

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Reports
12/02/2022

Well Name: BURTON FLAT 35-33 FED Well Location: T20S / R28E / SEC 35 / County or Parish/State:

COM NENW /

Well Number: 332H 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 Operator: DEVON ENERGY

Permit to Drill PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2700283

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/28/2022 Time Sundry Submitted: 03:15

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: NWNW, 1310 FNL, 20 FWL, 33-20S-28E Proposed BHL: NWNE, 400 FNL, 2620 FEL, 33-20S-28E

NOI Attachments

Procedure Description

WA018314468_BURTON_FLAT_35_33_FED_COM_332H_WL_R3_SIGNED_20221028125742.pdf

 $BURTON_FLAT_35_33_FED_COM_332H_Directional_Plan_10_28_22_20221028125704.pdf$

BURTON_FLAT_35_33_FED_COM_332H_10.28.22_20221028125704.pdf

by OCD: 1/9/2023 7:38:36 AM Name: BURTON FLAT 35-33 FED Well Location: T20S / R28E / SEC 35 / County or Parish/State:

COM

Well Number: 332H

NENW /

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 **Operator: DEVON ENERGY**

Permit to Drill

PRODUCTION COMPANY LP

Page 2 of

Conditions of Approval

Additional

35_20_28_C_Sundry_ID_2700283_Burton_Flat_35_33_Fed_Com_332H_Eddy_NM82992_Devon_Energy_Production_ Company_LP_13_22d_1_11_22_LV_20221108092246.pdf

Burton_Flat_35_33_Fed_Com_332H_Sundry_ID_2700283_20221108092246.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 12:56 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:

State: Zip: City:

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:** 12/01/2022

Signature: Chris Walls

Page 2 of 2

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

State of New Mexico Energy, Minerals & Natural Resources Department 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

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) 476-3460 Fax: (505) 476-3462

□ AMENDED REPORT

	WELL LOCATION AND	ACREAGE DEDICATION PLAT				
API Number	Pool Code	Pool Name				
	3713	3713 AVALON; BONE SPRING, EAST				
Property Code	Prop	Property Name				
	BURTON FI	LAT 35-33 FED COM	332H			
OGRID No.	Oper	Operator Name				
6137	DEVON ENERGY PRO	DEVON ENERGY PRODUCTION COMPANY, L.P.				

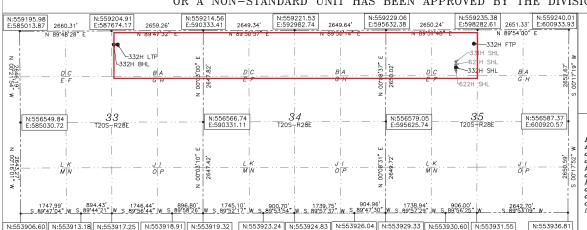
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
С	35	20-S	28-E		1158	NORTH	2059	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
В	33	20-S	28-E		400	NORTH	2620	EAST	EDDY
Dedicated Acre	s Joint o	r Infill Co	nsolidation (Code Or	der No.				

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



BURTON FLAT 35-33 FED COM 332H

EL:3223.5' LAT:32.534076 LON:104.150481 N:558076.02 F:597688.47 FIRST TAKE POINT 400' FNL 2550' FWL SEC. 35 LAT:32.536161 LON:104.148878 N:558835.13 E:598181.21 LAST TAKE POINT 400' FNL 2540' FEL SEC. 33 LAT:32.536124 LON:104.182587 N:558805.34 E:587793.05 BOTTOM OF HOLE LAT:32.536123 LON:104.182847 N:558805.05

F:587713.05

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.

Signature

10/28/22 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 LAMAN ⊗, WEY CO TOS/ONAL SUP REV: 06/29/2022

Certificate No. 22404 B.L. LAMAN

DRAWN BY: CM

Inten	t x	As Dril	led										
API#													
Operator Name: DEVON ENERGY PRODUCTION COMPANY, LP.				1		erty Name		35-33	FED	CON	Л	Well Number 332H	
Kick C	Off Point	(KOP)											
UL C	Section 35	Township 20S	Range 28E	Lot	Feet 1348		From N/S NORTH	Fee 25		From		County EDDY	
Latitu 32.5	ide 533457	771			Longitu -104.		39358	•				NAD 83	
First 1	Take Poir	nt (FTP)											
C	Section 35	Township 20-S	Range 28-E	Lot	Feet 400		From N/S NORTH	1 25		From	ST	County EDDY	,
Latitu 32.	5361	61			Longitu 104	itude 4.148878 83							
	ake Poin		T	T		1							
В	Section 33	Township 20-S	Range 28-E	Lot	Feet 400		RTH 25		From		Count		
32.	5361	24			Longitu 104		2587				NAD 83		
is this	well the	defining v	vell for th	e Horiz	zontal Sp	oacıng	Unit?	Υ					
Is this	well an	infill well?		N	7								
					_								
	l is yes p ng Unit.	lease prov	ide API if a	availab	ole, Oper	rator N	lame and	well	numbei	r for D	efinir	ng well fo	r Horizontal
API#													
Ope	rator Nai	me:				Prop	erty Name	e:					Well Number
													K7 06/20/201

KZ 06/29/2018

1. Geologic Formations

TVD of target	8729	Pilot hole depth	N/A
MD at TD:	19317	Deepest expected fresh water	

Basin

Dasin	Donalla	Water/Mineral	
	Depth		
Formation	(TVD)	Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	85		
Salt	411		
Base of Salt	640		
Capitan Reef Top	1130		
Delaware	2953		
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		
	8977		
		-	

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

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	ВТС	0	1080 MD	0	1080 TVD
12 1/4	9 5/8	40.0	J-55	ВТС	0	2928 MD	0	2928 TVD
8 3/4	5 1/2	17.0	P110	ВТС	0	19317 MD	0	8729 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.

3. Cementing Program (3-String Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	260	Surf	13.2	1.4	Lead: Class C Cement + additives
T	164	Surf	9.0	3.3	Lead: Class C Cement + additives
Int	339	500' above shoe	13.2	1.4	Tail: Class H / C + additives
Int 1	235	Surf	9.0	3.3	Lead: Class C Cement + additives
Int 1	154	500' above shoe	13.2	1.4	Tail: Class H / C + additives
Int 1	As Needed	Surf	0.0	3.3	Squeeze Lead: Class C Cement + additives
Intermediate	164	Surf	9.0	3.3	Lead: Class C Cement + additives
Squeeze	339	500' above shoe	13.2	1.4	Tail: Class H / C + additives
Production	675	50' above Capitan	9.0	3.3	Lead: Class H /C + additives
Troduction	2098	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%

4. Pressure Control Equipment (Four String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		✓	Tested to:		
			Anı	nular		N/A		
Int			Blind	l Ram				
Int			Pipe	Ram		500psi		
			Doub	le Ram		300psi		
			Other*	Diverter	X			
		5M	Anı	nular	X	50% of rated working pressure		
Int 1	13-5/8"		Blind Ram		X			
1110 1	13-3/6		Pipe Ram			5M		
			Doub	le Ram	X	5M		
			Other*					
			Annul	ar (5M)	X	50% of rated working pressure		
Production	13-5/8"	5M	Blind Ram		X			
Floduction	13-3/6	JIVI	Pipe Ram			5M		
			Doub	le Ram	X	J1V1		
			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.

5. Mud Program (Four String Design)

Section	Туре	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.

W/1 - '11 1 1 - ' - (1 1 1 ' - (1 10	DVT/Decem/Viewel Memitering
What will be used to monitor the loss or gain of fluid?	PVT/Pason/Visual Monitoring

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	4085
Abnormal temperature	No

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

Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.

Ľ	cheountered	ineasured varies and formations will be provided to the BEW.
	NI I	H2S is present
Ī	Y	H2S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

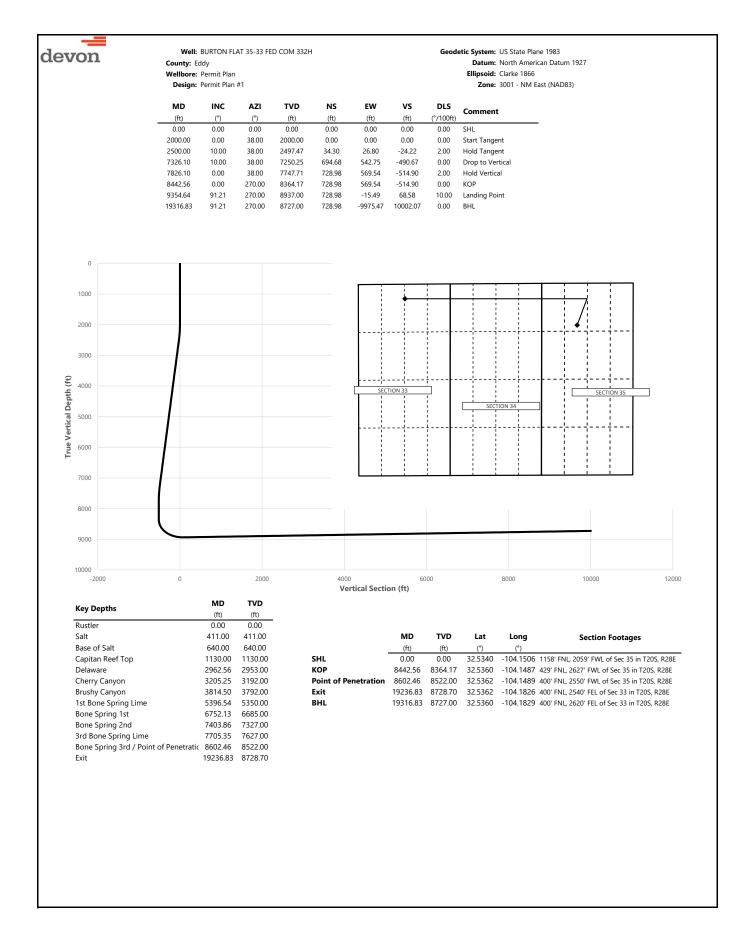
- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and 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 nippled up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

	Other, describe
X	Directional Plan
Attachments	





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)

March Marc		Design.	Permit Plar	1#1					Zone: 3001 - NM East (NAD83)
	MD	INC	A71	TVD	NC	EW	ve	DIS	
Dec Color Color									Comment
85.00									SHI .
100.00									
									Rustiei
Month Mont									
Manual M									
Mathematical Color									
50000 0.00 38.00 500.00 0.00 0.00 0.00 ACC									
600.00									Salt
Company									
700.00 0.00 38.00 700.00 0.00 0.00 0.00 900.00 0.00 900.00 0.00 0.00 1000 900.00 0.00 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 1000 0.00 0.00 1000 1000 0.00 0.00 1000 1000 0.00 0.00 1000 0.00 0.00 1000 0.00 0.00 1000 0.00 0.00 1000 0.00									
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100000									
11000									
1310.00									
1200.00			38.00		0.00				
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1400.00 0.00 38.00 1400.00 0.00 0.00 0.00 0.00 1500.00 0.00 0.00 0.00 1500.00 0.00 0.00 0.00 0.00 1500.00 0.00 0.00 0.00 0.00 0.00 1500.00 0.00 0.00 0.00 0.00 1500.00 0.00 0.00 0.00 0.00 0.00 1500.00 0.0	1200.00	0.00	38.00	1200.00	0.00	0.00	0.00	0.00	
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1800.00	1700.00	0.00	38.00	1700.00	0.00	0.00	0.00	0.00	
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2000,00									
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County: Eddy Wellbore: Permit Plan Geodetic System: US State Plane 1983

Datum: North American Datum 1927 Ellipsoid: Clarke 1866

	Design:	Permit Plan	#1					Zone: 3001 - NM East (NAD83)
MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
6200.00	10.00	38.00	6141.25	540.59	422.36	-381.83	0.00	
6300.00	10.00	38.00	6239.73	554.28	433.05	-391.50	0.00	
6400.00	10.00	38.00	6338.22	567.96	443.74	-401.16	0.00	
6500.00 6600.00	10.00	38.00	6436.70 6535.18	581.64	454.43	-410.83	0.00	
6700.00	10.00 10.00	38.00 38.00	6633.66	595.33 609.01	465.12 475.81	-420.49 -430.16	0.00	
6752.13	10.00	38.00	6685.00	616.14	481.38	-435.20	0.00	Bone Spring 1st
6800.00	10.00	38.00	6732.14	622.69	486.50	-439.83	0.00	some spring 1st
6900.00	10.00	38.00	6830.62	636.38	497.19	-449.49	0.00	
7000.00	10.00	38.00	6929.10	650.06	507.88	-459.16	0.00	
7100.00	10.00	38.00	7027.58	663.74	518.57	-468.82	0.00	
7200.00	10.00	38.00	7126.06	677.43	529.26	-478.49	0.00	
7300.00	10.00	38.00	7224.54	691.11	539.96	-488.15	0.00	Duna ta Vantinal
7326.10 7400.00	10.00 8.52	38.00 38.00	7250.25 7323.18	694.68 704.06	542.75 550.07	-490.67 -497.29	0.00 2.00	Drop to Vertical
7403.86	8.44	38.00	7327.00	704.50	550.42	-497.61	2.00	Bone Spring 2nd
7500.00	6.52	38.00	7422.32	714.37	558.13	-504.58	2.00	bone spring and
7600.00	4.52	38.00	7521.85	721.95	564.05	-509.94	2.00	
7700.00	2.52	38.00	7621.65	726.79	567.83	-513.35	2.00	
7705.35	2.41	38.00	7627.00	726.98	567.98	-513.48	2.00	3rd Bone Spring Lime
7800.00	0.52	38.00	7721.61	728.89	569.47	-514.83	2.00	
7826.10	0.00	38.00	7747.71	728.98	569.54	-514.90	2.00	Hold Vertical
7900.00 8000.00	0.00	270.00	7821.61	728.98 728.98	569.54	-514.90	0.00	
8100.00	0.00	270.00 270.00	7921.61 8021.61	728.98 728.98	569.54 569.54	-514.90 -514.90	0.00	
8200.00	0.00	270.00	8121.61	728.98	569.54	-514.90	0.00	
8300.00	0.00	270.00	8221.61	728.98	569.54	-514.90	0.00	
8400.00	0.00	270.00	8321.61	728.98	569.54	-514.90	0.00	
8442.56	0.00	270.00	8364.17	728.98	569.54	-514.90	0.00	KOP
8500.00	5.74	270.00	8421.52	728.98	566.66	-512.03	10.00	
8600.00	15.74	270.00	8519.64	728.98	548.05	-493.46	10.00	
8602.46 8700.00	15.99 25.74	270.00	8522.00	728.98	547.37	-492.79 -458.18	10.00	Bone Spring 3rd / Point of Penetration
8800.00	35.74	270.00 270.00	8613.04 8698.87	728.98 728.98	512.67 461.62	-436.16 -407.26	10.00 10.00	
8900.00	45.74	270.00	8774.54	728.98	396.43	-342.25	10.00	
9000.00	55.74	270.00	8837.74	728.98	319.10	-265.12	10.00	
9100.00	65.74	270.00	8886.55	728.98	231.96	-178.22	10.00	
9200.00	75.74	270.00	8919.48	728.98	137.68	-84.18	10.00	
9300.00	85.74	270.00	8935.55	728.98	39.10	14.13	10.00	
9354.64	91.21	270.00	8937.00	728.98	-15.49	68.58	10.00	Landing Point
9400.00 9500.00	91.21 91.21	270.00 270.00	8936.04 8933.94	728.98 728.98	-60.85 -160.83	113.82 213.53	0.00	
9600.00	91.21	270.00	8931.83	728.98	-260.80	313.24	0.00	
9700.00	91.21	270.00	8929.72	728.98	-360.78	412.95	0.00	
9800.00	91.21	270.00	8927.61	728.98	-460.76	512.66	0.00	
9900.00	91.21	270.00	8925.50	728.98	-560.74	612.38	0.00	
10000.00	91.21	270.00	8923.40	728.98	-660.71	712.09	0.00	
10100.00	91.21	270.00	8921.29	728.98	-760.69	811.80	0.00	
10200.00 10300.00	91.21 91.21	270.00 270.00	8919.18 8917.07	728.98 728.98	-860.67 -960.65	911.51	0.00	
10300.00	91.21	270.00	8914.97	728.98 728.98	-1060.63	1011.22 1110.93	0.00	
10500.00	91.21	270.00	8912.86	728.98	-1160.60	1210.65	0.00	
10600.00	91.21	270.00	8910.75	728.98	-1260.58	1310.36	0.00	
10700.00	91.21	270.00	8908.64	728.97	-1360.56	1410.07	0.00	
10800.00	91.21	270.00	8906.53	728.97	-1460.54	1509.78	0.00	
10900.00	91.21	270.00	8904.43	728.97	-1560.51	1609.49	0.00	
11000.00 11100.00	91.21	270.00 270.00	8902.32 8900.21	728.97	-1660.49	1709.21 1808.92	0.00	
11100.00	91.21 91.21	270.00	8898.10	728.97 728.97	-1760.47 -1860.45	1908.63	0.00	
11300.00	91.21	270.00	8895.99	728.97	-1960.43	2008.34	0.00	
11400.00	91.21	270.00	8893.89	728.97	-2060.40	2108.05	0.00	
11500.00	91.21	270.00	8891.78	728.97	-2160.38	2207.77	0.00	
11600.00	91.21	270.00	8889.67	728.97	-2260.36	2307.48	0.00	
11700.00	91.21	270.00	8887.56	728.97	-2360.34	2407.19	0.00	
11800.00	91.21	270.00	8885.46	728.97	-2460.31	2506.90	0.00	
11900.00 12000.00	91.21 91.21	270.00	8883.35	728.97	-2560.29	2606.61	0.00	
12000.00	91.21	270.00 270.00	8881.24 8879.13	728.97 728.97	-2660.27 -2760.25	2706.32 2806.04	0.00	
12200.00	91.21	270.00	8877.02	728.97	-2860.23	2905.75	0.00	
12300.00	91.21	270.00	8874.92	728.97	-2960.20	3005.46	0.00	



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)

	Design.	Permit Plan	# 1					Zone: 3001 - NM East (NAD83)
MD	INC	AZI	TVD	NS	EW	vs	DLS	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
12400.00	91.21	270.00	8872.81	728.97	-3060.18	3105.17	0.00	
12500.00	91.21	270.00	8870.70	728.97	-3160.16	3204.88	0.00	
12600.00	91.21	270.00	8868.59	728.97	-3260.14	3304.60	0.00	
12700.00	91.21	270.00	8866.49	728.97	-3360.11	3404.31	0.00	
12800.00	91.21	270.00	8864.38	728.97	-3460.09	3504.02	0.00	
12900.00	91.21	270.00	8862.27	728.97	-3560.07	3603.73	0.00	
13000.00	91.21	270.00	8860.16	728.97	-3660.05	3703.44	0.00	
13100.00	91.21	270.00	8858.05	728.97	-3760.03	3803.15	0.00	
13200.00	91.21	270.00	8855.95	728.96	-3860.00	3902.87	0.00	
13300.00	91.21	270.00	8853.84	728.96	-3959.98	4002.58	0.00	
13400.00	91.21	270.00	8851.73	728.96	-4059.96	4102.29	0.00	
13500.00	91.21	270.00	8849.62	728.96	-4159.94	4202.00	0.00	
13600.00	91.21	270.00	8847.51	728.96	-4259.91	4301.71	0.00	
13700.00	91.21	270.00	8845.41	728.96	-4359.89	4401.43	0.00	
13800.00	91.21	270.00	8843.30	728.96	-4459.87	4501.14	0.00	
13900.00	91.21	270.00	8841.19	728.96	-4559.85	4600.85	0.00	
		270.00	8839.08		-4659.83	4700.56		
14000.00 14100.00	91.21		8836.98	728.96 728.96	-4059.85 -4759.80	4800.27	0.00	
	91.21	270.00					0.00	
14200.00	91.21	270.00	8834.87	728.96	-4859.78	4899.99	0.00	
14300.00	91.21	270.00	8832.76	728.96	-4959.76	4999.70	0.00	
14400.00	91.21	270.00	8830.65	728.96	-5059.74	5099.41	0.00	
14500.00	91.21	270.00	8828.54	728.96	-5159.71	5199.12	0.00	
14600.00	91.21	270.00	8826.44	728.96	-5259.69	5298.83	0.00	
14700.00	91.21	270.00	8824.33	728.96	-5359.67	5398.54	0.00	
14800.00	91.21	270.00	8822.22	728.96	-5459.65	5498.26	0.00	
14900.00	91.21	270.00	8820.11	728.96	-5559.63	5597.97	0.00	
15000.00	91.21	270.00	8818.01	728.96	-5659.60	5697.68	0.00	
15100.00	91.21	270.00	8815.90	728.96	-5759.58	5797.39	0.00	
15200.00	91.21	270.00	8813.79	728.96	-5859.56	5897.10	0.00	
15300.00	91.21	270.00	8811.68	728.96	-5959.54	5996.82	0.00	
15400.00	91.21	270.00	8809.57	728.96	-6059.51	6096.53	0.00	
15500.00	91.21	270.00	8807.47	728.96	-6159.49	6196.24	0.00	
15600.00	91.21	270.00	8805.36	728.96	-6259.47	6295.95	0.00	
15700.00	91.21	270.00	8803.25	728.95	-6359.45	6395.66	0.00	
15800.00	91.21	270.00	8801.14	728.95	-6459.43	6495.38	0.00	
15900.00	91.21	270.00	8799.03	728.95	-6559.40	6595.09	0.00	
16000.00	91.21	270.00	8796.93	728.95	-6659.38	6694.80	0.00	
16100.00	91.21	270.00	8794.82	728.95	-6759.36	6794.51	0.00	
16200.00	91.21	270.00	8792.71	728.95	-6859.34	6894.22	0.00	
16300.00	91.21	270.00	8790.60	728.95	-6959.31	6993.93	0.00	
16400.00	91.21	270.00	8788.50	728.95	-7059.29	7093.65	0.00	
16500.00	91.21	270.00	8786.39	728.95	-7159.27	7193.36	0.00	
16600.00	91.21	270.00	8784.28	728.95	-7259.25	7293.07	0.00	
16700.00	91.21	270.00	8782.17	728.95	-7359.23	7392.78		
		270.00	8780.06	728.95 728.95		7492.49	0.00	
16800.00	91.21				-7459.20 7550.18		0.00	
16900.00	91.21	270.00	8777.96	728.95	-7559.18	7592.21	0.00	
17000.00	91.21	270.00	8775.85	728.95	-7659.16	7691.92	0.00	
17100.00	91.21	270.00	8773.74	728.95	-7759.14	7791.63	0.00	
17200.00	91.21	270.00	8771.63	728.95	-7859.11	7891.34	0.00	
17300.00	91.21	270.00	8769.52	728.95	-7959.09	7991.05	0.00	
17400.00	91.21	270.00	8767.42	728.95	-8059.07	8090.77	0.00	
17500.00	91.21	270.00	8765.31	728.95	-8159.05	8190.48	0.00	
17600.00	91.21	270.00	8763.20	728.95	-8259.03	8290.19	0.00	
17700.00	91.21	270.00	8761.09	728.95	-8359.00	8389.90	0.00	
17800.00	91.21	270.00	8758.99	728.95	-8458.98	8489.61	0.00	
17900.00	91.21	270.00	8756.88	728.95	-8558.96	8589.32	0.00	
18000.00	91.21	270.00	8754.77	728.95	-8658.94	8689.04	0.00	
18100.00	91.21	270.00	8752.66	728.95	-8758.91	8788.75	0.00	
18200.00	91.21	270.00	8750.55	728.94	-8858.89	8888.46	0.00	
18300.00	91.21	270.00	8748.45	728.94	-8958.87	8988.17	0.00	
18400.00	91.21	270.00	8746.34	728.94	-9058.85	9087.88	0.00	
18500.00	91.21	270.00	8744.23	728.94	-9158.83	9187.60	0.00	
18600.00	91.21	270.00	8742.12	728.94	-9258.80	9287.31	0.00	
18700.00	91.21	270.00	8740.02	728.94	-9358.78	9387.02	0.00	
18800.00	91.21	270.00	8737.91	728.94	-9458.76	9486.73	0.00	
18900.00	91.21	270.00	8735.80	728.94	-9558.74	9586.44	0.00	
19000.00	91.21	270.00	8733.69	728.94	-9658.71	9686.15	0.00	
19100.00	91.21	270.00	8731.58	728.94	-9758.69	9785.87	0.00	
19200.00	91.21	270.00	8729.48	728.94	-9858.67	9885.58	0.00	
12200.00		270.00	8728.70	728.94	-9895.49	9922.30	0.00	Exit
19236.83	91.21							



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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
19300.00	91.21	270.00	8727.37	728.94	-9958.65	9985.29	0.00	
19316.83	91.21	270.00	8727.00	728.98	-9975.47	10002.07	0.00	BHL

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)

INC TVD MD AZI NS EW ٧S 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
N/A

WELL NAME & NO.: Burton Flat 35-33 Fed Com 332H
SURFACE HOLE FOOTAGE: 1158'/N & 2059'/W
BOTTOM HOLE FOOTAGE 400'/N & 2620'/E

COA

H2S	O Yes	□ No	
Potash	None	☐ Secretary	R-111-P
Cave/Karst Potential	Low	☐ Medium	High
Cave/Karst Potential	Critical		
Variance	None	○ Flex Hose	Other
Wellhead	Conventional	☐ Multibowl	□ Both
Wellhead Variance	Diverter		
Other	✓4 String	Capitan Reef	\square WIPP
Other	□Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	Cement Squeeze	☐ EchoMeter	
Special Requirements	☐ Water Disposal	□сом	✓ Unit
Special Requirements	☐ Break Testing	☐ Offline	
Variance		Cementing	

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware**, **Bone Spring**, **and 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 and above the salt) 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 shall be set at approximately 1250 feet 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 <u>High Cave/Karst Areas</u> 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 <u>Capitan Reef Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 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.

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.

- 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.
 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.
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- ii. 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.
- iii. Manufacturer representative shall install the test plug for the initial BOP test.
- iv. 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.
- v. 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)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

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 CountyCall 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 intergrity 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 intergrity 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.

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Burton Flat 35-33 Fed Com 332H

20	su	rface csg in a	26	inch hole.		Design Factors					Surface		
Segment	#/ft	Grade	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"												0	
	w/8.4#/g mud, 30min Sfc Csg Test psig: 1,324 Tail Cmt does not circ to sfc. Totals: 350											32,900	
Comparison of	mparison of Proposed to Minimum Required Cement Volumes												
Hole	Hole Annular 1 Stage 1 Stage Min 1 Stage Drilling Calc Reg'd											Min Dist	
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg	
26	1.5053	260	364	527	-31	9.00	407	2M				2.50	

13 3/8	casiı	ng inside the		Design Factors								
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	osig:				Totals:	1,250	_			60,000
		The cement v	olume(s) are inten-	ded to achieve a top of	0	0 ft from surface or a 350						overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
17 1/2	0.6946	503	1016	982	3	10.50	619	2M				1.56
Class 'C' tail cm	nt yld > 1.35											

9 5/8	cas	ing 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	0.97	2,500	3	1.83	4.15	100,000
"B"								0				0
	w/8.4#	t/g mud, 30min Sfc Csg Test p	sig: 1,500				Totals:	2,500				100,000
		The cement vo	olume(s) are inten-	ded to achieve a top of	1050	ft from su	ırface or a	200				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
12 1/4	0.3132	389	991	467	112	9.00	2161	3M				0.81
Class 'C' tail cn	nt yld > 1.35											
Burst Frac Gradient(s) for Segment(s): A, B, C, D = 1.58 , b, c, d All > 0.70 ,												

casing	g inside the	9 5/8	_	<u>Design Factors</u>				Prod 1			
#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
17.00		p 110	btc	3.68	1.83	2.61	19,317	3	4.92	3.46	328,389
							0				0
w/8.4#/g	mud, 30min Sfc Csg Test p	sig: 1,920				Totals:	19,317				328,389
The cement volume(s) are intended to achieve a top of			2300	ft from su	rface or a	200				overlap.	
Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
0.2526	2773	5165	4300	20	9.00						1.35
Class 'H' tail cmt yld > 1.20 Capitan Reef est top XXXX.											
t	#/ft 17.00 w/8.4#/g Annular Volume 0.2526	17.00 w/8.4#/g mud, 30min Sfc Csg Test p The cement v Annular Volume Cmt Sx 0.2526 2773	#/ft Grade 17.00 p 110 w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920	##ft Grade Coupling 17.00 p 110 btc w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920 The cement volume(s) are intended to achieve a top of Annular 1 Stage 1 Stage Min Volume Cmt Sx CuFt Cmt Cu Ft 0.2526 2773 5165 4300	##ft Grade Coupling Body 17.00 p 110 btc 3.68 w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920 The cement volume(s) are intended to achieve a top of Annular 1 Stage 1 Stage Min 1 Stage Volume Cmt Sx CuFt Cmt Cu Ft % Excess 0.2526 2773 5165 4300 20	##ft Grade Coupling Body Collapse 17.00 p 110 btc 3.68 1.83 w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920 The cement volume(s) are intended to achieve a top of 2300 ft from su Annular 1 Stage 1 Stage Min 1 Stage Drilling Volume Cmt Sx CuFt Cmt Cu Ft % Excess Mud Wt 0.2526 2773 5165 4300 20 9.00	##ft Grade Coupling Body Collapse Burst 17.00 p 110 btc 3.68 1.83 2.61 w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920 Totals:	##ft Grade Coupling Body Collapse Burst Length 17.00 p 110 btc 3.68 1.83 2.61 19,317 W/8.4#/g mud, 30min Sfc Csg Test psig: 1,920	##ft Grade Coupling Body Collapse Burst Length B@s 17.00 p 110 btc 3.68 1.83 2.61 19,317 3 W/8.4#/g mud, 30min Sfc Csg Test psig: 1,920	##ft Grade Coupling Body Collapse Burst Length B@s a-B 17.00 p 110 btc 3.68 1.83 2.61 19,317 3 4.92 w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920 Totals: The cement volume(s) are intended to achieve a top of Collapse Burst Length B@s a-B Totals: 19,317 Totals: 19,317 Totals: 19,317 The cement volume(s) are intended to achieve a top of Collapse Burst Length B@s a-B Totals: 19,317 Totals: 19,	#/ft Grade Coupling Body Collapse Burst Length 17.00 p 110 btc 3.68 1.83 2.61 19,317 3 4.92 3.46 w/8.4#/g mud, 30min Sfc Csg Test psig: 1,920 Totals: 19,317 The cement volume(s) are intended to achieve a top of Annular 1 Stage 1 Stage Min 1 Stage Drilling Calc Req'd Volume Cmt Sx CuFt Cmt Cu Ft % Excess Mud Wt 0.2526 2773 5165 4300 20 9.00 Explored Cupt Stage Capitan Reef est top XXXXX.

Carlsbad Field Office 10/31/2022

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

CONDITIONS

Action 173789

CONDITIONS

Operator:	OGRID:				
DEVON ENERGY PRODUCTION COMPANY, LP	6137				
333 West Sheridan Ave.	Action Number:				
Oklahoma City, OK 73102	173789				
	Action Type:				
	[C-103] NOI Change of Plans (C-103A)				

CONDITIONS

Created B	/ Condition	Condition Date
kpickfor	Adhere to previous NMOCD Conditions of Approval	1/12/2023