellbore: Permit Plan
 Design: Permit Plan #1

Geodetic System: US State Plane 1983
 Datum: North American Datum 1927
 Ellipsoid: Clarke 1866
 Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
2000.00	0.00	59.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	59.00	2497.47	22.42	37.31	-36.68	2.00	Hold Tangent
5105.55	10.00	59.00	5063.43	255.44	425.13	-417.94	0.00	Drop to Vertical
5605.55	0.00	59.00	5560.90	277.86	462.44	-454.62	2.00	Hold Vertical
8310.81	0.00	270.00	8266.16	277.86	462.44	-454.62	0.00	KOP
9222.30	91.15	270.00	8839.00	277.86	-122.01	129.60	10.00	Landing Point
19199.39	91.15	270.00	8639.00	277.86	-10097.10	10100.92	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	0.00	0.00
Salt	441.00	441.00
Base of Salt	640.00	640.00
Lamar	854.00	854.00
Capitan Reef Top	1130.00	1130.00
Delaware	3022.47	3012.00
Cherry Canyon	3205.25	3192.00
Brushy Canyon	3814.50	3792.00
1st Bone Spring Lime	5394.46	5350.00
Bone Spring 1st	6729.65	6685.00
Bone Spring 2nd	7371.65	7327.00
3rd Bone Spring Lime	7671.65	7627.00
Bone Spring 3rd / Point of Penetratic	8576.02	8522.00
exit	19119.39	8640.62

	MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
SHL	0.00	0.00	32.5308	-104.1502	2307' FNL, 2182' FWL of Sec 35 in T20S, R28E
KOP	8310.81	8266.16	32.5316	-104.1487	2029' FNL, 2643' FWL of Sec 35 in T20S, R28E
Point of Penetration	8576.02	8522.00	32.5318	-104.1489	2000' FNL, 2548' FWL of Sec 35 in T20S, R28E
Exit	19119.39	8640.62	32.5317	-104.1826	2000' FNL, 2540' FEL of Sec 33 in T20S, R28E
BHL	19199.39	8639.00	32.5316	-104.1829	2000' FNL, 2620' FEL of Sec 33 in T20S, R28E



Well: BURTON FLAT 35-33 FED COM 333H
County: Eddy
Wellbore: Permit Plan
Design: Permit Plan #1

Geodetic System: US State Plane 1983
Datum: North American Datum 1927
Ellipsoid: Clarke 1866
Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
85.00	0.00	59.00	85.00	0.00	0.00	0.00	0.00	Rustler
100.00	0.00	59.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	59.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	59.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	59.00	400.00	0.00	0.00	0.00	0.00	
441.00	0.00	59.00	441.00	0.00	0.00	0.00	0.00	Salt
500.00	0.00	59.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	59.00	600.00	0.00	0.00	0.00	0.00	
640.00	0.00	59.00	640.00	0.00	0.00	0.00	0.00	Base of Salt
700.00	0.00	59.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	59.00	800.00	0.00	0.00	0.00	0.00	
854.00	0.00	59.00	854.00	0.00	0.00	0.00	0.00	Lamar
900.00	0.00	59.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	59.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	59.00	1100.00	0.00	0.00	0.00	0.00	
1130.00	0.00	59.00	1130.00	0.00	0.00	0.00	0.00	Capitan Reef Top
1200.00	0.00	59.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	59.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	59.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	59.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	59.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	59.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	59.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	59.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	59.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	59.00	2099.98	0.90	1.50	-1.47	2.00	
2200.00	4.00	59.00	2199.84	3.59	5.98	-5.88	2.00	
2300.00	6.00	59.00	2299.45	8.08	13.45	-13.22	2.00	
2400.00	8.00	59.00	2398.70	14.36	23.90	-23.49	2.00	
2500.00	10.00	59.00	2497.47	22.42	37.31	-36.68	2.00	Hold Tangent
2600.00	10.00	59.00	2595.95	31.36	52.19	-51.31	0.00	
2700.00	10.00	59.00	2694.43	40.30	67.08	-65.94	0.00	
2800.00	10.00	59.00	2792.91	49.25	81.96	-80.57	0.00	
2900.00	10.00	59.00	2891.39	58.19	96.84	-95.21	0.00	
3000.00	10.00	59.00	2989.87	67.13	111.73	-109.84	0.00	
3022.47	10.00	59.00	3012.00	69.14	115.07	-113.13	0.00	Delaware
3100.00	10.00	59.00	3088.35	76.08	126.61	-124.47	0.00	
3200.00	10.00	59.00	3186.83	85.02	141.50	-139.11	0.00	
3205.25	10.00	59.00	3192.00	85.49	142.28	-139.87	0.00	Cherry Canyon
3300.00	10.00	59.00	3285.31	93.96	156.38	-153.74	0.00	
3400.00	10.00	59.00	3383.79	102.91	171.27	-168.37	0.00	
3500.00	10.00	59.00	3482.27	111.85	186.15	-183.00	0.00	
3600.00	10.00	59.00	3580.75	120.79	201.04	-197.64	0.00	
3700.00	10.00	59.00	3679.23	129.74	215.92	-212.27	0.00	
3800.00	10.00	59.00	3777.72	138.68	230.81	-226.90	0.00	
3814.50	10.00	59.00	3792.00	139.98	232.96	-229.03	0.00	Brushy Canyon
3900.00	10.00	59.00	3876.20	147.63	245.69	-241.54	0.00	
4000.00	10.00	59.00	3974.68	156.57	260.57	-256.17	0.00	
4100.00	10.00	59.00	4073.16	165.51	275.46	-270.80	0.00	
4200.00	10.00	59.00	4171.64	174.46	290.34	-285.43	0.00	
4300.00	10.00	59.00	4270.12	183.40	305.23	-300.07	0.00	
4400.00	10.00	59.00	4368.60	192.34	320.11	-314.70	0.00	
4500.00	10.00	59.00	4467.08	201.29	335.00	-329.33	0.00	
4600.00	10.00	59.00	4565.56	210.23	349.88	-343.97	0.00	
4700.00	10.00	59.00	4664.04	219.17	364.77	-358.60	0.00	
4800.00	10.00	59.00	4762.52	228.12	379.65	-373.23	0.00	
4900.00	10.00	59.00	4861.00	237.06	394.53	-387.87	0.00	
5000.00	10.00	59.00	4959.48	246.00	409.42	-402.50	0.00	
5100.00	10.00	59.00	5057.97	254.95	424.30	-417.13	0.00	
5105.55	10.00	59.00	5063.43	255.44	425.13	-417.94	0.00	Drop to Vertical
5200.00	8.11	59.00	5156.70	263.10	437.87	-430.47	2.00	
5300.00	6.11	59.00	5255.93	269.48	448.48	-440.90	2.00	
5394.46	4.22	59.00	5350.00	273.86	455.77	-448.07	2.00	1st Bone Spring Lime
5400.00	4.11	59.00	5355.52	274.06	456.12	-448.41	2.00	
5500.00	2.11	59.00	5455.37	276.86	460.77	-452.98	2.00	
5600.00	0.11	59.00	5555.35	277.86	462.43	-454.61	2.00	
5605.55	0.00	59.00	5560.90	277.86	462.44	-454.62	2.00	Hold Vertical
5700.00	0.00	270.00	5655.35	277.86	462.44	-454.62	0.00	
5800.00	0.00	270.00	5755.35	277.86	462.44	-454.62	0.00	



Well: BURTON FLAT 35-33 FED COM 333H
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Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
5900.00	0.00	270.00	5855.35	277.86	462.44	-454.62	0.00	
6000.00	0.00	270.00	5955.35	277.86	462.44	-454.62	0.00	
6100.00	0.00	270.00	6055.35	277.86	462.44	-454.62	0.00	
6200.00	0.00	270.00	6155.35	277.86	462.44	-454.62	0.00	
6300.00	0.00	270.00	6255.35	277.86	462.44	-454.62	0.00	
6400.00	0.00	270.00	6355.35	277.86	462.44	-454.62	0.00	
6500.00	0.00	270.00	6455.35	277.86	462.44	-454.62	0.00	
6600.00	0.00	270.00	6555.35	277.86	462.44	-454.62	0.00	
6700.00	0.00	270.00	6655.35	277.86	462.44	-454.62	0.00	
6729.65	0.00	270.00	6685.00	277.86	462.44	-454.62	0.00	Bone Spring 1st
6800.00	0.00	270.00	6755.35	277.86	462.44	-454.62	0.00	
6900.00	0.00	270.00	6855.35	277.86	462.44	-454.62	0.00	
7000.00	0.00	270.00	6955.35	277.86	462.44	-454.62	0.00	
7100.00	0.00	270.00	7055.35	277.86	462.44	-454.62	0.00	
7200.00	0.00	270.00	7155.35	277.86	462.44	-454.62	0.00	
7300.00	0.00	270.00	7255.35	277.86	462.44	-454.62	0.00	
7371.65	0.00	270.00	7327.00	277.86	462.44	-454.62	0.00	Bone Spring 2nd
7400.00	0.00	270.00	7355.35	277.86	462.44	-454.62	0.00	
7500.00	0.00	270.00	7455.35	277.86	462.44	-454.62	0.00	
7600.00	0.00	270.00	7555.35	277.86	462.44	-454.62	0.00	
7671.65	0.00	270.00	7627.00	277.86	462.44	-454.62	0.00	3rd Bone Spring Lime
7700.00	0.00	270.00	7655.35	277.86	462.44	-454.62	0.00	
7800.00	0.00	270.00	7755.35	277.86	462.44	-454.62	0.00	
7900.00	0.00	270.00	7855.35	277.86	462.44	-454.62	0.00	
8000.00	0.00	270.00	7955.35	277.86	462.44	-454.62	0.00	
8100.00	0.00	270.00	8055.35	277.86	462.44	-454.62	0.00	
8200.00	0.00	270.00	8155.35	277.86	462.44	-454.62	0.00	
8300.00	0.00	270.00	8255.35	277.86	462.44	-454.62	0.00	
8310.81	0.00	270.00	8266.16	277.86	462.44	-454.62	0.00	KOP
8400.00	8.92	270.00	8354.99	277.86	455.51	-447.69	10.00	
8500.00	18.92	270.00	8451.93	277.86	431.48	-423.68	10.00	
8576.02	26.52	270.00	8522.00	277.86	402.14	-394.35	10.00	Bone Spring 3rd / Point of Penetration
8600.00	28.92	270.00	8543.22	277.86	390.99	-383.20	10.00	
8700.00	38.92	270.00	8626.10	277.86	335.26	-327.49	10.00	
8800.00	48.92	270.00	8698.04	277.86	265.98	-258.24	10.00	
8900.00	58.92	270.00	8756.86	277.86	185.27	-177.56	10.00	
9000.00	68.92	270.00	8800.77	277.86	95.57	-87.89	10.00	
9100.00	78.92	270.00	8828.43	277.86	-0.40	8.04	10.00	
9200.00	88.92	270.00	8839.01	277.86	-99.71	107.32	10.00	
9222.30	91.15	270.00	8839.00	277.86	-122.01	129.60	10.00	Landing Point
9300.00	91.15	270.00	8837.44	277.86	-199.69	207.26	0.00	
9400.00	91.15	270.00	8835.44	277.86	-299.67	307.20	0.00	
9500.00	91.15	270.00	8833.43	277.86	-399.65	407.15	0.00	
9600.00	91.15	270.00	8831.43	277.86	-499.63	507.09	0.00	
9700.00	91.15	270.00	8829.42	277.86	-599.61	607.03	0.00	
9800.00	91.15	270.00	8827.42	277.86	-699.59	706.97	0.00	
9900.00	91.15	270.00	8825.42	277.86	-799.57	806.91	0.00	
10000.00	91.15	270.00	8823.41	277.86	-899.55	906.86	0.00	
10100.00	91.15	270.00	8821.41	277.86	-999.53	1006.80	0.00	
10200.00	91.15	270.00	8819.40	277.86	-1099.51	1106.74	0.00	
10300.00	91.15	270.00	8817.40	277.86	-1199.49	1206.68	0.00	
10400.00	91.15	270.00	8815.39	277.86	-1299.47	1306.63	0.00	
10500.00	91.15	270.00	8813.39	277.85	-1399.45	1406.57	0.00	
10600.00	91.15	270.00	8811.38	277.85	-1499.43	1506.51	0.00	
10700.00	91.15	270.00	8809.38	277.85	-1599.41	1606.45	0.00	
10800.00	91.15	270.00	8807.38	277.85	-1699.39	1706.39	0.00	
10900.00	91.15	270.00	8805.37	277.85	-1799.37	1806.34	0.00	
11000.00	91.15	270.00	8803.37	277.85	-1899.35	1906.28	0.00	
11100.00	91.15	270.00	8801.36	277.85	-1999.33	2006.22	0.00	
11200.00	91.15	270.00	8799.36	277.85	-2099.31	2106.16	0.00	
11300.00	91.15	270.00	8797.35	277.85	-2199.29	2206.10	0.00	
11400.00	91.15	270.00	8795.35	277.85	-2299.27	2306.05	0.00	
11500.00	91.15	270.00	8793.34	277.85	-2399.25	2405.99	0.00	
11600.00	91.15	270.00	8791.34	277.85	-2499.23	2505.93	0.00	
11700.00	91.15	270.00	8789.34	277.85	-2599.21	2605.87	0.00	
11800.00	91.15	270.00	8787.33	277.85	-2699.19	2705.81	0.00	
11900.00	91.15	270.00	8785.33	277.85	-2799.17	2805.76	0.00	
12000.00	91.15	270.00	8783.32	277.85	-2899.15	2905.70	0.00	
12100.00	91.15	270.00	8781.32	277.85	-2999.13	3005.64	0.00	
12200.00	91.15	270.00	8779.31	277.85	-3099.11	3105.58	0.00	



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Zone: 3001 - NM East (NAD83)

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
12300.00	91.15	270.00	8777.31	277.85	-3199.09	3205.52	0.00	
12400.00	91.15	270.00	8775.30	277.85	-3299.07	3305.47	0.00	
12500.00	91.15	270.00	8773.30	277.85	-3399.05	3405.41	0.00	
12600.00	91.15	270.00	8771.30	277.85	-3499.03	3505.35	0.00	
12700.00	91.15	270.00	8769.29	277.85	-3599.01	3605.29	0.00	
12800.00	91.15	270.00	8767.29	277.85	-3698.99	3705.23	0.00	
12900.00	91.15	270.00	8765.28	277.85	-3798.97	3805.18	0.00	
13000.00	91.15	270.00	8763.28	277.84	-3898.95	3905.12	0.00	
13100.00	91.15	270.00	8761.27	277.84	-3998.93	4005.06	0.00	
13200.00	91.15	270.00	8759.27	277.84	-4098.91	4105.00	0.00	
13300.00	91.15	270.00	8757.26	277.84	-4198.89	4204.94	0.00	
13400.00	91.15	270.00	8755.26	277.84	-4298.87	4304.89	0.00	
13500.00	91.15	270.00	8753.26	277.84	-4398.85	4404.83	0.00	
13600.00	91.15	270.00	8751.25	277.84	-4498.83	4504.77	0.00	
13700.00	91.15	270.00	8749.25	277.84	-4598.81	4604.71	0.00	
13800.00	91.15	270.00	8747.24	277.84	-4698.79	4704.66	0.00	
13900.00	91.15	270.00	8745.24	277.84	-4798.77	4804.60	0.00	
14000.00	91.15	270.00	8743.23	277.84	-4898.75	4904.54	0.00	
14100.00	91.15	270.00	8741.23	277.84	-4998.73	5004.48	0.00	
14200.00	91.15	270.00	8739.22	277.84	-5098.71	5104.42	0.00	
14300.00	91.15	270.00	8737.22	277.84	-5198.69	5204.37	0.00	
14400.00	91.15	270.00	8735.22	277.84	-5298.67	5304.31	0.00	
14500.00	91.15	270.00	8733.21	277.84	-5398.65	5404.25	0.00	
14600.00	91.15	270.00	8731.21	277.84	-5498.63	5504.19	0.00	
14700.00	91.15	270.00	8729.20	277.84	-5598.61	5604.13	0.00	
14800.00	91.15	270.00	8727.20	277.84	-5698.59	5704.08	0.00	
14900.00	91.15	270.00	8725.19	277.84	-5798.57	5804.02	0.00	
15000.00	91.15	270.00	8723.19	277.84	-5898.55	5903.96	0.00	
15100.00	91.15	270.00	8721.18	277.84	-5998.53	6003.90	0.00	
15200.00	91.15	270.00	8719.18	277.84	-6098.51	6103.84	0.00	
15300.00	91.15	270.00	8717.18	277.84	-6198.49	6203.79	0.00	
15400.00	91.15	270.00	8715.17	277.84	-6298.47	6303.73	0.00	
15500.00	91.15	270.00	8713.17	277.84	-6398.45	6403.67	0.00	
15600.00	91.15	270.00	8711.16	277.83	-6498.43	6503.61	0.00	
15700.00	91.15	270.00	8709.16	277.83	-6598.41	6603.55	0.00	
15800.00	91.15	270.00	8707.15	277.83	-6698.39	6703.50	0.00	
15900.00	91.15	270.00	8705.15	277.83	-6798.37	6803.44	0.00	
16000.00	91.15	270.00	8703.14	277.83	-6898.35	6903.38	0.00	
16100.00	91.15	270.00	8701.14	277.83	-6998.33	7003.32	0.00	
16200.00	91.15	270.00	8699.13	277.83	-7098.31	7103.26	0.00	
16300.00	91.15	270.00	8697.13	277.83	-7198.29	7203.21	0.00	
16400.00	91.15	270.00	8695.13	277.83	-7298.27	7303.15	0.00	
16500.00	91.15	270.00	8693.12	277.83	-7398.25	7403.09	0.00	
16600.00	91.15	270.00	8691.12	277.83	-7498.23	7503.03	0.00	
16700.00	91.15	270.00	8689.11	277.83	-7598.21	7602.97	0.00	
16800.00	91.15	270.00	8687.11	277.83	-7698.19	7702.92	0.00	
16900.00	91.15	270.00	8685.10	277.83	-7798.17	7802.86	0.00	
17000.00	91.15	270.00	8683.10	277.83	-7898.15	7902.80	0.00	
17100.00	91.15	270.00	8681.09	277.83	-7998.13	8002.74	0.00	
17200.00	91.15	270.00	8679.09	277.83	-8098.11	8102.69	0.00	
17300.00	91.15	270.00	8677.09	277.83	-8198.09	8202.63	0.00	
17400.00	91.15	270.00	8675.08	277.83	-8298.07	8302.57	0.00	
17500.00	91.15	270.00	8673.08	277.83	-8398.05	8402.51	0.00	
17600.00	91.15	270.00	8671.07	277.83	-8498.03	8502.45	0.00	
17700.00	91.15	270.00	8669.07	277.83	-8598.01	8602.40	0.00	
17800.00	91.15	270.00	8667.06	277.83	-8697.99	8702.34	0.00	
17900.00	91.15	270.00	8665.06	277.83	-8797.97	8802.28	0.00	
18000.00	91.15	270.00	8663.05	277.83	-8897.95	8902.22	0.00	
18100.00	91.15	270.00	8661.05	277.82	-8997.93	9002.16	0.00	
18200.00	91.15	270.00	8659.05	277.82	-9097.91	9102.11	0.00	
18300.00	91.15	270.00	8657.04	277.82	-9197.89	9202.05	0.00	
18400.00	91.15	270.00	8655.04	277.82	-9297.87	9301.99	0.00	
18500.00	91.15	270.00	8653.03	277.82	-9397.85	9401.93	0.00	
18600.00	91.15	270.00	8651.03	277.82	-9497.83	9501.87	0.00	
18700.00	91.15	270.00	8649.02	277.82	-9597.81	9601.82	0.00	
18800.00	91.15	270.00	8647.02	277.82	-9697.79	9701.76	0.00	
18900.00	91.15	270.00	8645.01	277.82	-9797.77	9801.70	0.00	
19000.00	91.15	270.00	8643.01	277.82	-9897.75	9901.64	0.00	
19100.00	91.15	270.00	8641.01	277.82	-9997.73	10001.58	0.00	
19119.39	91.15	270.00	8640.62	277.82	-10017.12	10020.97	0.00	exit



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MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
19199.39	91.15	270.00	8639.00	277.86	-10097.10	10100.92	0.00	BHL

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Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production Company LP
LEASE NO.:	NMNM082992
LOCATION:	Section 35, T.20 S., R.28 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Burton Flat 35-33 Fed Com 333H
SURFACE HOLE FOOTAGE:	2307'/N & 2182'/W
BOTTOM HOLE FOOTAGE:	2000'/N & 2620'/E
ATS/API ID:	
Sundry ID:	2700339

COA

H2S	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Potash	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Secretary	<input type="checkbox"/> R-111-P
Cave/Karst Potential	<input type="checkbox"/> Low	<input type="checkbox"/> Medium	<input checked="" type="checkbox"/> High
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input type="checkbox"/> None	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Other
Wellhead	<input type="checkbox"/> Conventional	<input type="checkbox"/> Multibowl	<input type="checkbox"/> Both
Wellhead Variance	<input checked="" type="checkbox"/> Diverter		
Other	<input checked="" type="checkbox"/> 4 String	<input checked="" type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Cementing	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> EchoMeter	
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements Variance	<input type="checkbox"/> Break Testing	<input type="checkbox"/> Offline Cementing	

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware, Bone Springs, Wolfcamp** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **20** inch surface casing shall be set at approximately **350 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

- 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.
2. The minimum required fill of cement behind the **13-3/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef. 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.**
 - ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ In Capitan Reef Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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.

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 **9-5/8** inch intermediate casing is:
 - Cement should tie-back at least **50 feet** on top of Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.**
4. 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.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef. 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 tested to **500** psi. A Diverter system is approved as a variance to drill the **13-3/8** inch intermediate casing in a **17-1/2** inch hole.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13-3/8** inch intermediate casing shoe shall be **5000 (5M)** psi.
- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi.

Option 2:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be tested to **500** psi. A Diverter system is approved as a variance to drill the **13-3/8** inch intermediate casing in a **17-1/2** inch hole.
- b. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch intermediate casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate 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 OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

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

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)

Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

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 Onshore Oil and Gas Order No. 2 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.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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, 2) until cement has been in place at least 24 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 Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
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 OOGO2.III.A.2.i 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 when specified), 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 plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 water basin (8 hours) or potash (24 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 Onshore Order No. 2.

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.

LVO 10/31/2022

35-20-28-C Sundry ID 2700339 Burton Flat 35-33 Fed Com 333H Eddy NM82992 Devon Energy Production Company LP 13-22d 1-11-22 LV.xlsm

Burton Flat 35-33 Fed Com 333H

20		surface csg in a		26		inch hole.		Design Factors				Surface	
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	94.00		j 55	stc	23.80	3.18	3.09	350	14	5.19	6.00	32,900	
"B"				stc				0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,324								Totals:	350			32,900	
Comparison of Proposed to Minimum Required Cement Volumes													
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg		
26	1.5053	260	364	527	-31	9.00	407	2M			2.50		

Site plan (page tabs S or E) as per G.D. L. in D.A. not found.

13 3/8		casing inside the		20		Design Factors				Int 1		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	48.00		h 40	btc	9.02	1.13	1.48	1,250	3	2.80	1.89	60,000
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:								Totals:	1,250			60,000
The cement volume(s) are intended to achieve a top of 0 ft from surface or a 350 overlap.												
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg	
17 1/2	0.6946	503	1016	982	3	10.50	619	2M			1.56	

Class 'C' tail cmt yld > 1.35

9 5/8		casing inside the		13 3/8		Design Factors				Int 2		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00		j 55	btc	6.30	2.2	0.98	2,500	3	1.85	4.15	100,000
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500								Totals:	2,500			100,000
The cement volume(s) are intended to achieve a top of 1050 ft from surface or a 200 overlap.												
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg	
12 1/4	0.3132	396	1014	467	117	9.00	2139	3M			0.81	

Class 'C' tail cmt yld > 1.35
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.58, b, c, d All > 0.70,

5 1/2		casing inside the		9 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	17.00		p 110	btc	3.72	1.85	2.63	19,199	3	4.97	3.50	326,383
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,901								Totals:	19,199			326,383
The cement volume(s) are intended to achieve a top of 2300 ft from surface or a 200 overlap.												
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg	
8 3/4	0.2526	2765	5133	4270	20	9.00					1.35	

Class 'H' tail cmt yld > 1.20
Capitan Reef est top XXXX.

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

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

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

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

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

CONDITIONS

Action 157156

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 157156
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	11/8/2022