# Sundry Print Reports 10/15/2023

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

Well Name: TATER TOT 2-35 FED Well Location: T24S / R29E / SEC 2 / County or Parish/State:

COM SWSE /

Well Number: 332H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM103604 Unit or CA Name: Unit or CA Number:

**US Well Number:** 3001549054 **Well Status:** Approved Application for **Operator:** DEVON ENERGY

Permit to Drill PRODUCTION COMPANY LP

# **Notice of Intent**

**Sundry ID:** 2742379

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 07/26/2023 Time Sundry Submitted: 12:03

Date proposed operation will begin: 07/24/2023

**Procedure Description:** Devon Energy Production Co., L.P. (Devon) respectfully requests to change the well name, BHL, and dedicated spacing on the subject well. Please see attached revised C102, drill plan (break test variance included), and directional plan. Permitted Well name: TATER TOT 2-35 STATE FED COM 332H Proposed Well name: TATER TOT 2-35 FED COM 332H Permitted BHL: SESW 970 FSL, 2310 FWL, 35-23S-29E Proposed BHL: NENW 20 FNL, 1690 FWL, 35-23S-29E New leases have been added since approved APD and notification has been given.

# **NOI Attachments**

# **Procedure Description**

WA018301885\_TATER\_TOT\_2\_35\_FED\_COM\_332H\_WL\_R2\_20230828105901.pdf

Tater\_Tot\_2\_35\_\_Fed\_Com\_332H\_20230724095117.pdf

Tater\_Tot\_2\_35\_\_Fed\_Com\_332H\_Directional\_Plan\_07\_18\_23\_20230724095118.pdf

5.5\_17lb\_P110RY\_DWC\_C\_20230724095116.pdf

break\_test\_variance\_BOP\_20230724095117.pdf

8.625in\_32lb\_P110EC\_SPRINT\_FJ\_09.16.2022\_20230724095118.pdf

10.750\_45.5\_J55\_SEAH\_20230724095117.pdf

eived by OCD: 10/15/2023 10:44:50 AM Well Name: TATER TOT 2-35 FED

COM

Well Location: T24S / R29E / SEC 2 /

SWSE /

Well Number: 332H

Type of Well: OIL WELL

**Allottee or Tribe Name:** 

County or Parish/State:

Page 2 of

Lease Number: NMNM103604

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number: 3001549054** 

Well Status: Approved Application for Permit to Drill

**Operator: DEVON ENERGY** PRODUCTION COMPANY LP

# **Conditions of Approval**

# **Additional**

2\_24\_29\_O\_Sundry\_ID\_2742379\_Tater\_Tot\_2\_35\_State\_Fed\_Com\_332H\_20230822071116.pdf Tater\_Tot\_2\_35\_State\_Fed\_Com\_332H\_Dr\_COA\_Sundry\_ID\_2742379\_20230822071116.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: SHAYDA OMOUMI Signed on: AUG 28, 2023 10:59 AM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Associate 3 Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY State: OK

Phone: (405) 235-3611

Email address: SHAYDA.OMOUMI@DVN.COM

# **Field**

**Representative Name:** 

**Street Address:** 

City:

State:

Zip:

Phone:

**Email address:** 

# **BLM Point of Contact**

**BLM POC Name: CHRISTOPHER WALLS** 

**BLM POC Phone:** 5752342234

**Disposition:** Approved

Signature: Chris Walls

**BLM POC Title:** Petroleum Engineer

BLM POC Email Address: cwalls@blm.gov

Disposition Date: 10/13/2023

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

District III 1000 Rio Brazos Road, 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

State of New Mexico

Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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

AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Numbe	er	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name			
30-015-49	-015-49054 11520 CEDAR CANYON;BONE S		SPRING			
<sup>4</sup> Property Code		<sup>5</sup> Property Name				
331701		TATER TO	OT 2-35 FED COM	332H		
<sup>7</sup> OGRID No.		8 O <sub>I</sub>	perator Name	<sup>9</sup> Elevation		
6137		DEVON ENERGY PRO	ODUCTION COMPANY, L.P.	3092.6		

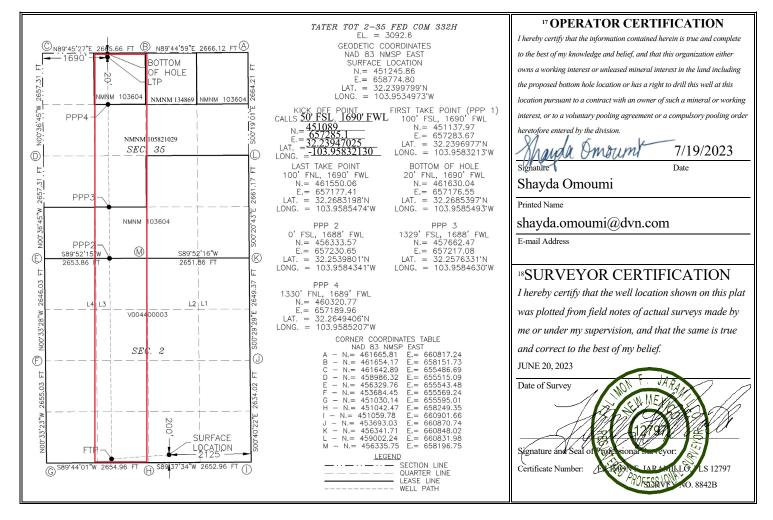
### <sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	2	24 S	29 E		200	SOUTH	2125	EAST	EDDY
			11 <b>I</b>	Bottom H	ole Location	If Different Fr	om Surface		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	35	23 S	29 E		20	NORTH	1690	WEST	EDDY

12 Dedicated Acres 15 Order No. 13 Joint or Infill <sup>14</sup> Consolidation Code

319.66

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.



Inten	t X	As Dril	led											
API#														
DE\	rator Nai /ON EN MPANY	NERGY P	PRODUC	OITO	N		erty N ER T			FED	COI	M		Well Number 332H
Kick (	Off Point	(KOP)												
UL	Section	Township	Range	Lot	Feet	I	From N	1/5	Feet		From	n E/W	County	
N	2	245	29E	Lot	50			JTH	1690			WEST	EDDY	
Latitu		2.10	232	I	Longitu -103.95			<u> </u>	1 2000			***	NAD 83	
	Γake Poir		Dan an	l	F	T		1/6	T 5		F	- F /\A/	Country	
UL <b>N</b>	Section 2	Township 24S	Range 29E	Lot	Feet 100		From N		Feet 169		WE	n E/W ST	County EDDY	
Latitu 32.2	ude 239697	7			Longitu 103.9	tude NAD						NAD 83		
UL C Latitu	Section 35 ude 268319	Township 23S	Range 29E	Lot	Feet 100 Longitu	NO ide	m N/S RTH	Feet 169		From WES		Count EDD NAD 83		
		e defining v	vell for th	e Hori:					Υ					
ls this	s well an	infill well?		N										
	ng Unit.	lease provi	ide API if	availak	ole, Oper	rator I	Name :	and v	vell n	umber	for l	Definir	ng well fo	r Horizontal
"														
Ope	rator Nai	me:	•			Prop	erty N	ame	:					Well Number

KZ 06/29/2018



# <u>10-3/4"</u> <u>45.50#</u> <u>0.400"</u> <u>J-55</u>

in.

in.

1000 lbs

1000 lbs

493

796

10.750

0.400

# **Dimensions (Nominal)**

**Outside Diameter** 

Wall

Inside Diameter Drift	9.950 9.875	in. in.
Dilit	3.6/3	111.
Weight, T&C	45.500	lbs/ft
Weight, PE	44.260	lbs/ft
Internal Yield Pressure at Minimum Yield		
Collapse	2090	nci
Collapse	2090	psi
Internal Yields Pressure		
PE	3580	psi
STC	3580	psi
втс	3580	psi
Yield Strength, Pipe Body	715	1000 lbs
Joint Strength, STC		

Note: SeAH Steel has produced this specification sheet for general information only. SeAH does not assume liability or responsibility for any loss or injury resulting from the use of information or data contained herein. All applications for the material described are at the customer's own risk and responsibility.

**STC** 

**BTC** 

P-110RY

16.89

4.962

# **Technical Specifications**

Connection Type:	Size(O.D.):	Weight (Wall):	Grade:
DWC/C Casing	5-1/2 in	17.00 lb/ft (0.304 in)	P-110RY
standard			

Material
Grade
Minimum Yield Strength (psi)

 110,000
 Minimum Yield Strength (psi)

 125,000
 Minimum Ultimate Strength (psi)

 VAM-USA

 4424 W. Sam Houston Pkwy. Suite 150

 Houston, TX 77041
 Phone: 713-479-3200

 Fax: 713-479-3234
 Fax: 713-479-3234

4.892 Nominal Pipe Body I.D.(in)
0.304 Nominal Wall Thickness (in)
17.00 Nominal Weight (lbs/ft)

Fipe Body Performance Properties

546,000 Minimum Pipe Body Yield Strength (lbs)

7,480 Minimum Collapse Pressure (psi)

10,640 Minimum Internal Yield Pressure (psi)

9,700 Hydrostatic Test Pressure (psi)

Plain End Weight (lbs/ft)

Nominal Pipe Body Area (sq in)

Connection Dimensions
6.050 Connection O.D. (in)
4.892 Connection I.D. (in)
4.767 Connection Drift Diameter (in)
4.13 Make-up Loss (in)
4.962 Critical Area (sq in)
100.0 Joint Efficiency (%)

Connection Performance Properties

546,000 Joint Strength (lbs)

22,940 Reference String Length (ft) 1.4 Design Factor

568,000 API Joint Strength (lbs)

546,000 Compression Rating (lbs)

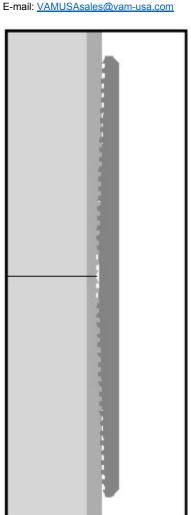
7,480 API Collapse Pressure Rating (psi)

10,640 API Internal Pressure Resistance (psi)

7,480 API Collapse Pressure Rating (psi)
10,640 API Internal Pressure Resistance (psi)
91.7 Maximum Uniaxial Bend Rating [degrees/100 ft]

Appoximated Field End Torque Values

12,000 Minimum Final Torque (ft-lbs)
13,800 Maximum Final Torque (ft-lbs)
15,500 Connection Yield Torque (ft-lbs)



For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

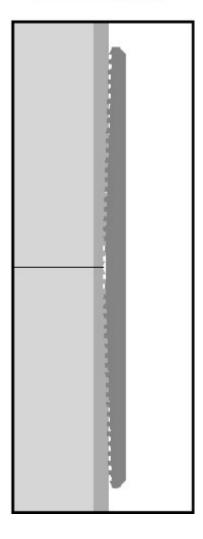
Connection specifications within the control of VAM-USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

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#### **DWC Connection Data Notes:**

- 1. DWC connections are available with a seal ring (SR) option.
- All standard DWC/C connections are interchangeable for a give pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
- 3. Connection performance properties are based on nominal pipe body and connection dimensions.
- DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
- 5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
- 6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
- Bending efficiency is equal to the compression efficiency.
- 8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
- 9. Connection yield torque is not to be exceeded.
- 10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
- DWC connections will accommodate API standard drift diameters.



Connection specifications within the control of VAM-USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained from mill publications and are subject to change. Properties of mill proprietary grades should be confirmed with the mill. Users are advised to obtain current connection specifications and verify pipe mechanical properties for each application.

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Issued on: 16 Sep. 2022 by Logan Van Gorp



### **Connection Data Sheet**

### HIGHER TORQUE VERSION

OD	Weight (lb/ft)	Wall Th.	Grade	Alt. Drift:	Connection
8 5/8 in.	Nominal: 32.00	0.352 in.	P110EC	7.875 in.	VAM® SPRINT-FJ
	Plain End: 31.13				

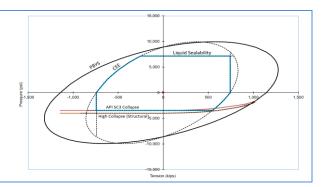
PIPE PROPERTIES		
Nominal OD	8.625	in.
Nominal ID	7.921	in.
Nominal Cross Section Area	9.149	sqin.
Grade Type	Hig	h Yield
Min. Yield Strength	125	ksi
Max. Yield Strength	140	ksi
Min. Ultimate Tensile Strength	135	ksi

CONNECTION PROP	ERTIES	
Connection Type	Semi-Premium Int	egral Flush
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	5.978	sqin.
Tension Efficiency	65.0	% of pipe
Compression Efficiency	65.0	% of pipe
Internal Pressure Efficiency	80.0	% of pipe
External Pressure Efficiency	100	% of pipe

CONNECTION PERFORMANCES		
Tensile Yield Strength	744	klb
Compression Resistance	744	klb
Max. Internal Pressure	7,150	psi
Structural Collapse Resistance	4,000	psi
Max. Structural Bending	41	°/100ft
Max. Bending with Sealability	10	°/100ft

23,000	ft.lb
	10.110
25,500	ft.lb
28,000	ft.lb
48,000	ft.lb
	28,000

VAM® SPRINT-FJ is a semi-premium flush connection designed for shale applications, where maximum clearance and high tension capacity are required for intermediate casing strings.



canada@vamfieldservice.com usa@vamfieldservice.com mexico@vamfieldservice.com brazil@vamfieldservice.com Do you need help on this product? - Remember no one knows VAM<sup>®</sup> like VAM<sup>®</sup>

uk@vamfieldservice.com dubai@vamfieldservice.com nigeria@vamfieldservice.com angola@vamfieldservice.com china@vamfieldservice.com baku@vamfieldservice.com singapore@vamfieldservice.com australia@vamfieldservice.com

Over 140 VAM® Specialists available worldwide 24/7 for Rig Site Assistance



<sup>\* 87.5%</sup> RBW

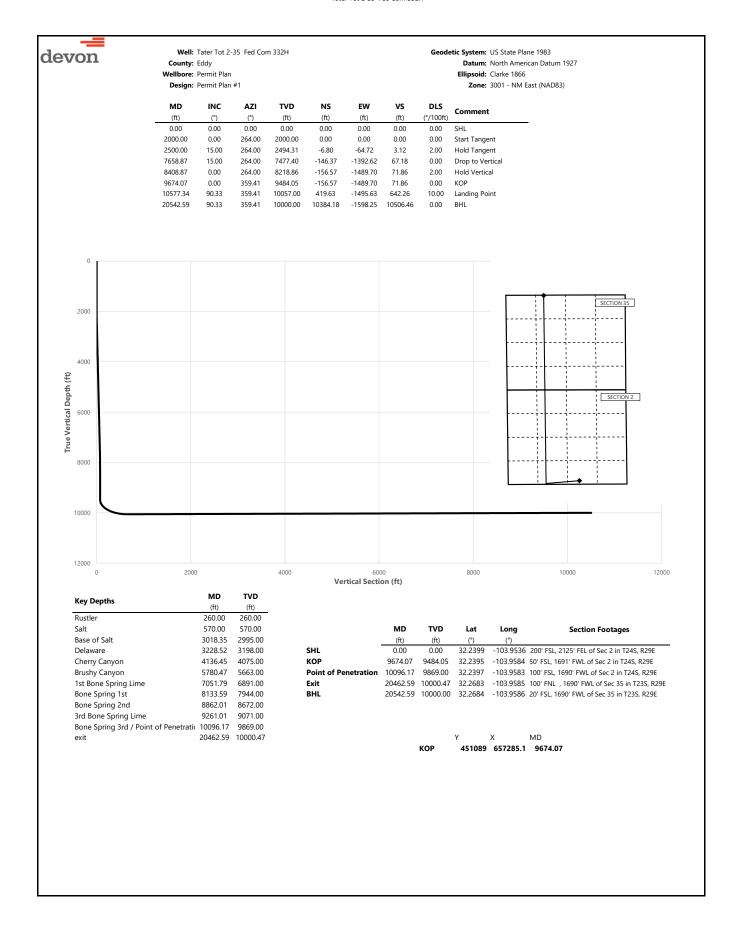
### **Section 2 - Blowout Preventer Testing Procedure**

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. This test will include the Top Pipe Rams, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and Shell of the 10M BOPE to 5M for 10 minutes. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections and no deeper than the Bone Springs Formation where 5M BOP tests are required. The initial BOP test will follow OOGO2.III.A.2.i, and subsequent tests following a skid will only test connections that are broken. The annular preventer will be tested to 100% working pressure. This variance will meet or exceed OOGO2.III.A.2.i per the following: Devon Energy will perform a full BOP test per OOGO2.III.A.2.i before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, before the expiration of the allotted 14-days for 5M intermediate batch drilling or when the drilling rig is fully mobilized to a new well pad, whichever is sooner. We will utilize a 200' TVD tolerance between intermediate shoes as the cutoff for a full BOP test. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. Break test will be a 14 day interval and not a 30 day full BOPE test interval. If in the event break testing is not utilized, then a full BOPE test would be conducted.

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







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 TVD vs AZI NS EW DLS Comment (°/100ft) (ft) (ft) (°) (°) (ft) (ft) (ft) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 SHL 100.00 0.00 264.00 100.00 0.00 0.00 0.00 0.00 200.00 0.00 264.00 200.00 0.00 0.00 0.00 0.00 0.00 260.00 0.00 264.00 260.00 0.00 0.00 0.00 Rustler 300.00 0.00 264.00 300.00 0.00 0.00 0.00 0.00 400.00 0.00 264.00 400.00 0.00 0.00 0.00 0.00 500.00 0.00 264.00 500.00 0.00 0.00 0.00 0.00 570.00 264.00 0.00 Salt 0.00 570.00 0.00 0.00 0.00 600.00 0.00 264.00 600.00 0.00 0.00 0.00 0.00 700.00 0.00 264.00 700.00 0.00 0.00 0.00 0.00 800.00 0.00 264.00 800.00 0.00 0.00 0.00 0.00 900.00 0.00 264.00 900.00 0.00 0.00 0.00 0.00 1000.00 0.00 264.00 1000.00 0.00 0.00 0.00 0.00 1100.00 0.00 264.00 1100.00 0.00 0.00 0.00 0.00 1200.00 0.00 264.00 1200.00 0.00 0.00 0.00 1300.00 0.00 264.00 1300.00 0.00 0.00 0.00 0.00 1400.00 264.00 1400.00 0.00 0.00 0.00 0.00 0.00 1500.00 0.00 264.00 1500.00 0.00 0.00 0.00 0.00 1600.00 0.00 264.00 1600.00 0.00 0.00 0.00 0.00 1700.00 0.00 264.00 1700.00 0.00 0.00 0.00 0.00 1800.00 0.00 264.00 1800.00 0.00 0.00 0.00 0.00 1900.00 0.00 264.00 1900.00 0.00 0.00 0.00 0.00 2000.00 0.00 264 00 2000 00 0.00 0.00 0.00 0.00 Start Tangent 2100.00 3.00 264.00 2099.95 -0.27 -2.60 0.13 3.00 2200.00 6.00 264.00 2199.63 -1.09 -10.41 0.50 3.00 2300.00 9.00 264.00 2298.77 -2.46 -23.38 1.13 3.00 2400.00 12.00 264.00 2397.08 -436 -41.51 2.00 3.00 2500.00 264.00 2494.31 -6.80 -64.72 Hold Tangent 15.00 3.12 2.00 2600.00 15.00 264.00 2590.90 -9.51 -90.46 4.36 0.00 2700.00 15.00 264.00 2687.49 -12.21 -116.20 0.00 5.61 2800.00 15.00 264.00 2784.09 -14.92 -141.94 6.85 0.00 2900.00 15.00 2880.68 -167.68 0.00 264.00 -17.62 8.09 3000.00 264.00 2977.27 -20.33 -193.42 0.00 15.00 9.33 0.00 3018.35 15.00 264.00 2995.00 -20.83-198.159.56 Base of Salt 3100.00 15.00 264.00 3073.86 -23.04 -219.16 10 57 0.00 3200.00 15.00 264.00 3170.46 -25.74 -244.90 11.81 0.00 0.00 3228.52 15.00 264.00 3198.00 -26.51 -252.24 Delaware 12.17 3300.00 15.00 264.00 3267.05 -28.45 -270.64 13.06 0.00 3400.00 15.00 264.00 3363.64 -31.15 -296.38 14.30 0.00 3500.00 264.00 3460.23 -33.86 -322.12 15.54 0.00 15.00 3600.00 -36.56 -347.86 15.00 264.00 3556.83 16.78 0.00 3700.00 15.00 264.00 3653.42 -39.27 -373.60 18.02 0.00 3800.00 15.00 264.00 3750.01 -41.97 -399.34 19.26 0.00 3900.00 3846.60 -425.08 15.00 264.00 -44.68 20.50 0.00 4000.00 15.00 264.00 3943.20 -47.38-450.82 21.75 0.00 4100.00 15.00 264.00 4039.79 -50.09 -476.56 22.99 0.00 4136.45 15.00 264.00 4075.00 -51.08 -485.94 23.44 0.00 Cherry Canyon 4200.00 264.00 4136.38 -52.80 -502.30 24.23 0.00 15.00 4300.00 15.00 264.00 4232.97 -55.50 -528.04 25.47 0.00 4400.00 15.00 264.00 4329.57 -58.21 -553.78 26.71 0.00 4500.00 15.00 264.00 4426.16 -60.91 -579.52 27.95 0.00 4600.00 15.00 264.00 4522.75 -63.62 -605.26 29.20 0.00 4700.00 15.00 264.00 4619.34 -66.32 -631.00 30.44 0.00 4800.00 15.00 4715.94 -69.03 -656.74 31.68 0.00 264.00 4900.00 264.00 4812.53 -71.73 15.00 -682.48 32.92 0.00 5000.00 4909 12 0.00 15.00 264 00 -74 44 -708 22 34 16 5100.00 15.00 264.00 5005.72 -77.15 -733.96 35.40 0.00 5200.00 15.00 264.00 5102.31 -79.85 -759.70 36.65 5300.00 15.00 264.00 5198.90 -82.56 37.89 0.00 -785.44 5400.00 15.00 264.00 5295.49 -85.26 -811.18 39.13 0.00 5500.00 5392.09 -836.92 40.37 15.00 264.00 -87.97 0.00 5600.00 15.00 264.00 5488.68 -90.67 -862.66 41.61 0.00 5700.00 5585 27 -93 38 15.00 264 00 -888 40 42 85 0.00 5780.47 15.00 264.00 5663.00 -95.56 -909.12 43.85 0.00 Brushy Canyon 5800.00 0.00 15.00 264.00 5681.86 -96.08 914.14 44.10 5900.00 264.00 5778.46 -98.79 -939.88 45.34 0.00 15.00 6000.00 15.00 264 00 5875.05 -10149 -965.62 46 58 0.00 6100.00 15.00 264.00 5971.64 -104.20 -991.36 47.82 0.00 6200.00 15.00 264.00 6068.23 -106.91 -1017.10 49.06 0.00 6300.00 15.00 264.00 6164.83 -109.61 -1042.84 50.30 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

	Design:	Permit Plan	ı #1					<b>Zone:</b> 3001 - NM East (NAD83)
MD (ft)	INC (°)	<b>AZI</b> (°)	TVD (ft)	NS (ft)	<b>EW</b> (ft)	VS (ft)	<b>DLS</b> (°/100ft)	Comment
6400.00	15.00	264.00	6261.42	-112.32	-1068.58	51.55	0.00	
6500.00	15.00	264.00	6358.01	-115.02	-1094.32	52.79	0.00	
6600.00	15.00	264.00	6454.60	-117.73	-1120.06	54.03	0.00	
6700.00	15.00	264.00	6551.20	-120.43	-1145.80	55.27	0.00	
6800.00 6900.00	15.00 15.00	264.00 264.00	6647.79 6744.38	-123.14 -125.84	-1171.54 -1197.28	56.51 57.75	0.00	
7000.00	15.00	264.00	6840.97	-123.54	-1223.02	59.00	0.00	
7051.79	15.00	264.00	6891.00	-129.95	-1236.36	59.64	0.00	1st Bone Spring Lime
7100.00	15.00	264.00	6937.57	-131.26	-1248.76	60.24	0.00	
7200.00	15.00	264.00	7034.16	-133.96	-1274.50	61.48	0.00	
7300.00	15.00	264.00	7130.75	-136.67	-1300.24	62.72	0.00	
7400.00	15.00	264.00	7227.34	-139.37	-1325.98	63.96	0.00	
7500.00	15.00	264.00	7323.94	-142.08	-1351.72	65.20	0.00	
7600.00 7658.87	15.00 15.00	264.00 264.00	7420.53 7477.40	-144.78 -146.37	-1377.46 -1392.62	66.44 67.18	0.00	Drop to Vertical
7700.00	14.18	264.00	7517.20	-140.37	-1402.92	67.68	2.00	brop to vertical
7800.00	12.18	264.00	7614.56	-149.84	-1425.59	68.77	2.00	
7900.00	10.18	264.00	7712.66	-151.86	-1444.87	69.70	2.00	
8000.00	8.18	264.00	7811.37	-153.53	-1460.73	70.47	2.00	
8100.00	6.18	264.00	7910.58	-154.84	-1473.16	71.07	2.00	
8133.59	5.51	264.00	7944.00	-155.19	-1476.56	71.23	2.00	Bone Spring 1st
8200.00	4.18	264.00	8010.17	-155.78	-1482.13	71.50	2.00	
8300.00	2.18	264.00	8110.01	-156.36	-1487.64	71.76	2.00	
8400.00 8408.87	0.18 0.00	264.00 264.00	8209.99 8218.86	-156.57	-1489.69 -1489.70	71.86 71.86	2.00 2.00	Hold Vertical
8500.00	0.00	359.41	8309.99	-156.57 -156.57	-1489.70	71.86	0.00	noid vertical
8600.00	0.00	359.41	8409.99	-156.57	-1489.70	71.86	0.00	
8700.00	0.00	359.41	8509.99	-156.57	-1489.70	71.86	0.00	
8800.00	0.00	359.41	8609.99	-156.57	-1489.70	71.86	0.00	
8862.01	0.00	359.41	8672.00	-156.57	-1489.70	71.86	0.00	Bone Spring 2nd
8900.00	0.00	359.41	8709.99	-156.57	-1489.70	71.86	0.00	
9000.00	0.00	359.41	8809.99	-156.57	-1489.70	71.86	0.00	
9100.00 9200.00	0.00	359.41 359.41	8909.99 9009.99	-156.57 -156.57	-1489.70 -1489.70	71.86 71.86	0.00	
9261.01	0.00	359.41	9071.00	-156.57	-1489.70	71.86	0.00	3rd Bone Spring Lime
9300.00	0.00	359.41	9109.99	-156.57	-1489.70	71.86	0.00	Sid bone Spring Line
9400.00	0.00	359.41	9209.99	-156.57	-1489.70	71.86	0.00	
9500.00	0.00	359.41	9309.99	-156.57	-1489.70	71.86	0.00	
9600.00	0.00	359.41	9409.99	-156.57	-1489.70	71.86	0.00	
9674.07	0.00	359.41	9484.05	-156.57	-1489.70	71.86	0.00	KOP
9700.00	2.59	359.41	9509.98	-155.99	-1489.71	72.45	10.00	
9800.00 9900.00	12.59 22.59	359.41	9608.97 9704.18	-142.79 -112.60	-1489.84 -1490.15	85.51	10.00 10.00	
10000.00	32.59	359.41 359.41	9792.69	-66.35	-1490.13	115.39 161.18	10.00	
10096.17	42.21	359.41	9869.00	-8.00	-1491.23	218.94	10.00	Bone Spring 3rd / Point of Penetration
10100.00	42.59	359.41	9871.82	-5.42	-1491.26	221.49	10.00	
10200.00	52.59	359.41	9939.18	68.32	-1492.02	294.49	10.00	
10300.00	62.59	359.41	9992.70	152.63	-1492.89	377.96	10.00	
10400.00	72.59	359.41	10030.77	244.96	-1493.84	469.36	10.00	
10500.00	82.59	359.41	10052.23	342.50	-1494.84	565.91	10.00	Leading Balan
10577.34	90.33	359.41	10057.00	419.63	-1495.63	642.26 664.69	10.00	Landing Point
10600.00 10700.00	90.33 90.33	359.41 359.41	10056.87 10056.30	442.29 542.28	-1495.87 -1496.90	763.68	0.00	
10800.00	90.33	359.41	10056.50	642.27	-1490.90	862.66	0.00	
10900.00	90.33	359.41	10055.15	742.27	-1498.96	961.65	0.00	
11000.00	90.33	359.41	10054.58	842.26	-1499.99	1060.64	0.00	
11100.00	90.33	359.41	10054.01	942.25	-1501.02	1159.62	0.00	
11200.00	90.33	359.41	10053.44	1042.24	-1502.05	1258.61	0.00	
11300.00	90.33	359.41	10052.87	1142.24	-1503.08	1357.60	0.00	
11400.00 11500.00	90.33 90.33	359.41 359.41	10052.30 10051.72	1242.23 1342.22	-1504.11 -1505.14	1456.58 1555.57	0.00	
11600.00	90.33	359.41	10051.72	1442.22	-1505.14	1654.55	0.00	
11700.00	90.33	359.41	10051.13	1542.21	-1507.20	1753.54	0.00	
11800.00	90.33	359.41	10050.01	1642.20	-1508.23	1852.53	0.00	
11900.00	90.33	359.41	10049.44	1742.20	-1509.26	1951.51	0.00	
12000.00	90.33	359.41	10048.86	1842.19	-1510.29	2050.50	0.00	
12100.00	90.33	359.41	10048.29	1942.18	-1511.32	2149.48	0.00	
12200.00	90.33	359.41	10047.72	2042.18	-1512.35	2248.47	0.00	
12300.00 12400.00	90.33 90.33	359.41 359.41	10047.15 10046.58	2142.17 2242.16	-1513.38 -1514.41	2347.46 2446.44	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#1					<b>Zone:</b> 3001 - NM East (NAD83)
MD	INC	AZI	TVD	NS	EW	vs	DLS	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
12500.00	90.33	359.41	10046.01	2342.15	-1515.44	2545.43	0.00	
12600.00	90.33	359.41	10045.43	2442.15	-1516.47	2644.41	0.00	
12700.00	90.33	359.41	10044.86	2542.14	-1517.50	2743.40	0.00	
12800.00	90.33	359.41	10044.29	2642.13	-1518.53	2842.39	0.00	
12900.00	90.33	359.41	10043.72	2742.13	-1519.56	2941.37	0.00	
13000.00	90.33	359.41	10043.15	2842.12	-1520.59	3040.36	0.00	
13100.00	90.33	359.41	10042.57	2942.11	-1521.62	3139.34	0.00	
13200.00	90.33	359.41	10042.00	3042.11	-1522.65	3238.33	0.00	
13300.00	90.33	359.41	10041.43	3142.10	-1523.68	3337.32	0.00	
13400.00	90.33	359.41	10040.86	3242.09	-1524.71	3436.30	0.00	
13500.00	90.33	359.41	10040.29	3342.08	-1525.74	3535.29	0.00	
13600.00	90.33	359.41	10039.71	3442.08	-1526.78	3634.27	0.00	
13700.00	90.33	359.41	10039.14	3542.07	-1527.81	3733.26	0.00	
13800.00	90.33	359.41	10038.57	3642.06	-1528.84	3832.25	0.00	
13900.00	90.33	359.41	10038.00	3742.06	-1529.87	3931.23	0.00	
14000.00	90.33	359.41	10037.43	3842.05	-1530.90	4030.22	0.00	
14100.00	90.33	359.41	10037.43	3942.04	-1531.93	4129.20	0.00	
14200.00	90.33	359.41	10036.86	4042.04	-1531.95	4228.19	0.00	
14300.00	90.33	359.41	10036.28	4142.03	-1532.90	4327.18	0.00	
14400.00	90.33	359.41	10035.71	4242.02	-1535.99	4426.16	0.00	
14500.00	90.33	359.41	10033.14	4342.02	-1535.02	4525.15	0.00	
14600.00	90.33	359.41	10034.37	4442.01	-1530.03	4624.13	0.00	
14700.00	90.33	359.41	10034.00	4542.00	-1537.06	4723.12	0.00	
14800.00	90.33	359.41	10033.42	4641.99	-1539.14	4822.11	0.00	
14900.00	90.33	359.41	10032.83	4741.99	-1539.14	4921.09	0.00	
15000.00	90.33	359.41	10032.28	4841.98	-1540.17	5020.08	0.00	
15100.00	90.33	359.41	10031.71	4941.97	-1542.23	5119.06	0.00	
15200.00	90.33	359.41	10031.14	5041.97	-1543.26	5218.05	0.00	
15300.00	90.33	359.41	10030.37	5141.96	-1544.29	5317.04	0.00	
15400.00	90.33	359.41	10029.33	5241.95	-1545.32	5416.02	0.00	
15500.00	90.33	359.41	10029.42	5341.95	-1546.35	5515.01	0.00	
15600.00	90.33	359.41	10028.28	5441.94	-1547.38	5613.99	0.00	
15700.00	90.33	359.41	10028.28	5541.93	-1547.56	5712.98	0.00	
15800.00	90.33	359.41	10027.71	5641.93	-1549.44	5811.97	0.00	
15900.00	90.33			5741.92	-1549.44	5910.95		
		359.41	10026.56				0.00	
16000.00	90.33	359.41	10025.99	5841.91	-1551.50	6009.94	0.00	
16100.00	90.33	359.41	10025.42	5941.90	-1552.53	6108.92	0.00	
16200.00	90.33	359.41	10024.85	6041.90	-1553.56	6207.91	0.00	
16300.00	90.33	359.41	10024.27	6141.89	-1554.59	6306.90	0.00	
16400.00	90.33	359.41	10023.70	6241.88	-1555.62	6405.88	0.00	
16500.00	90.33	359.41	10023.13	6341.88	-1556.65	6504.87	0.00	
16600.00	90.33	359.41	10022.56	6441.87	-1557.68	6603.86	0.00	
16700.00	90.33	359.41	10021.99	6541.86	-1558.71	6702.84	0.00	
16800.00	90.33	359.41	10021.42	6641.86	-1559.74	6801.83	0.00	
16900.00	90.33	359.41	10020.84	6741.85	-1560.77	6900.81	0.00	
17000.00	90.33	359.41	10020.27	6841.84	-1561.80	6999.80	0.00	
17100.00	90.33	359.41	10019.70	6941.84	-1562.83	7098.79	0.00	
17200.00	90.33	359.41	10019.13	7041.83	-1563.86	7197.77	0.00	
17300.00	90.33	359.41	10018.56	7141.82	-1564.89	7296.76	0.00	
17400.00	90.33	359.41	10017.98	7241.81	-1565.92	7395.74	0.00	
17500.00	90.33	359.41	10017.41	7341.81	-1566.95	7494.73	0.00	
17600.00	90.33	359.41	10016.84	7441.80	-1567.98	7593.72	0.00	
17700.00	90.33	359.41	10016.27	7541.79	-1569.01	7692.70	0.00	
17800.00	90.33	359.41	10015.70	7641.79	-1570.05	7791.69	0.00	
17900.00	90.33	359.41	10015.13	7741.78	-1571.08	7890.67	0.00	
18000.00	90.33	359.41	10014.55	7841.77	-1572.11	7989.66	0.00	
18100.00	90.33	359.41	10013.98	7941.77	-1573.14	8088.65	0.00	
18200.00	90.33	359.41	10013.41	8041.76	-1574.17	8187.63	0.00	
18300.00	90.33	359.41	10012.84	8141.75	-1575.20	8286.62	0.00	
18400.00	90.33	359.41	10012.27	8241.74	-1576.23	8385.60	0.00	
18500.00	90.33	359.41	10011.69	8341.74	-1577.26	8484.59	0.00	
18600.00	90.33	359.41	10011.12	8441.73	-1578.29	8583.58	0.00	
18700.00	90.33	359.41	10010.55	8541.72	-1579.32	8682.56	0.00	
18800.00	90.33	359.41	10009.98	8641.72	-1580.35	8781.55	0.00	
18900.00	90.33	359.41	10009.41	8741.71	-1581.38	8880.53	0.00	
4000000	90.33	359.41	10008.83	8841.70	-1582.41	8979.52	0.00	
	90.33	359.41	10008.26	8941.70	-1583.44	9078.51	0.00	
19100.00					150447	0177.40	0.00	
19000.00 19100.00 19200.00	90.33	359.41	10007.69	9041.69	-1584.47	9177.49		
19100.00		359.41 359.41 359.41	10007.69 10007.12 10006.55	9041.69 9141.68 9241.68	-1585.50 -1586.53	9177.49 9276.48 9375.46	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)

ı	MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
195	500.00	90.33	359.41	10005.98	9341.67	-1587.56	9474.45	0.00	
196	500.00	90.33	359.41	10005.40	9441.66	-1588.59	9573.44	0.00	
197	700.00	90.33	359.41	10004.83	9541.65	-1589.62	9672.42	0.00	
198	300.00	90.33	359.41	10004.26	9641.65	-1590.65	9771.41	0.00	
199	900.00	90.33	359.41	10003.69	9741.64	-1591.68	9870.39	0.00	
200	00.00	90.33	359.41	10003.12	9841.63	-1592.71	9969.38	0.00	
201	100.00	90.33	359.41	10002.54	9941.63	-1593.74	10068.37	0.00	
202	200.00	90.33	359.41	10001.97	10041.62	-1594.77	10167.35	0.00	
203	300.00	90.33	359.41	10001.40	10141.61	-1595.80	10266.34	0.00	
204	100.00	90.33	359.41	10000.83	10241.61	-1596.83	10365.32	0.00	
204	162.59	90.33	359.41	10000.47	10304.19	-1597.48	10427.28	0.00	exit
205	500.00	90.33	359.41	10000.26	10341.60	-1597.86	10464.31	0.00	
205	542.59	90.33	359.41	10000.00	10384.18	-1598.25	10506.46	0.00	BHL

# 1. Geologic Formations

TVD of target	10000	Pilot hole depth	N/A
MD at TD:	20543	Deepest expected fresh water	

### Basin

/Mineral g/Target Hazards* one?
one?
I

<sup>\*</sup>H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program (Primary Design)

		Wt	Wt		Casing Interval		Casing Interval	
Hole Size	Csg. Size	(PPF)	Grade	Conn	From (MD)	To (MD)	From (TVD)	To (TVD)
14 3/4	10 3/4	45 1/2	J-55	ВТС	0	285	0	285
9 7/8	8 5/8	32	P110	Sprint FJ	0	9572	0	9572
7 7/8	5 1/2	17	P110	DWC/C-IS+	0	20543	0	10000

<sup>•</sup> All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	189	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	281	Surf	9	3.27	2nd State: Bradenhead Squeeze - Lead:Class C Cement + additives
1111.1	455	5663	13.2	1.44	Tail: Class H / C + additives
Duadvation	35	9072	9	3.27	Lead: Class H /C + additives
Production	1438	9674	13.2	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures.

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Intermediate 1 (Two Stage)	25%
Prod	10%

**4. Pressure Control Equipment (Three String Design)** 

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	T	ype	✓	Tested to:
			Anı	nular	X	50% of rated working pressure
Int 1	13-58"	5M	Blind	d Ram	X	
IIIt I	13-36	3101	Pipe	Ram		5M
			Doub	le Ram	X	JIVI
			Other*			
			Annular (5M)		X	50% of rated working pressure
Production	13-5/8"	5M	Blind Ram		X	
Production			Pipe Ram			5M
			Double Ram		X	JIVI
			Other*			
	Annular (5M)					
			Blind Ram			
			Pipe Ram			
			Double Ram			]
			Other*			
	r the use of a diverter on the surface casing. See attached for schematic.					
Y A variance is requested to	A variance is requested to run a 5 M annular on a 10M system					

5. Mud Program (Three String Design)

Section	Туре	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	8.5-9

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

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

6. Logging and Testing Procedures

Logging, C	Logging, Coring and Testing						
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the						
X	Completion Report and shumitted 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	Int. shoe to KOP	
	Density	Int. shoe to KOP	
X	CBL	Production casing	
X	Mud log	Intermediate shoe to TD	
	PEX		

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	4680
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.

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).
- 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 pa.
- 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. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
  - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments						
X	Directional Plan					
	Other, describe					

### Tater Tot 2-35 State Fed Com 332H

10 3/4		surface csg in a	14 3/4	inch hole.		Design	Factors			Surface		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	45.50		j 55	btc	55.16	15.69	0.69	285	28	1.15	29.63	12,968
"B"				btc				0				0
	v	u/8.4#/g mud, 30min Sfc Csg Tes	t psig: 1,500	Tail Cmt	does not	circ to sfc.	Totals:	285				12,968
omparison o	f Proposed	to Minimum Required Cen	nent Volumes									
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min Dis
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cp
14 3/4	0.5563	189	272	159	72	9.00	3115	5M				1.50
urst Frac Grac	dient(s) for S	egment(s) A, B = , b All > 0	1.70, OK.									
0.5/0		and in aids the	10.274			Decign	Factors			Int 1		
8 5/8		casing inside the	10 3/4	Caumlina	lalat	Design		Lamadh	D@-		- 0	\A/a i a k
Segment	#/ft	Grade	- 110	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	32.00		p 110	vam sprint fj	2.43	0.77	1.53	9,572	1	2.89	1.28	306,30
"B"								0				0
	v	u/8.4#/g mud, 30min Sfc Csg Tes					Totals:	9,572				306,30
				led to achieve a top of	0	ft from su		285				overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Di
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cp
9 7/8	0.1261	455	655	1210	-46	10.50	2475	3M				0.61
			5663				cum of cv	Σ CuFt				Σ%exce
D V Tool(s):			3663				sum of sx	Z Our t				
oy stage % :	it yld > 1.35	33	28				736	1574				30
oy stage % : lass 'C' tail cm			28			Design Fa	736			Prod 1		30
y stage % : class 'C' tail cm Tail cmt 5 1/2		casing inside the		Counling	Joint	Design Fa	736	1574	B@s	Prod 1	a-C	
Tail cmt 5 1/2 Segment	#/ft		28 8 5/8	Coupling	Joint 3 21	Collapse	736  ctors  Burst	1574	<b>B@s</b>	а-В	a-C 3 02	Weigh
Tail cmt 5 1/2 Segment "A"		casing inside the	28	Coupling dwc/c is+	Joint 3.21		736	1574 Length 20,543	<b>B@s</b> 2			Weigh 349,23
y stage %: lass 'C' tail cm  Tail cmt 5 1/2  Segment "A" "B"	#/ft	casing inside the	28 8 5/8			Collapse	736  ctors  Burst	Length 20,543		а-В		Weigh 349,23
Tail cmt 5 1/2 Segment "A" "C"	#/ft	casing inside the	28 8 5/8	dwc/c is+		Collapse	736  ctors  Burst	Length 20,543 0		а-В		Weigl 349,23 0 0
y stage %: lass 'C' tail cm  Tail cmt 5 1/2  Segment "A" "B"	#/ft 17.00	casing inside the Grade	8 5/8 p 110			Collapse	ctors Burst 2.28	Length 20,543 0 0		а-В		Weigl 349,23 0 0
Tail cmt 5 1/2 Segment "A" "B" "C"	#/ft 17.00	casing inside the Grade	85/8 p 110	dwc/c is+	3.21	Collapse 1.6	ctors Burst 2.28	Length 20,543 0 0 0 20,543		а-В	3.02	Weigh 349,23 0 0 0 0 349,23
Tail cmt 51/2 Segment "A" "B" "C" "D"	#/ft 17.00	casing inside the Grade 1/8.4#/g mud, 30min Sfc Csg Tes The cement	85/8 p 110  httpsig: 2,200 volume(s) are intend	dwc/c is+  0  led to achieve a top of	9072	Collapse 1.6	Ctors Burst 2.28  Totals:	Length 20,543 0 0 20,543 500		а-В	3.02	Weigh 349,23 0 0 0 349,23 overlap.
Tail cmt 5 1/2 Segment "A" "C" "D"	#/ft 17.00 v	casing inside the Grade v/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage	8 5/8 p 110  at psig: 2,200 volume(s) are intend 1 Stage	dwc/c is+  0  led to achieve a top of Min	3.21 9072 1 Stage	ft from su Drilling	ctors Burst 2.28  Totals: urface or a Calc	Length 20,543 0 0 20,543 500 Req'd		а-В	3.02	Weigh 349,23 0 0 0 349,23 overlap.
y stage %: lass 'C' tail cm  Tail cmt 5 1/2 Segment "A" "B" "C" "D"	#/ft 17.00	casing inside the Grade  //8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110  st psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt	dwc/c is+  0  led to achieve a top of Min Cu Ft	3.21 9072 1 Stage % Excess	ft from su Drilling Mud Wt	Ctors Burst 2.28  Totals:	Length 20,543 0 0 20,543 500		а-В	3.02	Weigh 349,23 0 0 0 349,23 overlap. Min Dis
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade v/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage	8 5/8 p 110  at psig: 2,200 volume(s) are intend 1 Stage	dwc/c is+  0  led to achieve a top of Min	3.21 9072 1 Stage	ft from su Drilling	ctors Burst 2.28  Totals: urface or a Calc	Length 20,543 0 0 20,543 500 Req'd		а-В	3.02	Weigh 349,23 0 0 0 349,23 overlap.
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  //8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110  st psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt	dwc/c is+  0  led to achieve a top of Min Cu Ft	3.21 9072 1 Stage % Excess	ft from su Drilling Mud Wt	ctors Burst 2.28  Totals: urface or a Calc	Length 20,543 0 0 20,543 500 Req'd		а-В	3.02	Weigl 349,23 0 0 349,23 overlap. Min Di: Hole-Cţ
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 Class 'C' tail cm	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  //8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110  st psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt	dwc/c is+  0  led to achieve a top of Min Cu Ft	3.21 9072 1 Stage % Excess	ft from su Drilling Mud Wt	ctors Burst 2.28  Totals: urface or a Calc	Length 20,543 0 0 20,543 500 Req'd	2	<b>a-B</b> 4.30	3.02	Weigh 349,23 0 0 0 349,23 overlap. Min Dis
5 1/2 Segment "A" "B" "C" "D" Hole Size 7 7/8	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  //8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110  st psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt	dwc/c is+  0  led to achieve a top of Min Cu Ft	3.21 9072 1 Stage % Excess	ft from su Drilling Mud Wt	Totals: urface or a Calc MASP	Length 20,543 0 0 20,543 500 Req'd	2	а-В	3.02	Weigh 349,23 0 0 0 349,23 overlap. Min Dis
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 alass 'C' tail cm #N/A 0 Segment	#/ft 17.00 Annular Volume 0.1733	casing inside the Grade  //8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx	8 5/8 p 110  tt psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185	dwc/c is+  0  led to achieve a top of  Min  Cu Ft  1989  Coupling	3.21 9072 1 Stage % Excess	ft from su Drilling Mud Wt 9.00	Totals: urface or a Calc MASP	Length 20,543 0 0 20,543 500 Req'd BOPE	2	<b>a-B</b> 4.30	3.02	Weigh 349,23 0 0 349,23 overlap. Min Dis Hole-Cp 0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 class 'C' tail cm	#/ft 17.00 Annular Volume 0.1733 ttyld > 1.35	casing inside the Grade  v/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1473	8 5/8 p 110  tt psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185	dwc/c is+  0  led to achieve a top of Min Cu Ft 1989  Coupling 0.00	9072 1 Stage % Excess 10	ft from su Drilling Mud Wt 9.00	Totals: Irface or a Calc MASP	Length 20,543 0 0 20,543 500 Req'd BOPE	2	a-B 4.30	3.02	Weigl 349,23 0 0 349,23 overlap. Min Di: Hole-Cp 0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 alass 'C' tail cm #N/A 0 Segment	#/ft 17.00 Annular Volume 0.1733 ttyld > 1.35	casing inside the Grade  v/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1473	8 5/8 p 110  tt psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185	dwc/c is+  0  led to achieve a top of  Min  Cu Ft  1989  Coupling	9072 1 Stage % Excess 10	ft from su Drilling Mud Wt 9.00	Totals: urface or a Calc MASP	Length 20,543 0 0 0 20,543 500 Req'd BOPE	2	a-B 4.30	3.02	Weigl 349,23 0 0 349,23 overlap. Min Di Hole-Cp 0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 lass 'C' tail cm	#/ft 17.00 Annular Volume 0.1733 ttyld > 1.35	casing inside the Grade  d/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1473  Grade	8 5/8 p 110  tt psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185	dwc/c is+  0  led to achieve a top of Min Cu Ft 1989  Coupling 0.00 0.00	9072 1 Stage % Excess 10	ft from su Drilling Mud Wt 9.00	Totals:  Totals:  MASP  Factors Burst  Totals:	Length 20,543 0 0 20,543 500 Req'd BOPE	2	a-B 4.30	3.02 ng> a-C	Weigi 349,2: 0 0 349,2: overlap. Min Di Hole-Ci 0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 lass 'C' tail cm #N/A 0 Segment "A" "B" """ "B" """ """ """ """ """ "" "" """ """ """ """ """ """ """ """ """ """ """ """ """ """ """ """	#/ft 17.00 Annular Volume 0.1733 ttyld > 1.35	casing inside the Grade  d/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1473  Grade	8 5/8 p 110  tt psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185	dwc/c is+  0  led to achieve a top of Min Cu Ft 1989  Coupling 0.00	9072 1 Stage % Excess 10	ft from su Drilling Mud Wt 9.00	Totals:  Totals:  MASP  Factors Burst  Totals:	Length 20,543 0 0 0 20,543 500 Req'd BOPE	2	a-B 4.30	3.02 ng> a-C	Weigl 349,2: 0 0 349,2: overlap. Min Di Hole-C <sub>I</sub> 0.91
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 class 'C' tail cm	#/ft 17.00 Annular Volume 0.1733 ttyld > 1.35	casing inside the Grade  d/8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1473  Grade	8 5/8 p 110  tt psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185	dwc/c is+  0  led to achieve a top of Min Cu Ft 1989  Coupling 0.00 0.00	9072 1 Stage % Excess 10	ft from su Drilling Mud Wt 9.00	Totals:  Totals:  MASP  Factors Burst  Totals:	Length 20,543 0 0 20,543 500 Req'd BOPE	2	a-B 4.30	3.02 ng> a-C	Weight 349,23
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 7 7/8 class 'C' tail cm #N/A 0 Segment "A" "B" """ """ """ """ """ """ """ """	#/ft 17.00 Annular Volume 0.1733 styld>1.35	casing inside the Grade  //8.4#/g mud, 30min Sfc Csg Tes The cement 1 Stage Cmt Sx 1473  Grade  //8.4#/g mud, 30min Sfc Csg Tes Cmt vol of	85/8 p 110  at psig: 2,200 volume(s) are intend 1 Stage CuFt Cmt 2185  51/2  at psig: calc below includes the stage of the	dwc/c is+  0  led to achieve a top of Min Cu Ft 1989  Coupling 0.00 0.00 his csg, TOC intended	9072 1 Stage % Excess 10 #N/A	ft from su Drilling Mud Wt 9.00  Design Collapse	Totals:  Totals:  Factors Burst  Totals:  Totals:	Length 20,543 0 0 20,543 500 Req'd BOPE  Length 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2	a-B 4.30	3.02 ng> a-C	Weigh 349,23 0 0 349,23 overlap. Min Dis Hole-Cp 0.91

Carlsbad Field Office 8/22/2023

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** Tater Tot 2-35 State Fed Com 332H

LEASE NO.: NMNM103604

**LOCATION:** | Section 2, T.24 S., R.29 E., NMPM

**COUNTY:** Eddy County, New Mexico

WELL NAME & NO.: Tater Tot 2-35 Fed Com 332H

**SURFACE HOLE FOOTAGE:** 200'/S & 2125'/E **BOTTOM HOLE FOOTAGE** 20'/N & 1690'/W

ATS/API ID: 3001549054 APD ID: 10400073916 Sundry ID: 2742379

# COA

H2S	No 🔻		
Potash	Secretary -		
Cave/Karst Potential	Medium 🔽		
Cave/Karst	☐ Critical		
Potential			
Variance	☐ None	☑ Flex Hose	C Other
Wellhead	Conventional and Multibov	/I <u> </u>	
Other	□4 String	Capitan Reef	□WIPP
		None	
Other	Pilot Hole	☐ Open Annulus	
	None 🔻		
Cementing	Contingency Squeeze	Echo-Meter	Primary Cement
	None	Int 1	Squeeze
			None -
Special	□ Water	<b>☑</b> COM	□ Unit
Requirements	Disposal/Injection		
Special	☐ Batch Sundry		
Requirements			
Special	▼ Break Testing	□ Offline	☐ Casing
Requirements		Cementing	Clearance
Variance			

#### A. HYDROGEN SULFIDE

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

### B. CASING

- 1. The 10-3/4 inch surface casing shall be set at approximately 285 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. The surface hole shall be 14 3/4 inch in diameter.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

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

### **Option 1 (Single Stage):**

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

### Option 2:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon at 5663' (455 sxs Class H/C+ additives).
- b. Second stage:
  - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. (Squeeze 281 sxs Class C)
     Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed to pump down 10-3/4" X 8-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 8-5/8" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

- ❖ In Medium 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 <u>Secretary Potash 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 5-1/2 inch production casing is:
  - Cement should tie-back at least 500 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 or potash.
     Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

### C. PRESSURE CONTROL

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

2.

### Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. Annular which shall be tested to 3500 (70% Working Pressure) psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8-5/8 inch intermediate casing shoe shall be 5000 (5M) psi.

# Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 10-3/4 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 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.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR part 3170 Subpart 3171
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

# **BOPE Break Testing Variance (Approved)**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# **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

    EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

    BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV

    (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 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per **43** CFR part **3170** Subpart **3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 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 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in 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 cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR part 3170 Subpart 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 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 43 CFR

# part 3170 Subpart 3172.

### C. DRILLING MUD

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

### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

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

LVO 8/22/2023

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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 275708

### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	275708
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

### CONDITIONS

Created By	Condition	Condition Date
ward.rikal	If a bradenhead squeeze is used during the cementing of the casing, then a CBL is required to verify the integrity of the cement behind the casing. All other COA's still apply.	10/18/2023