Received by UCD: 50/15/2023 10:47:47 AM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Reports
Well Name: TATER TOT 2-35 FED COM	Well Location: T24S / R29E / SEC 2 / SESE /	County or Parish/State:
Well Number: 334H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM103604	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001549053	Well Status: Approved Application for Permit to Drill	<b>Operator:</b> DEVON ENERGY PRODUCTION COMPANY LP

## **Notice of Intent**

Sundry ID: 2742449

Type of Submission: Notice of Intent

Date Sundry Submitted: 07/26/2023

Date proposed operation will begin: 07/24/2023

Type of Action: APD Change Time Sundry Submitted: 12:04

**Procedure Description:** Devon Energy Production Co., L.P. (Devon) respectfully requests to change the well name, SHL, 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 334H Proposed Well name: TATER TOT 2-35 FED COM 334H Permitted SHL: SESE 240 FSL, 825 FEL, 2-24S-29E Proposed SHL: SESE 240 FSL, 845 FEL, 2-24S-29E Proposed BHL: NESE 2620 FSL, 990 FEL, 35-23S-29E Proposed BHL: SWNE 1351 FNL, 1740 FEL, 35-23S-29E New leases have been added since approved APD and notification has been given.

**NOI Attachments** 

### **Procedure Description**

WA017356944\_TATER\_TOT\_2\_35\_FED\_COM\_334H\_WL\_R7\_20230828110025.pdf Tater\_Tot\_2\_35\_Fed\_Com\_334H\_20230724131550.pdf 10.750\_45.5\_J55\_SEAH\_20230724131542.pdf 5.5\_17lb\_P110RY\_DWC\_C\_20230724131541.pdf Tater\_Tot\_2\_35\_Fed\_Com\_334H\_Directional\_Plan\_07\_18\_23\_20230724131543.pdf 8.625in\_32lb\_P110EC\_SPRINT\_FJ\_09.16.2022\_20230724131543.pdf

break\_test\_variance\_BOP\_20230724131544.pdf

Ceived by OCD: 10/15/2023 10:47:47 AM Well Name: TATER TOT 2-35 FED COM	Well Location: T24S / R29E / SEC 2 / SESE /	County or Parish/State: Page 2 of
Well Number: 334H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM103604	Unit or CA Name:	Unit or CA Number:
<b>US Well Number:</b> 3001549053	Well Status: Approved Application for Permit to Drill	<b>Operator:</b> DEVON ENERGY PRODUCTION COMPANY LP
Conditions of Approva	al	
dditional		
2_24_2_2_20231010133130.PDF		
TATERT_1_20231010133130.PDF		
Operator		
crime for any person knowingly and will	prrect. Title 18 U.S.C. Section 1001 and Tit fully to make to any department or agency ions as to any matter within its jurisdiction. gulations requiring a	of the United States any false, fictitious
Operator Electronic Signature: SHAY	ÍDA OMOUMI Si	gned on: AUG 28, 2023 11:00 AM
Name: DEVON ENERGY PRODUCTIO	ON COMPANY LP	
Title: Regulatory Compliance Associate	ə 3	

 City: OKLAHOMA CITY
 State: OK

 Phone: (405) 235-3611

Street Address: 333 W SHERIDAN AVE

Email address: SHAYDA.OMOUMI@DVN.COM

## Field

Representative Name: Street Address: City: Phone:

Email address:

State:

**BLM Point of Contact** 

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls Zip:

BLM POC Title: Petroleum Engineer

BLM POC Email Address: cwalls@blm.gov

Disposition Date: 10/13/2023

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

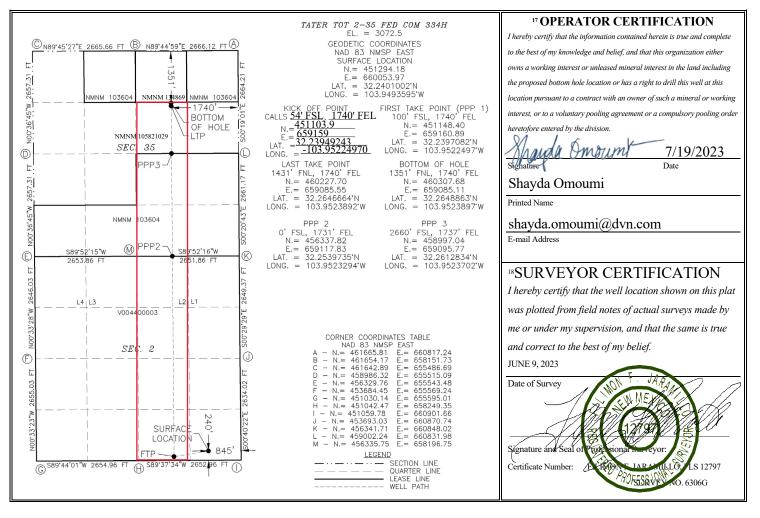
## State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

AMENDED REPORT

Page 3 of 31

		۱ ۱	VELL LC	DCATIO	N AND ACK	REAGE DEDIC	ATION PLA	1		
<sup>1</sup> A	API Number	r		<sup>2</sup> Pool Code	•	<sup>3</sup> Pool Name				
30-	015-490	)53		11520		CED	AR CANYON	;BONE	SPRIN	G
<sup>4</sup> Property C	Code		·		<sup>5</sup> Property	Name			6	Well Number
3348	01			TA	TER TOT 2-3	<b>35 FED COM</b>				334H
<sup>7</sup> OGRID N	No.				<sup>8</sup> Operator	Name				<sup>9</sup> Elevation
6137			DEV	ON ENE	RGY PRODUC	CTION COMPA	NY, L.P.			3072.5
<sup>10</sup> Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/We	est line	County
Р	2	24 S	29 E		240	SOUTH	845	EAS	ST	EDDY
			пF	Bottom H	lole 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/We	est line	County
G	35	23 S	29 E		1351	NORTH	1740	EAS	ST	EDDY
<sup>12</sup> Dedicated Acres	s <sup>13</sup> Joint	or Infill	<sup>4</sup> Consolidatio	n Code	<sup>15</sup> Order No.					
279.62										
<u>.</u>	1									

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.



### Received by OCD: 10/15/2023 10:47:47 AM

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API #

Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, L.P.	TATER TOT 2-35 FED COM	334H

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
0	2	24S	29E		54	SOUTH	1740	EAST	EDDY
Latitude				Longitude			NAD		
32.239	32.23949243			-103.95224970			83		

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
O	2	24S	29E		100	SOUTH	1740	EAST	EDDY
Latitu 32.2	<sup>de</sup> 39708	2			Longitude 103.9522	2497			NAD 83

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
G	35	23S	29E		1431	NORTH	1740	EAST	EDDY
Latitude				U	Longitude			NAD	
32.2646664					103.9523892			83	
32.2040004				105.9	103.9523692			03	

Y

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

Is this well an infill well?

Ν

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018



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

## **Dimensions (Nominal)**

Outside Diameter Wall Inside Diameter Drift	10.750 0.400 9.950 9.875	in. in. in. in.
Weight, T&C Weight, PE	45.500 44.260	lbs/ft lbs/ft
Internal Yield Pressure at Minimum Yield		
Collapse	2090	psi
Internal Yields Pressure		
PE	3580	psi
STC	3580	psi
BTC	3580	psi
Yield Strength, Pipe Body	715	1000 lbs
Joint Strength, STC		
STC	493	1000 lbs
BTC	796	1000 lbs

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.

Connection Type:	Size(O.D.):	Weight (Wall):	Grade:
DWC/C Casing	5-1/2 in	17.00 lb/ft (0.304 in)	P-110RY
	Material		
P-110RY	Grade		
110,000	Minimum Yield Strength (psi)		USA
125,000	Minimum Ultimate Strength (psi)	1	VAM-USA
			4424 W. Sam Houston Pkwy. Suite 150
	Pipe Dimensions		Houston, TX 77041
5.500	Nominal Pipe Body O.D. (in)		Phone: 713-479-3200 Fax: 713-479-3234
4.892	Nominal Pipe Body I.D.(in)		E-mail: <u>VAMUSAsales@vam-usa.com</u>
0.304	Nominal Wall Thickness (in)		
17.00	Nominal Weight (lbs/ft)		
16.89	Plain End Weight (lbs/ft)		
4.962	Nominal Pipe Body Area (sq in)		
	Pipe Body Performance Prope	erties	
546,000	Minimum Pipe Body Yield Stren		
7,480	Minimum Collapse Pressure (ps		
10,640	Minimum Internal Yield Pressure		
9,700	Hydrostatic Test Pressure (psi)		3
	Connection Dimensions		
6.050	Connection O.D. (in)		
4.892	Connection I.D. (in)		2
4.767	Connection Drift Diameter (in)		
4.13	Make-up Loss (in)		
4.962	Critical Area (sq in)		
100.0	Joint Efficiency (%)		
	Connection Performance Prop	perties	8
546,000	Joint Strength (lbs)		5
22,940	Reference String Length (ft) 1.4	4 Design Factor	
568,000	API Joint Strength (lbs)	- = 50.9.1 0.000	5
546,000	Compression Rating (lbs)		
7,480	API Collapse Pressure Rating (p	osi)	
10,640	API Internal Pressure Resistance		1
91.7	Maximum Uniaxial Bend Rating	u ,	
	Appoximated Field End Torqu	e 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).

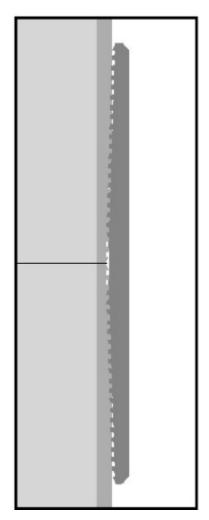
Connection specifications within the control of VAM-USA were correct as of the date printed. Specifications are subject to change without notice. Certain connection specifications are dependent on the mechanical properties of the pipe. Mechanical properties of mill proprietary pipe grades were obtained 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.

11/13/2013 3:17:42 PM



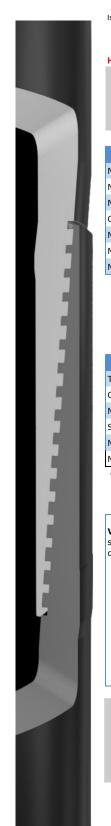
#### **DWC Connection Data Notes:**

- 1. DWC connections are available with a seal ring (SR) option.
- 2. 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.
- 7. 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.
- 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.
- 11. 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.

11/13/2013 3:17:42 PM



Issued on: 16 Sep. 2022 by Logan Van Gorp



#### **Connection Data Sheet**

HIGHER TORQUE VERSION

OD

8 5/8 in.

L				connection Data Sheet
Weight (lb/ft)	Wall Th.	Grade	Alt. Drift:	Connection
Nominal: 32.00	0.352 in.	P110EC	7.875 in.	VAM <sup>®</sup> SPRINT-FJ

Plain End: 31.13

PIPE PROPERTIE	S	
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

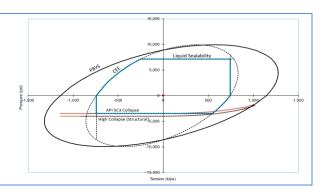
CONNECTION	PROPERTIES	
Connection Type	Semi-Premium Inte	gral Flush
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	5.978	sqin.
Tension Efficiency	65.0	% of pipe
Compression Efficiency	65.0	% of pipe
Internal Pressure Efficiency	80.0	% of pipe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

TORQUE VALUE	ES	
Min. Make-up torque	23,000	ft.lb
Opt. Make-up torque	25,500	ft.lb
Max. Make-up torque	28,000	ft.lb
Max. Torque with Sealability (MTS)	48,000	ft.lb

\* 87.5% RBW

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.



Do you need help on this product? - Remember no one knows VAM<sup>®</sup> like VAM<sup>®</sup>

canada@vamfieldservice.com usa@vamfieldservice.com mexico@vamfieldservice.com brazil@vamfieldservice.com

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



### 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.

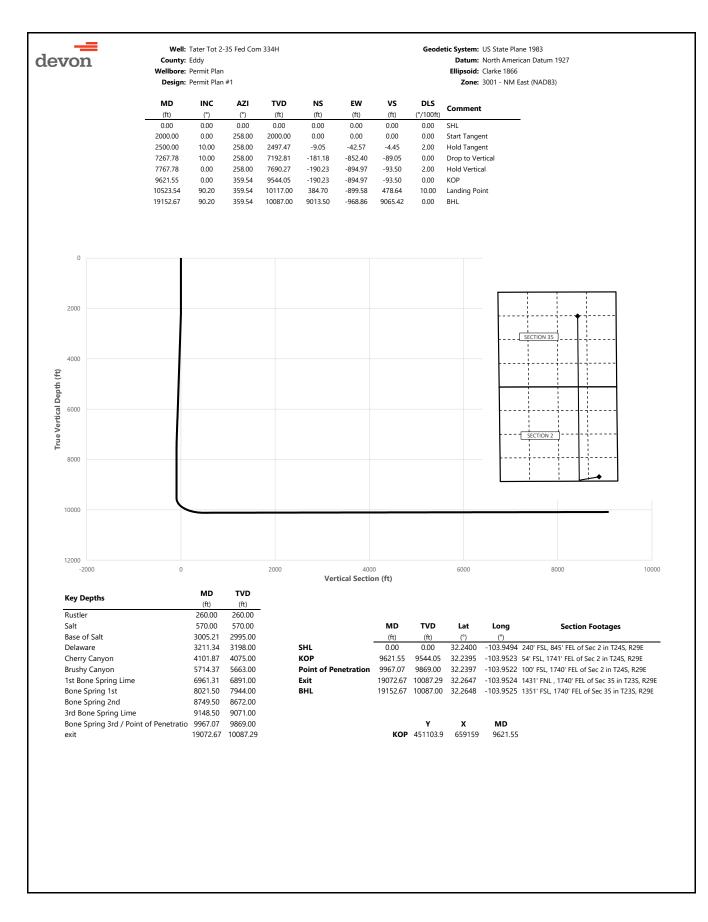
1. Well Control Response:

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





-									
. —			Tatas T-1 0	2E Fach Co	22411				Condition Statement LIC State Diana 1002
devon		Well: County:		-35 Fed Com	534H				Geodetic System: US State Plane 1983 Datum: North American Datum 1927
		-	Permit Plar	1					Ellipsoid: Clarke 1866
			Permit Plar						Zone: 3001 - NM East (NAD83)
	MD	INC	A 71		NC	E14/	VC		
	MD (ft)	INC (°)	<b>AZI</b> (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
	100.00	0.00	258.00	100.00	0.00	0.00	0.00	0.00	
	200.00	0.00	258.00	200.00	0.00	0.00	0.00	0.00	Duration
	260.00 300.00	0.00 0.00	258.00 258.00	260.00 300.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	Rustler
	400.00	0.00	258.00	400.00	0.00	0.00	0.00	0.00	
	500.00	0.00	258.00	500.00	0.00	0.00	0.00	0.00	
	570.00	0.00	258.00	570.00	0.00	0.00	0.00	0.00	Salt
	600.00	0.00	258.00	600.00	0.00	0.00	0.00	0.00	
	700.00 800.00	0.00 0.00	258.00 258.00	700.00 800.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	900.00 900.00	0.00	258.00	900.00	0.00	0.00	0.00	0.00	
	1000.00	0.00	258.00	1000.00	0.00	0.00	0.00	0.00	
	1100.00	0.00	258.00	1100.00	0.00	0.00	0.00	0.00	
	1200.00	0.00	258.00	1200.00	0.00	0.00	0.00	0.00	
	1300.00	0.00	258.00	1300.00	0.00	0.00	0.00	0.00	
	1400.00 1500.00	0.00 0.00	258.00 258.00	1400.00 1500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	1600.00	0.00	258.00	1600.00	0.00	0.00	0.00	0.00	
	1700.00	0.00	258.00	1700.00	0.00	0.00	0.00	0.00	
	1800.00	0.00	258.00	1800.00	0.00	0.00	0.00	0.00	
	1900.00	0.00	258.00	1900.00	0.00	0.00	0.00	0.00	
	2000.00	0.00	258.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
	2100.00 2200.00	2.00 4.00	258.00 258.00	2099.98 2199.84	-0.36 -1.45	-1.71 -6.83	-0.18 -0.71	2.00 2.00	
	2300.00	6.00	258.00	2299.45	-3.26	-15.35	-1.60	2.00	
	2400.00	8.00	258.00	2398.70	-5.80	-27.27	-2.85	2.00	
	2500.00	10.00	258.00	2497.47	-9.05	-42.57	-4.45	2.00	Hold Tangent
	2600.00	10.00	258.00	2595.95	-12.66	-59.56	-6.22	0.00	
	2700.00 2800.00	10.00 10.00	258.00 258.00	2694.43 2792.91	-16.27 -19.88	-76.54 -93.53	-8.00 -9.77	0.00 0.00	
	2900.00	10.00	258.00	2891.39	-23.49	-110.51	-11.54	0.00	
	3000.00	10.00	258.00	2989.87	-27.10	-127.50	-13.32	0.00	
	3005.21	10.00	258.00	2995.00	-27.29	-128.38	-13.41	0.00	Base of Salt
	3100.00	10.00	258.00	3088.35	-30.71	-144.48	-15.09	0.00	
	3200.00	10.00 10.00	258.00 258.00	3186.83 3198.00	-34.32 -34.73	-161.47	-16.87 -17.07	0.00 0.00	Deleuron
	3211.34 3300.00	10.00	258.00	3285.31	-34.73	-163.40 -178.45	-17.07	0.00	Delaware
	3400.00	10.00	258.00	3383.79	-41.54	-195.44	-20.42	0.00	
	3500.00	10.00	258.00	3482.27	-45.15	-212.42	-22.19	0.00	
	3600.00	10.00	258.00	3580.75	-48.76	-229.41	-23.97	0.00	
	3700.00 3800.00	10.00	258.00	3679.23	-52.37	-246.40	-25.74	0.00	
	3800.00 3900.00	10.00 10.00	258.00 258.00	3777.72 3876.20	-55.98 -59.59	-263.38 -280.37	-27.51 -29.29	0.00 0.00	
	4000.00	10.00	258.00	3974.68	-63.21	-297.35	-31.06	0.00	
	4100.00	10.00	258.00	4073.16	-66.82	-314.34	-32.84	0.00	
	4101.87	10.00	258.00	4075.00	-66.88	-314.65	-32.87	0.00	Cherry Canyon
	4200.00	10.00	258.00	4171.64	-70.43	-331.32	-34.61	0.00	
	4300.00 4400.00	10.00 10.00	258.00 258.00	4270.12 4368.60	-74.04 -77.65	-348.31 -365.29	-36.39 -38.16	0.00 0.00	
	4400.00 4500.00	10.00	258.00	4368.60 4467.08	-77.65 -81.26	-365.29 -382.28	-38.16	0.00	
	4600.00	10.00	258.00	4565.56	-84.87	-399.26	-41.71	0.00	
	4700.00	10.00	258.00	4664.04	-88.48	-416.25	-43.48	0.00	
	4800.00	10.00	258.00	4762.52	-92.09	-433.23	-45.26	0.00	
	4900.00 5000.00	10.00 10.00	258.00 258.00	4861.00 4959.48	-95.70 -99.31	-450.22 -467.20	-47.03 -48.81	0.00 0.00	
	5000.00 5100.00	10.00	258.00 258.00	4959.48 5057.97	-99.31 -102.92	-467.20 -484.19	-48.81 -50.58	0.00	
	5200.00	10.00	258.00	5156.45	-102.92	-404.19	-52.36	0.00	
	5300.00	10.00	258.00	5254.93	-110.14	-518.16	-54.13	0.00	
	5400.00	10.00	258.00	5353.41	-113.75	-535.15	-55.91	0.00	
	5500.00	10.00	258.00	5451.89	-117.36	-552.13	-57.68	0.00	
	5600.00 5700.00	10.00	258.00 258.00	5550.37 5648.85	-120.97 -124.58	-569.12 -586.10	-59.45 -61.23	0.00 0.00	
	5700.00 5714.37	10.00 10.00	258.00 258.00	5648.85 5663.00	-124.58 -125.10	-586.10 -588.54	-61.23 -61.48	0.00	Brushy Canyon
	5800.00	10.00	258.00	5747.33	-128.19	-603.09	-63.00	0.00	
	5900.00	10.00	258.00	5845.81	-131.80	-620.07	-64.78	0.00	
	6000.00	10.00	258.00	5944.29	-135.41	-637.06	-66.55	0.00	
	6100.00	10.00	258.00	6042.77	-139.02	-654.04	-68.33	0.00	
	6200.00 6300.00	10.00 10.00	258.00 258.00	6141.25 6239.73	-142.63 -146.24	-671.03 -688.01	-70.10 -71.88	0.00 0.00	
								5.50	

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		141-14	Tates 7 - + 0	25 Feel Com	22411				Conductio Systems LIC State Diana 1002
von		Well: County:		-35 Fed Com	334H				Geodetic System: US State Plane 1983 Datum: North American Datum 1927
			Permit Plan						Ellipsoid: Clarke 1866
			Permit Plan						Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
-	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
	6400.00 6500.00	10.00 10.00	258.00 258.00	6338.22 6436.70	-149.85 -153.47	-705.00 -721.98	-73.65 -75.42	0.00 0.00	
	6600.00	10.00	258.00	6535.18	-157.08	-738.97	-77.20	0.00	
	6700.00	10.00	258.00	6633.66	-160.69	-755.96	-78.97	0.00	
	6800.00	10.00	258.00	6732.14	-164.30	-772.94	-80.75	0.00	
	6900.00	10.00	258.00	6830.62	-167.91	-789.93	-82.52	0.00	
	6961.31 7000.00	10.00 10.00	258.00 258.00	6891.00	-170.12	-800.34	-83.61	0.00 0.00	1st Bone Spring Lime
	7000.00	10.00	258.00	6929.10 7027.58	-171.52 -175.13	-806.91 -823.90	-84.30 -86.07	0.00	
	7200.00	10.00	258.00	7126.06	-178.74	-840.88	-87.84	0.00	
	7267.78	10.00	258.00	7192.81	-181.18	-852.40	-89.05	0.00	Drop to Vertical
	7300.00	9.36	258.00	7224.57	-182.31	-857.69	-89.60	2.00	
	7400.00	7.36	258.00	7323.51	-185.33	-871.91	-91.08	2.00	
	7500.00 7600.00	5.36 3.36	258.00 258.00	7422.89 7522.59	-187.63 -189.21	-882.73 -890.16	-92.21 -92.99	2.00 2.00	
	7700.00	1.36	258.00	7622.50	-190.06	-894.18	-93.41	2.00	
	7767.78	0.00	258.00	7690.27	-190.23	-894.97	-93.50	2.00	Hold Vertical
	7800.00	0.00	359.54	7722.50	-190.23	-894.97	-93.49	0.00	
	7900.00	0.00	359.54	7822.50	-190.23	-894.97	-93.49	0.00	
	8000.00 8021.50	0.00 0.00	359.54 359.54	7922.50 7944.00	-190.23 -190.23	-894.97 -894.97	-93.49 -93.49	0.00 0.00	Bone Spring 1st
	8100.00	0.00	359.54	8022.50	-190.23	-894.97	-93.49	0.00	bone opining tot
	8200.00	0.00	359.54	8122.50	-190.23	-894.97	-93.49	0.00	
	8300.00	0.00	359.54	8222.50	-190.23	-894.97	-93.49	0.00	
	8400.00	0.00	359.54	8322.50	-190.23	-894.97	-93.49	0.00	
	8500.00 8600.00	0.00 0.00	359.54 359.54	8422.50 8522.50	-190.23 -190.23	-894.97 -894.97	-93.49 -93.49	0.00 0.00	
	8700.00	0.00	359.54	8622.50	-190.23	-894.97	-93.49	0.00	
	8749.50	0.00	359.54	8672.00	-190.23	-894.97	-93.49	0.00	Bone Spring 2nd
	8800.00	0.00	359.54	8722.50	-190.23	-894.97	-93.49	0.00	
	8900.00 9000.00	0.00 0.00	359.54 359.54	8822.50 8922.50	-190.23 -190.23	-894.97 -894.97	-93.49	0.00 0.00	
	9000.00 9100.00	0.00	359.54	9022.50 9022.50	-190.23	-894.97 -894.97	-93.49 -93.49	0.00	
	9148.50	0.00	359.54	9071.00	-190.23	-894.97	-93.49	0.00	3rd Bone Spring Lime
	9200.00	0.00	359.54	9122.50	-190.23	-894.97	-93.49	0.00	
	9300.00	0.00	359.54	9222.50	-190.23	-894.97	-93.49	0.00	
	9400.00 9500.00	0.00	359.54	9322.50	-190.23	-894.97	-93.49	0.00 0.00	
	9600.00 9600.00	0.00 0.00	359.54 359.54	9422.50 9522.50	-190.23 -190.23	-894.97 -894.97	-93.49 -93.49	0.00	
	9621.55	0.00	359.54	9544.05	-190.23	-894.97	-93.50	0.00	КОР
	9700.00	7.85	359.54	9622.25	-184.87	-895.01	-88.16	10.00	
	9800.00	17.85	359.54	9719.63	-162.67	-895.19	-66.06	10.00	
	9900.00	27.85	359.54	9811.67 9869.00	-123.89	-895.50	-27.48	10.00	Rono Spring 2rd / Point of Ponotration
	9967.07 10000.00	34.55 37.85	359.54 359.54	9869.00 9895.57	-89.17 -69.73	-895.78 -895.93	7.08 26.43	10.00 10.00	Bone Spring 3rd / Point of Penetration
	10100.00	47.85	359.54	9968.80	-1.81	-896.48	20.43 94.01	10.00	
	10200.00	57.85	359.54	10029.12	77.78	-897.12	173.22	10.00	
	10300.00	67.85	359.54	10074.70	166.65	-897.83	261.65	10.00	
	10400.00	77.85	359.54	10104.16	262.07	-898.60	356.61	10.00	
	10500.00 10523.54	87.85 90.20	359.54 359.54	10116.60 10117.00	361.17 384.70	-899.40 -899.58	455.22 478.64	10.00 10.00	Landing Point
	10600.00	90.20	359.54	10116.73	461.16	-900.20	554.73	0.00	viii
	10700.00	90.20	359.54	10116.39	561.15	-901.00	654.23	0.00	
	10800.00	90.20	359.54	10116.04	661.15	-901.80	753.74	0.00	
	10900.00	90.20	359.54	10115.69	761.15	-902.61	853.25	0.00	
	11000.00 11100.00	90.20 90.20	359.54 359.54	10115.34 10115.00	861.14 961.14	-903.41 -904.21	952.76 1052.27	0.00 0.00	
	11200.00	90.20 90.20	359.54 359.54	10115.00	961.14 1061.13	-904.21 -905.02	1052.27 1151.78	0.00	
	11300.00	90.20	359.54	10114.30	1161.13	-905.82	1251.29	0.00	
	11400.00	90.20	359.54	10113.95	1261.13	-906.62	1350.80	0.00	
	11500.00	90.20	359.54	10113.61	1361.12	-907.43	1450.31	0.00	
	11600.00	90.20	359.54	10113.26	1461.12	-908.23	1549.82	0.00	
	11700.00 11800.00	90.20 90.20	359.54 359.54	10112.91 10112.56	1561.12 1661.11	-909.03 -909.84	1649.33 1748.84	0.00 0.00	
	11800.00	90.20 90.20	359.54 359.54	10112.56	1761.11	-909.84 -910.64	1748.84 1848.35	0.00	
	12000.00	90.20	359.54	10111.87	1861.10	-911.44	1947.86	0.00	
	12100.00	90.20	359.54	10111.52	1961.10	-912.25	2047.36	0.00	
	12200.00	90.20	359.54	10111.17	2061.10	-913.05	2146.87	0.00	
	12300.00	90.20	359.54 359.54	10110.83	2161.09	-913.85 -914.66	2246.38	0.00 0.00	
	12400.00	90.20		10110.48	2261.09		2345.89		

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		Well:	Tater Tot 2	-35 Fed Com	334H				Geodetic System:	US State Plane 1983
1		County:								North American Datum 1927
			Permit Plar Permit Plar							Clarke 1866 3001 - NM East (NAD83)
		Design.	rennicria	1 # 1					Zone.	Stor - Nim Last (NADOS)
	MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment	
-	(ft) 12500.00	(°) 90.20	(°) 359.54	(ft) 10110.13	(ft) 2361.08	(ft) -915.46	(ft) 2445.40	(°/100ft) 0.00		
	12600.00	90.20	359.54	10109.78	2461.08	-916.26	2544.91	0.00		
	12700.00	90.20	359.54	10109.44	2561.08	-917.07	2644.42	0.00		
	12800.00	90.20	359.54	10109.09	2661.07	-917.87	2743.93	0.00		
	12900.00 13000.00	90.20 90.20	359.54 359.54	10108.74 10108.39	2761.07 2861.07	-918.67 -919.48	2843.44 2942.95	0.00 0.00		
	13100.00	90.20	359.54	10108.05	2961.06	-920.28	3042.46	0.00		
	13200.00	90.20	359.54	10107.70	3061.06	-921.08	3141.97	0.00		
	13300.00	90.20	359.54	10107.35	3161.05	-921.89	3241.48	0.00		
	13400.00 13500.00	90.20 90.20	359.54 359.54	10107.00 10106.66	3261.05 3361.05	-922.69 -923.49	3340.99 3440.49	0.00 0.00		
	13600.00	90.20	359.54	10106.31	3461.04	-924.30	3540.00	0.00		
	13700.00	90.20	359.54	10105.96	3561.04	-925.10	3639.51	0.00		
	13800.00	90.20	359.54	10105.61	3661.03 3761.03	-925.90	3739.02 3838.53	0.00		
	13900.00 14000.00	90.20 90.20	359.54 359.54	10105.27 10104.92	3761.03 3861.03	-926.71 -927.51	3838.53 3938.04	0.00 0.00		
	14100.00	90.20	359.54	10104.52	3961.02	-928.31	4037.55	0.00		
	14200.00	90.20	359.54	10104.22	4061.02	-929.12	4137.06	0.00		
	14300.00	90.20 90.20	359.54 359.54	10103.88	4161.02	-929.92 -930 73	4236.57	0.00		
	14400.00 14500.00	90.20 90.20	359.54 359.54	10103.53 10103.18	4261.01 4361.01	-930.73 -931.53	4336.08 4435.59	0.00 0.00		
	14600.00	90.20	359.54	10102.83	4461.00	-932.33	4535.10	0.00		
	14700.00	90.20	359.54	10102.49	4561.00	-933.14	4634.61	0.00		
	14800.00 14900.00	90.20	359.54 359.54	10102.14 10101.79	4661.00 4760.99	-933.94 -934.74	4734.12 4833.62	0.00 0.00		
	14900.00	90.20 90.20	359.54	10101.79	4860.99	-934.74 -935.55	4033.02	0.00		
	15100.00	90.20	359.54	10101.10	4960.99	-936.35	5032.64	0.00		
	15200.00	90.20	359.54	10100.75	5060.98	-937.15	5132.15	0.00		
	15300.00 15400.00	90.20 90.20	359.54 359.54	10100.40 10100.05	5160.98 5260.97	-937.96 -938.76	5231.66 5331.17	0.00 0.00		
	15500.00	90.20 90.20	359.54	10099.71	5260.97 5360.97	-938.76	5430.68	0.00		
	15600.00	90.20	359.54	10099.36	5460.97	-940.37	5530.19	0.00		
	15700.00	90.20	359.54	10099.01	5560.96	-941.17	5629.70	0.00		
	15800.00 15900.00	90.20 90.20	359.54 359.54	10098.66 10098.32	5660.96 5760.95	-941.97 -942.78	5729.21 5828.72	0.00 0.00		
	16000.00	90.20 90.20	359.54	10098.32	5760.95 5860.95	-942.78 -943.58	5928.23	0.00		
	16100.00	90.20	359.54	10097.62	5960.95	-944.38	6027.74	0.00		
	16200.00	90.20	359.54	10097.27	6060.94	-945.19	6127.25	0.00		
	16300.00	90.20 90.20	359.54	10096.93 10096.58	6160.94 6260.94	-945.99	6226.75	0.00		
	16400.00 16500.00	90.20 90.20	359.54 359.54	10096.58	6260.94 6360.93	-946.79 -947.60	6326.26 6425.77	0.00 0.00		
	16600.00	90.20	359.54	10095.88	6460.93	-948.40	6525.28	0.00		
	16700.00	90.20	359.54	10095.53	6560.92	-949.20	6624.79	0.00		
	16800.00 16900.00	90.20 90.20	359.54 359.54	10095.19 10094.84	6660.92 6760.92	-950.01 -950.81	6724.30 6823.81	0.00 0.00		
	17000.00	90.20 90.20	359.54 359.54	10094.84	6860.92	-950.81 -951.61	6923.81 6923.32	0.00		
	17100.00	90.20	359.54	10094.14	6960.91	-952.42	7022.83	0.00		
	17200.00	90.20	359.54	10093.80	7060.90	-953.22	7122.34	0.00		
	17300.00 17400.00	90.20 90.20	359.54 359.54	10093.45 10093.10	7160.90 7260.90	-954.02 -954.83	7221.85 7321.36	0.00 0.00		
	17400.00	90.20	359.54	10093.10	7260.90	-954.65 -955.63	7420.87	0.00		
	17600.00	90.20	359.54	10092.41	7460.89	-956.43	7520.38	0.00		
	17700.00	90.20	359.54	10092.06	7560.89	-957.24	7619.89	0.00		
	17800.00 17900.00	90.20 90.20	359.54 359.54	10091.71 10091.36	7660.88 7760.88	-958.04 -958.84	7719.39 7818.90	0.00 0.00		
	18000.00	90.20 90.20	359.54 359.54	10091.36	7860.87	-958.84 -959.65	7818.90 7918.41	0.00		
	18100.00	90.20	359.54	10090.67	7960.87	-960.45	8017.92	0.00		
	18200.00	90.20	359.54	10090.32	8060.87	-961.25	8117.43	0.00		
	18300.00 18400.00	90.20 90.20	359.54 359.54	10089.97 10089.63	8160.86 8260.86	-962.06 -962.86	8216.94 8316.45	0.00 0.00		
	18400.00	90.20 90.20	359.54 359.54	10089.63	8260.86 8360.85	-962.86 -963.66	8316.45 8415.96	0.00		
	18600.00	90.20	359.54	10088.93	8460.85	-964.47	8515.47	0.00		
	18700.00	90.20	359.54	10088.58	8560.85	-965.27	8614.98	0.00		
	18800.00 18900.00	90.20 90.20	359.54 359.54	10088.24 10087.89	8660.84 8760.84	-966.07 -966.88	8714.49 8814.00	0.00 0.00		
	19000.00	90.20 90.20	359.54 359.54	10087.89	8760.84 8860.84	-966.88 -967.68	8913.51	0.00		
	19072.67	90.20	359.54	10087.29	8933.50	-968.26	8985.82	0.00	exit	
	19100.00	90.20	359.54	10087.19	8960.83	-968.48	9013.02	0.00		
	19152.67	90.20	359.54	10087.00	9013.50	-968.86	9065.42	0.00	BHL	

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#### 1. Geologic Formations

TVD of target	10087	Pilot hole depth	N/A
MD at TD:	19153	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	260	Zone:	
Salt	570		
Base of Salt	2995		
Delaware	3198		
Cherry Canyon	4075		
Brushy Canyon	5663		
1st Bone Spring Lime	6891		
Bone Spring 1st	7944		
Bone Spring 2nd	8672		
3rd Bone Spring Lime	9071		
Bone Spring 3rd	9869		

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

#### 2. Casing Program (Primary Design)

		Wt				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	BTC	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	19153	0	10087

• 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	тос	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
Int I	455	5662	13.2	1.44	Tail: Class H / C + additives
Production	32	9072	9	3.27	Lead: Class H /C + additives
Froduction	1261	9622	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	Туре		4	Tested to:
			Anı	nular	Х	50% of rated working pressure
Int 1	13-58"	5M	Bline	Blind Ram		
Int I	15-50	5101	Pipe	Ram		5M
			Doub	le Ram	X	JIVI
			Other*			
			Annul	ar (5M)	Х	50% of rated working pressure
Production	13-5/8"	5M	Blind Ram		Х	
Floduction	13-3/8	5101	Pipe Ram			5M
			Doub	le Ram	Х	JIVI
			Other*			
			Annul	ar (5M)		
			Blind	d Ram		
			Pipe	Ram		1
			Doub	le Ram		
			Other*			
N A variance is requested for	the use of	a diverter of	n the surface	e casing. See	attached for	schematic.
Y A variance is requested to a	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.

#### 6. Logging and Testing Procedures

Logging, C	oring and Testing
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the
Х	Completion Rpeort 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.

Addition	al logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
Х	CBL	Production casing
Х	Mud log	Intermediate shoe to TD
	PEX	

#### 7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	4721
Abnormal temperature	No

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

Hydrogren S	Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations				
greater than	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.				
Ν	H2S is present				
Y	H2S plan attached.				

#### 8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
  - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
- $^{3}$  The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well 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 Fed Com 334H

10 3/4	su	rface csg in a	14 3/4	inch hole.		Design	Factors			Surface	2	
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	45.50		j 55	btc	55.16	15.69	0.69	285	28	1.15	29.63	12,968
"B"			,	btc				0				0
	w/8.4	/g mud, 30min Sfc Csg Test	psig: 1,500	Tail Cmt	does not	circ to sfc.	Totals:	285				12,968
omparison o		Ainimum Required Ceme										
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 Grad	dient(s) for Segn	nent(s) A, B = , b All > C	).70, OK.									
									-			
8 5/8	cas	ing inside the	10 3/4			Design	Factors			Int 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	32.00		p 110	vam sprint fj	2.43	0.77	1.52	9,572	1	2.86	1.28	306,304
"B"								0				0
	w/8.44	#/g mud, 30min Sfc Csg Test	psig:				Totals:	9,572	-			306,304
				ded to achieve a top of	0	ft from su	irface or a	285				overlap.
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
9 7/8	0.1261	455	655	1210	-46	10.50	2497	3M				0.61
V Tool(s):			5663				sum of sx	Σ CuFt				Σ%exces
by stage % :		33	28				736	1574				30
lass 'C' tail cm	nt yld > 1.35						730	1374				
Tail cmt	·	ing incide the				Dosign Fa				Drod 1		
Tail cmt 5 1/2	cas	ing inside the	8 5/8	Coupling	loint	Design Fa	ctors		R@c	Prod 1		Woigh
Tail cmt 5 1/2 Segment	cas #/ft	ing inside the Grade	8 5/8	Coupling	Joint	Collapse	<u>ctors</u> Burst	Length	B@s	a-B	a-C	•
Tail cmt 5 1/2 Segment "A"	cas	•		Coupling dwc/c is+	<b>Joint</b> 3.18		ctors	Length 19,153	<b>B@s</b> 2			325,60
Tail cmt 5 1/2 Segment	cas #/ft 17.00	Grade	<b>8 5/8</b> p 110			Collapse	<u>ctors</u> Burst 2.26	Length 19,153 0	<u> </u>	a-B	a-C	325,60 <b>0</b>
Tail cmt 5 1/2 Segment "A"	cas #/ft 17.00	Grade	<b>8 5/8</b> p 110 psig: 2,219	dwc/c is+	3.18	Collapse 1.59	ctors Burst 2.26 Totals:	Length 19,153 0 19,153	<u> </u>	a-B	a-C	325,60 <b>0</b> 325,60
Tail cmt 5 1/2 Segment "A" "B"	cas #/ft 17.00 w/8.44	Grade #/g mud, 30min Sfc Csg Test ; The cement v	8 5/8 p 110 psig: 2,219 volume(s) are inten	dwc/c is+ ded to achieve a top of	3.18 9072	Collapse 1.59 ft from su	ctors Burst 2.26 Totals: Inface or a	Length 19,153 0 19,153 500	<u> </u>	a-B	a-C	325,60 0 325,60 overlap.
Tail cmt 5 1/2 Segment "A" "B" Hole	cas #/ft 17.00 w/8.44 Annular	Grade t/g mud, 30min Sfc Csg Test ( The cement ) 1 Stage	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage	dwc/c is+ ded to achieve a top of Min	3.18 9072 1 Stage	Collapse 1.59 ft from su Drilling	ctors Burst 2.26 Totals: Inface or a Calc	Length 19,153 0 19,153 500 Req'd	<u> </u>	a-B	a-C	325,60 0 325,60 overlap. Min Dis
Tail cmt 5 1/2 Segment "A" "B" Hole Size	cas #/ft 17.00 w/8.44 Annular Volume	Grade t/g mud, 30min Sfc Csg Test ( The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt	dwc/c is+ ded to achieve a top of Min Cu Ft	3.18 9072 1 Stage % Excess	Collapse 1.59 ft from su Drilling Mud Wt	ctors Burst 2.26 Totals: Inface or a	Length 19,153 0 19,153 500	<u> </u>	a-B	a-C	325,60 0 325,60 overlap. Min Dis Hole-Cp
Tail cmt 5 1/2 Segment "A" "B" Hole Size 7 7/8	cas #/ft 17.00 w/8.4/ Annular Volume 0.1733	Grade t/g mud, 30min Sfc Csg Test ( The cement ) 1 Stage	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage	dwc/c is+ ded to achieve a top of Min	3.18 9072 1 Stage	Collapse 1.59 ft from su Drilling	ctors Burst 2.26 Totals: Inface or a Calc	Length 19,153 0 19,153 500 Req'd	<u> </u>	a-B	a-C	<b>0</b> 325,60
Tail cmt 51/2 Segment "A" "B" Hole Size 7 7/8 Class 'C' tail cm	cas #/ft 17.00 w/8.4/ Annular Volume 0.1733	Grade t/g mud, 30min Sfc Csg Test ( The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt	dwc/c is+ ded to achieve a top of Min Cu Ft	3.18 9072 1 Stage % Excess	Collapse 1.59 ft from su Drilling Mud Wt	ctors Burst 2.26 Totals: Inface or a Calc	Length 19,153 0 19,153 500 Req'd	<u> </u>	a-B	a-C	325,60 0 325,60 overlap. Min Dis Hole-Cp
5 1/2 Segment "A" "B" Hole Size	cas #/ft 17.00 w/8.4/ Annular Volume 0.1733	Grade t/g mud, 30min Sfc Csg Test ( The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920	dwc/c is+ ded to achieve a top of Min Cu Ft	3.18 9072 1 Stage % Excess	Collapse 1.59 ft from su Drilling Mud Wt	ctors Burst 2.26 Totals: Irface or a Calc MASP	Length 19,153 0 19,153 500 Req'd	2	a-B	<b>a-C</b> 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cpl
Tail cmt 5 1/2 Segment "A" "B" Hole Size 7 7/8 Class 'C' tail cm #N/A 0	cas #/ft 17.00 w/8.4/ Annular Volume 0.1733	Grade t/g mud, 30min Sfc Csg Test ( The cement 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt	dwc/c is+ ded to achieve a top of Min Cu Ft 1749	3.18 9072 1 Stage % Excess	Collapse 1.59 ft from su Drilling Mud Wt 9.00	ctors Burst 2.26 Totals: Irface or a Calc MASP	Length 19,153 0 19,153 500 Req'd BOPE	2	a-B 4.26	<b>a-C</b> 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cpl 0.91
Tail cmt 51/2 Segment "A" "B" Hole Size 7 7/8 Class 'C' tail cm #IV/A	cas #/ft 17.00 w/8.4# Annular Volume 0.1733 itt yld > 1.35	Grade //g mud, 30min Sfc Csg Test The cement v 1 Stage Cmt Sx 1293	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920	dwc/c is+ ded to achieve a top of Min Cu Ft	3.18 9072 1 Stage % Excess 10	Collapse 1.59 ft from su Drilling Mud Wt 9.00 Design	Ctors Burst 2.26 Totals: Inface or a Calc MASP	Length 19,153 0 19,153 500 Req'd	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cpl
Tail cmt 5 1/2 Segment "A" "B" Hole Size 7 7/8 class 'C' tail cm #N/A 0 Segment	cas #/ft 17.00 w/8.4# Annular Volume 0.1733 itt yld > 1.35	Grade //g mud, 30min Sfc Csg Test The cement v 1 Stage Cmt Sx 1293	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920	dwc/c is+ ded to achieve a top of Min Cu Ft 1749 Coupling 0.00	3.18 9072 1 Stage % Excess 10	Collapse 1.59 ft from su Drilling Mud Wt 9.00 Design	Ctors Burst 2.26 Totals: Inface or a Calc MASP	Length 19,153 0 19,153 500 Req'd BOPE	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cpl 0.91 Weigh 0
Tail cmt 5 1/2 Segment "A" "B" Hole Size 7 7/8 (Lass 'C' tail cm #N/A 0 Segment "A"	cas #/ft 17.00 w/8.44 Annular Volume 0.1733 nt yld > 1.35 #/ft	Grade //g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1293 Grade //g mud, 30min Sfc Csg Test	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920 5 1/2 psig:	dwc/c is+ ded to achieve a top of Min Cu Ft 1749 Coupling 0.00 0.00	3.18 9072 1 Stage % Excess 10 #N/A	Collapse 1.59 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse	ctors Burst 2.26 Totals: Inface or a Calc MASP Factors Burst	Length 19,153 0 19,153 500 Req'd BOPE	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cp 0.91 Weigh 0 0 0
Tail cmt 51/2 Segment "A" "B" Hole Size 7 7/8 lass 'C' tail cm #N/A 0 Segment "A" "B"	cas #/ft 17.00 w/8.4/ Annular Volume 0.1733 it yld > 1.35 #/ft w/8.4/	Grade #/g mud, 30min Sfc Csg Test The cement of 1 Stage Cmt Sx 1293 Grade #/g mud, 30min Sfc Csg Test   Cmt vol ci	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920 5 1/2 psig: alc below includes	dwc/c is+ ded to achieve a top of Min Cu Ft 1749 Coupling 0.00 0.00 this csg, TOC intended	3.18 9072 1 Stage % Excess 10 #N/A	Collapse 1.59 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse ft from su	ctors Burst 2.26 Totals: Inface or a Calc MASP Factors Burst	Length 19,153 0 19,153 500 Req'd BOPE Length 0 0 0 0 %N/A	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cp 0.91 Weigh 0 0 0 0 0 0 0 0 0
Tail cmt 51/2 Segment "A" "B" Hole Size 77/8 lass 'C' tail cm #N/A 0 Segment "A" "B" Hole	ccas #/ft 17.00 w/8.4 Annular Volume 0.1733 it yld > 1.35 #/ft w/8.4 Annular	Grade #/g mud, 30min Sfc Csg Test The cement of 1 Stage Cmt Sx 1293 Grade #/g mud, 30min Sfc Csg Test Cmt vol ci 1 Stage	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920 5 1/2 psig: alc below includes 1 Stage	dwc/c is+ ded to achieve a top of Min Cu Ft 1749 Coupling 0.00 0.00 this csg, TOC intended Min	3.18 9072 1 Stage % Excess 10 #N/A #N/A 1 Stage	Collapse 1.59 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse ft from su Drilling	ctors Burst 2.26 Totals: Inface or a Calc MASP Factors Burst	Length 19,153 0 19,153 500 Req'd BOPE Length 0 0 0 #N/A Req'd	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cp 0.91 Weigh 0 0 0 overlap. Min Dis
Tail cmt 5 1/2 Segment "A" "B" Hole Size 7 7/8 Iass 'C' tail cm #N/A 0 Segment "A" "B" Hole Size	cas #/ft 17.00 w/8.4/ Annular Volume 0.1733 it yld > 1.35 #/ft w/8.4/	Grade //g mud, 30min Sfc Csg Test The cement v 1 Stage Cmt Sx 1293 Grade //g mud, 30min Sfc Csg Test Cmt vol ci 1 Stage Cmt Sx	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920 5 1/2 psig: alc below includes 1 Stage CuFt Cmt	dwc/c is+ ded to achieve a top of Min Cu Ft 1749 Coupling 0.00 0.00 this csg, TOC intended Min Cu Ft	3.18 9072 1 Stage % Excess 10 #N/A #N/A 1 Stage % Excess	Collapse 1.59 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse ft from su	ctors Burst 2.26 Totals: Inface or a Calc MASP Factors Burst	Length 19,153 0 19,153 500 Req'd BOPE Length 0 0 0 0 %N/A	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cp 0.91 Weigh 0 0 0 overlap. Min Dis
Tail cmt 5 1/2 Segment "A" "B" Hole Size 7 7/8 Iass 'C' tail cm #N/A 0 Segment "A" "B" Hole	ccas #/ft 17.00 w/8.4 Annular Volume 0.1733 it yld > 1.35 #/ft w/8.4 Annular	Grade #/g mud, 30min Sfc Csg Test The cement of 1 Stage Cmt Sx 1293 Grade #/g mud, 30min Sfc Csg Test Cmt vol ci 1 Stage	8 5/8 p 110 psig: 2,219 volume(s) are inten 1 Stage CuFt Cmt 1920 5 1/2 psig: alc below includes 1 Stage	dwc/c is+ ded to achieve a top of Min Cu Ft 1749 Coupling 0.00 0.00 0.00 this csg, TOC intended Min Cu Ft 0	3.18 9072 1 Stage % Excess 10 #N/A #N/A 1 Stage	Collapse 1.59 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse ft from su Drilling	ctors Burst 2.26 Totals: Inface or a Calc MASP Factors Burst	Length 19,153 0 19,153 500 Req'd BOPE Length 0 0 0 #N/A Req'd	2	a-B 4.26	a-C 3.00	325,60 0 325,60 overlap. Min Dis Hole-Cp 0.91 Weigh 0 0 0

.

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

	Devon Energy Production Company LP
LEASE NO.:	NMNM103604
LOCATION:	Section 2, T.24 S., R.29 E., NMPM
<b>COUNTY:</b>	Eddy County, New Mexico

WELL NAME & NO.:	Tater Tot 2-35 Fed Com 334H
SURFACE HOLE FOOTAGE:	240'/S & 845'/E
<b>BOTTOM HOLE FOOTAGE</b>	1351'/N & 1740'/E
ATS/API ID:	3001549053
APD ID:	10400073977
Sundry ID:	2742449

## COA

H2S	No		
Potash	Secretary 🔽		
Cave/Karst	Medium 🔽		
Potential			
Cave/Karst	Critical		
Potential			
Variance	🖸 None	🖸 Flex Hose	C Other
Wellhead	Conventional and Multibow	/I ▼	
Other	□4 String	Capitan Reef	□ WIPP
		None 🝷	
Other	Pilot Hole	C Open Annulus	
	None 🔻		
Cementing	Contingency Squeeze	Echo-Meter	Primary Cement
	None 🔫	Int 1 🔫	Squeeze
			None 🚽
Special	□ Water	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 <u>24 hours in the Potash Area</u> 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. <u>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.</u>

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 <u>Medium 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 Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 500 feet into 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. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

## **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 (575-361-2822 Eddy 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)

## $\boxtimes$ 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 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 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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24 hours</u>. 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. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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
- 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 10/10/2023

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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

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	275710
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

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

CONDITIONS

Action 275710

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