

Well Name: PURRITO 18-19 FED COM	Well Location: T23S / R32E / SEC 18 / LOT 1 /	County or Parish/State:
Well Number: 621H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM18848	Unit or CA Name:	Unit or CA Number:
US Well Number: 3002551230	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2740151

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 07/10/2023	Time Sundry Submitted: 03:09
Date proposed operation will begin: 07/10/2023	

**Procedure Description:** Devon Energy Production Co., L.P. (Devon) respectfully requests to move SHL and BHL on the subject well. Please see attached revised C102, drill plan (break test variance included), and directional plan. Permitted SHL: LOT 1, 375 FNL, 560 FWL, 18-23S-32E Proposed SHL: LOT 1, 375 FNL, 605 FWL, 18-23S-32E Permitted BHL: LOT 4, 20 FSL, 330 FWL, 19-23S-32E Proposed BHL: LOT 4, 20 FSL, 990 FWL, 19-23S-32E No new leases have been added since approved APD.

NOI Attachments

Procedure Description

- WA018229898\_PURRITO\_18\_19\_FED\_COM\_621H\_WL\_R3\_20230710150918.pdf
- break\_test\_variance\_BOP\_20230710133733.pdf
- 5.5\_17lb\_P110\_BTC\_20230710133732.pdf
- 8.625in\_32lb\_P110EC\_SPRINT\_FJ\_09.16.2022\_20230710133732.pdf
- Purrito\_18\_19\_Fed\_Com\_621H\_20230710133733.pdf
- Purrito\_18\_19\_Fed\_Com\_621H\_Directional\_Plan\_07\_03\_23\_20230710133733.pdf
- 10.750\_40.50lb\_0.350\_J55\_USS\_20230710133732.PDF

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Conditions of Approval

Additional

18\_23\_32\_1\_Sundry\_ID\_2740151\_Purrito\_18\_19\_Fed\_Com\_621H\_20230718104321.pdf  
Purrito\_18\_19\_Fed\_Com\_621H\_Dr\_COA\_Sundry\_ID\_2740151\_20230718104321.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: JUL 10, 2023 03:09 PM
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 Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 07/28/2023
Signature: Chris Walls	

District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (575) 393-6161 Fax: (575) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos 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 Number 30-025-51230	<sup>2</sup> Pool Code 98248	<sup>3</sup> Pool Name WC-025 G-08 S243217P; UPR WOLFCAMP
<sup>4</sup> Property Code 327016	<sup>5</sup> Property Name PURRITO 18 19 FED COM	<sup>6</sup> Well Number 621H
<sup>7</sup> OGRID No. 6137	<sup>8</sup> Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	<sup>9</sup> Elevation 3534.6

<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
1	18	23 S	32 E		375	NORTH	605	WEST	LEA

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	19	23 S	32 E		20	SOUTH	990	WEST	LEA
<sup>12</sup> Dedicated Acres 689.36	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.						

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p><b>PURRITO 18 19 FED COM 621H</b> EL. = 3534.6</p> <p>GEODETTIC COORDINATES NAD 83 NMSP EAST SURFACE LOCATION N. = 477295.09 E. = 730511.64 LAT. = 32.3106717°N LONG. = 103.7210020°W</p> <p>KICK OFF POINT CALLS 64' FNL 990' FWL N. = 477616 E. = 730895 LAT. = 32.3114551°N LONG. = 103.7197558°W</p> <p>FIRST TAKE POINT (PPP 1) 100' FNL, 990' FWL N. = 477574.39 E. = 730895.05 LAT. = 32.3114334°N LONG. = 103.7197558°W</p> <p>LAST TAKE POINT 100' FSL, 990' FWL N. = 467220.42 E. = 730951.65 LAT. = 32.2829724°N LONG. = 103.7197644°W</p> <p>BOTTOM OF HOLE 20' FSL, 990' FWL N. = 467140.43 E. = 730952.10 LAT. = 32.2827525°N LONG. = 103.7197644°W</p> <p>CORNER COORDINATES TABLE NAD 83 NMSP EAST</p> <table border="1"> <tr><td>A</td><td>N. = 477695.30</td><td>E. = 732744.70</td></tr> <tr><td>B</td><td>N. = 477663.17</td><td>E. = 729904.77</td></tr> <tr><td>C</td><td>N. = 475023.97</td><td>E. = 729919.08</td></tr> <tr><td>D</td><td>N. = 472388.26</td><td>E. = 729934.39</td></tr> <tr><td>E</td><td>N. = 469748.82</td><td>E. = 729947.60</td></tr> <tr><td>F</td><td>N. = 467109.75</td><td>E. = 729962.47</td></tr> <tr><td>G</td><td>N. = 467140.54</td><td>E. = 732811.53</td></tr> <tr><td>H</td><td>N. = 472418.53</td><td>E. = 732778.17</td></tr> </table> <p>LEGEND --- SECTION LINE --- QUARTER LINE --- LEASE LINE --- WELL PATH</p>	A	N. = 477695.30	E. = 732744.70	B	N. = 477663.17	E. = 729904.77	C	N. = 475023.97	E. = 729919.08	D	N. = 472388.26	E. = 729934.39	E	N. = 469748.82	E. = 729947.60	F	N. = 467109.75	E. = 729962.47	G	N. = 467140.54	E. = 732811.53	H	N. = 472418.53	E. = 732778.17	<p><b><sup>17</sup> OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Shayda Omoumi</i> 6/28/2023 Signature Date</p> <p>Shayda Omoumi Printed Name</p> <p>shayda.omoumi@dvn.com E-mail Address</p> <p><b><sup>18</sup> SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JUNE 23, 2023 Date of Survey</p> <p><i>Lin F. Jaramillo</i> Signature and Seal of Professional Surveyor</p> <p>Certificate Number: 12797 Survey No. 8748B</p>
A	N. = 477695.30	E. = 732744.70																							
B	N. = 477663.17	E. = 729904.77																							
C	N. = 475023.97	E. = 729919.08																							
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F	N. = 467109.75	E. = 729962.47																							
G	N. = 467140.54	E. = 732811.53																							
H	N. = 472418.53	E. = 732778.17																							

Intent ☒ As Drilled ☐

API #		
Operator Name: DEVON ENERGY PRODUCTION COMPANY, L.P.	Property Name: PURRITO 18 19 FED COM	Well Number 621H

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	18	23S	32E	1	64	NORTH	990	WEST	LEA
Latitude 32.31145510					Longitude -103.71975580			NAD 83	

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	18	23S	32E	1	100	NORTH	990	WEST	LEA
Latitude 32.3114334					Longitude 103.7197558			NAD 83	

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
	19	23S	32E	4	100	SOUTH	990	WEST	LEA
Latitude 32.2829724					Longitude 103.7197644			NAD 83	

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

☐ N

Is this well an infill well?

☐ Y

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

API #		
Operator Name: DEVON ENERGY PRODUCTION COMPANY, L.P.	Property Name: PURRITO 18-19 FED COM	Well Number 832H

KZ 06/29/2018



# U. S. Steel Tubular Products

## 10.75 40.5/0.35 J55

1/18/2017 9:30:29 AM

MECHANICAL PROPERTIES	Pipe	BTC	LTC	STC	
Minimum Yield Strength	55,000	--	--	--	psi
Maximum Yield Strength	80,000	--	--	--	psi
Minimum Tensile Strength	75,000	--	--	--	psi
DIMENSIONS	Pipe	BTC	LTC	STC	
Outside Diameter	10.750	11.750	--	11.750	in.
Wall Thickness	0.350	--	--	--	in.
Inside Diameter	10.050	10.050	--	10.050	in.
Standard Drift	9.894	9.894	--	9.894	in.
Alternate Drift	--	--	--	--	in.
Nominal Linear Weight, T&C	40.50	--	--	--	lbs/ft
Plain End Weight	38.91	--	--	--	lbs/ft
PERFORMANCE	Pipe	BTC	LTC	STC	
Minimum Collapse Pressure	1,580	1,580	--	1,580	psi
Minimum Internal Yield Pressure	3,130	3,130	--	3,130	psi
Minimum Pipe Body Yield Strength	629,000	--	--	--	lbs
Joint Strength	--	700	--	420	lbs
Reference Length	--	11,522	--	6,915	ft
MAKE-UP DATA	Pipe	BTC	LTC	STC	
Make-Up Loss	--	4.81	--	3.50	in.
Minimum Make-Up Torque	--	--	--	3,150	ft-lbs
Maximum Make-Up Torque	--	--	--	5,250	ft-lbs

### Legal Notice

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U. S. Steel Tubular Products  
10343 Sam Houston Park Dr., #120  
Houston, TX 77064

1-877-893-9461  
connections@uss.com  
www.usstubular.com



# U. S. Steel Tubular Products

## 5.500" 17.00lbs/ft (0.304" Wall) P110

2/21/2019 8:12:22 AM

MECHANICAL PROPERTIES	Pipe	BTC	LTC	STC	
Minimum Yield Strength	110,000	--	--	--	psi
Maximum Yield Strength	140,000	--	--	--	psi
Minimum Tensile Strength	125,000	--	--	--	psi
DIMENSIONS	Pipe	BTC	LTC	STC	
Outside Diameter	5.500	6.050	6.050	--	in.
Wall Thickness	0.304	--	--	--	in.
Inside Diameter	4.892	4.892	4.892	--	in.
Standard Drift	4.767	4.767	4.767	--	in.
Alternate Drift	--	--	--	--	in.
Nominal Linear Weight, T&C	17.00	--	--	--	lbs/ft
Plain End Weight	16.89	--	--	--	lbs/ft
PERFORMANCE	Pipe	BTC	LTC	STC	
Minimum Collapse Pressure	7,480	7,480	7,480	--	psi
Minimum Internal Yield Pressure	10,640	10,640	10,640	--	psi
Minimum Pipe Body Yield Strength	546	--	--	--	1,000 lbs
Joint Strength	--	568	445	--	1,000 lbs
Reference Length	--	22,271	17,449	--	ft
MAKE-UP DATA	Pipe	BTC	LTC	STC	
Make-Up Loss	--	4.13	3.50	--	in.
Minimum Make-Up Torque	--	--	3,470	--	ft-lbs
Maximum Make-Up Torque	--	--	5,780	--	ft-lbs

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U. S. Steel Tubular Products  
460 Wildwood Forest Drive, Suite 300S  
Spring, Texas 77380

1-877-893-9461  
connections@uss.com  
www.usstubular.com

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 Plain End: 31.13	0.352 in.	P110EC	7.875 in.	VAM® SPRINT-FJ

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

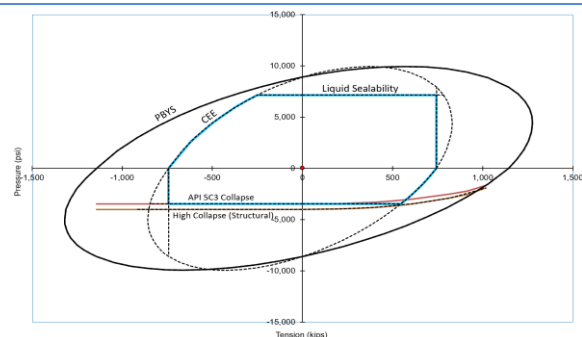
CONNECTION PROPERTIES		
Connection Type	Semi-Premium Integral Flush	
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	5.978	sqin.
Tension Efficiency	65.0	% of pipe
Compression Efficiency	65.0	% of pipe
Internal Pressure Efficiency	80.0	% of pipe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

\* 87.5% RBW

TORQUE VALUES		
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

**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® like VAM®

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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.

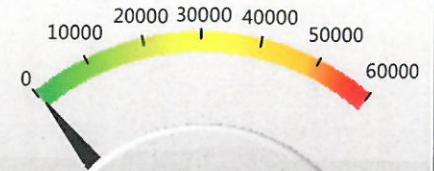
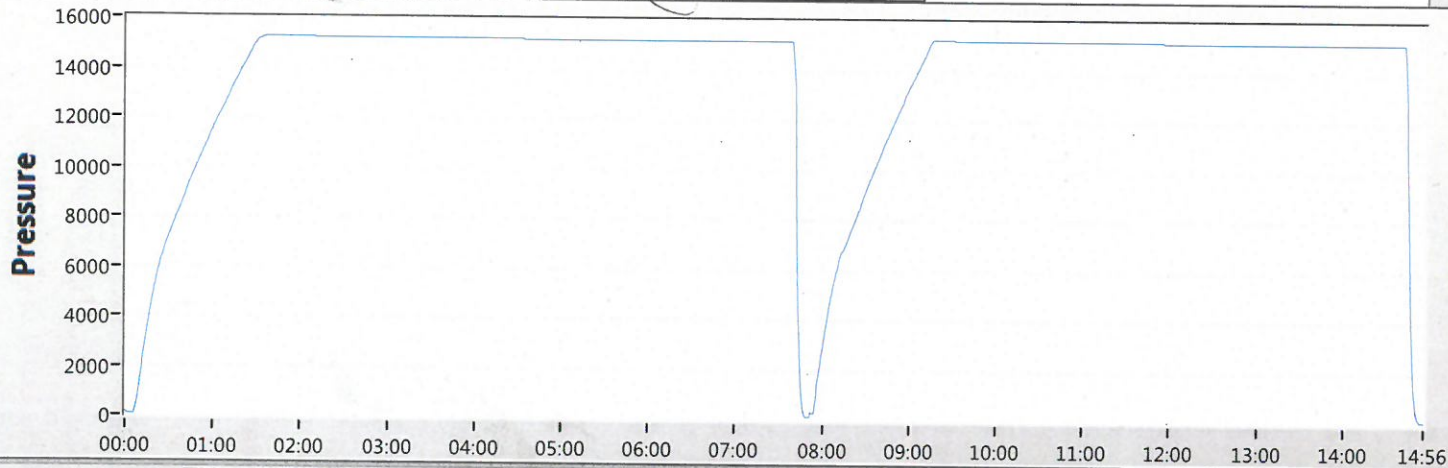
1. Well Control Response:
  1. Primary barrier remains fluid
  2. In the event of an influx due to being underbalanced and after a realized gain or flow, the order of closing BOPE is as follows:
    - a) Annular first
    - b) If annular were to not hold, Upper pipe rams second (which were tested on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



**Cactus**  
**Wellhead**2-9-17  
E Bell

80.7 °F

15:49



50

Date 02-09-17

Tested By E.BELL

Transducer bay2

Transducer Serial 181504

Calibration Date 9/6/15

	Job#	Part#	Serial#	Description	Test Pressure
1	TRJ0006341-0007	116966	TRJ6341-7-1	ADPT,DRLG,CW,MBU-3T,13-5/8 10M	15000
2					
3					
4					
5				TRANSDUCER CALIBRATION DUE 03/13/2017	
6					
7					
8					

TRANSDUCER CALIBRATION DUE 03/13/2017



Start



Stop



Zero



Config



Save



Print

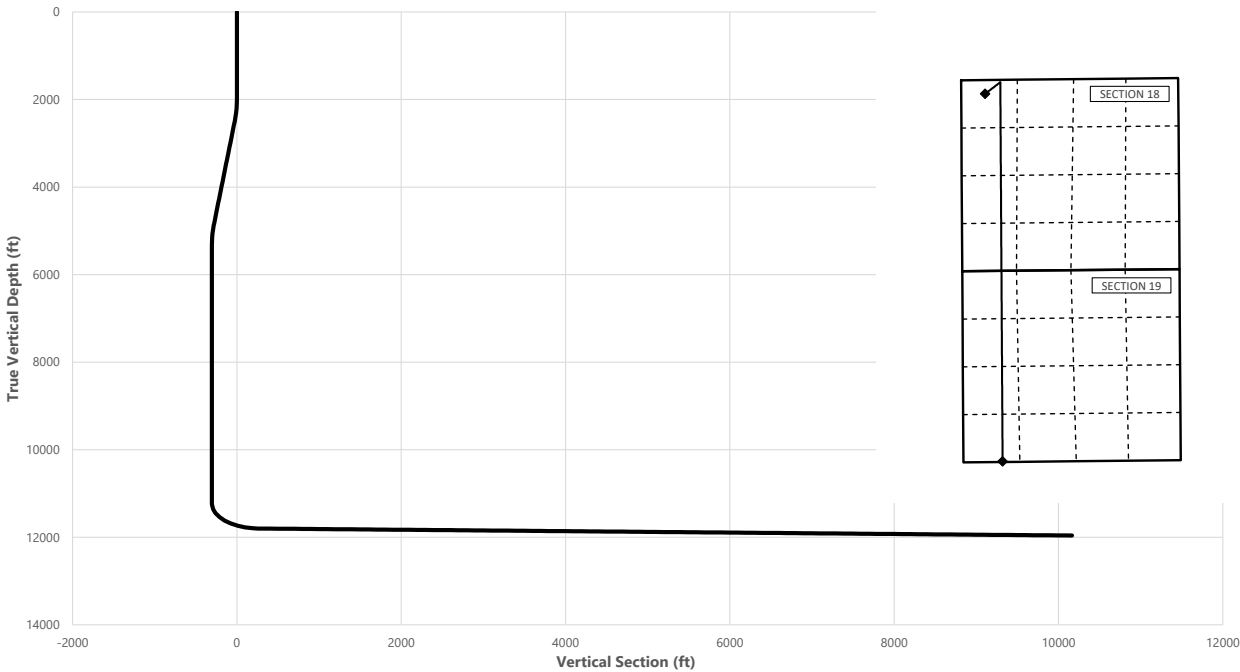
EXIT



Well: Purrito 18-19 Fed Com 621H  
County: Lea  
Wellbore: Permit Plan  
Design: Permit Plan #1

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

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
2000.00	0.00	50.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	50.00	2497.47	27.98	33.34	-26.50	1.00	Hold Tangent
4876.93	10.00	50.00	4838.28	293.29	349.52	-277.86	0.00	Drop to Vertical
5376.93	0.00	50.00	5335.75	321.26	382.87	-304.37	2.00	Hold Vertical
11268.30	0.00	179.69	11227.12	321.26	382.87	-304.37	0.00	KOP
12159.05	89.08	179.69	11800.00	-242.44	385.96	258.94	10.00	Landing Point
22072.71	89.08	179.69	11960.00	-10154.66	440.46	10164.21	0.00	BHL



Key Depths	MD	TVD
	(ft)	(ft)
Rustler	0.00	0.00
Salado	1236.00	1236.00
Top of Salt	2306.58	2306.00
Base of Salt	3247.90	3234.00
Lamar	4594.35	4560.00
Bell Canyon	4634.97	4600.00
Cherry Canyon	5545.18	5504.00
Brushy Canyon	6826.18	6785.00
Bone Spring Lime	8436.18	8395.00
1st Bone Spring Sand	9566.18	9525.00
Bone Spring 2nd	10200.18	10159.00
3rd Bone Spring Lime	10691.18	10650.00
Bone Spring 3rd	11443.92	11400.00
Wolfcamp / Point of Penetration	14637.47	11840.00
Exit	21992.71	11958.72

SHL  
KOP  
Point of Penetration  
Exit  
BHL

MD	TVD	Lat	Long	Section Footages
(ft)	(ft)	(°)	(°)	
0.00	0.00	32.3106	-103.7211	375' FNL, 605' FWL of Sec 18 in T23S, R32E
11268.30	11227.12	32.3115	-103.7198	64' FNL, 990' FWL of Sec 18 in T23S, R32E
14637.47	11840.00	32.3114	-103.7198	100' FNL, 990' FWL of Sec 18 in T23S, R32E
21992.71	11958.72	32.2830	-103.7198	100' FSL, 990' FWL of Sec 19 in T23S, R32E
22072.71	11960.00	32.2827	-103.7198	20' FSL, 990' FWL of Sec 19 in T23S, R32E

	X	Y	MD
KOP	730895	477616	11268.30

Purrito 18-19 Fed Com 621H



**Well:** Purrito 18-19 Fed Com 621H  
**County:** Lea  
**Wellbore:** Permit Plan  
**Design:** Permit Plan #1

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

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	50.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	50.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	50.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	50.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	50.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	50.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	50.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	50.00	800.00	0.00	0.00	0.00	0.00	
830.00	0.00	50.00	830.00	0.00	0.00	0.00	0.00	Rustler
900.00	0.00	50.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	50.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	50.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	50.00	1200.00	0.00	0.00	0.00	0.00	
1236.00	0.00	50.00	1236.00	0.00	0.00	0.00	0.00	Salado
1300.00	0.00	50.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	50.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	50.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	50.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	50.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	50.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	50.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	50.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	50.00	2099.98	1.12	1.34	-1.06	2.00	
2200.00	4.00	50.00	2199.84	4.49	5.35	-4.25	2.00	
2300.00	6.00	50.00	2299.45	10.09	12.02	-9.56	2.00	
2306.58	6.13	50.00	2306.00	10.53	12.55	-9.98	2.00	Top of Salt
2400.00	8.00	50.00	2398.70	17.92	21.36	-16.98	2.00	
2500.00	10.00	50.00	2497.47	27.98	33.34	-26.50	1.00	Hold Tangent
2600.00	10.00	50.00	2595.95	39.14	46.64	-37.08	0.00	
2700.00	10.00	50.00	2694.43	50.30	59.94	-47.65	0.00	
2800.00	10.00	50.00	2792.91	61.46	73.25	-58.23	0.00	
2900.00	10.00	50.00	2891.39	72.62	86.55	-68.80	0.00	
3000.00	10.00	50.00	2989.87	83.79	99.85	-79.38	0.00	
3100.00	10.00	50.00	3088.35	94.95	113.15	-89.95	0.00	
3200.00	10.00	50.00	3186.83	106.11	126.46	-100.53	0.00	
3247.90	10.00	50.00	3234.00	111.46	132.83	-105.59	0.00	Base of Salt
3300.00	10.00	50.00	3285.31	117.27	139.76	-111.10	0.00	
3400.00	10.00	50.00	3383.79	128.43	153.06	-121.68	0.00	
3500.00	10.00	50.00	3482.27	139.59	166.36	-132.25	0.00	
3600.00	10.00	50.00	3580.75	150.76	179.66	-142.83	0.00	
3700.00	10.00	50.00	3679.23	161.92	192.97	-153.40	0.00	
3800.00	10.00	50.00	3777.72	173.08	206.27	-163.98	0.00	
3900.00	10.00	50.00	3876.20	184.24	219.57	-174.55	0.00	
4000.00	10.00	50.00	3974.68	195.40	232.87	-185.13	0.00	
4100.00	10.00	50.00	4073.16	206.57	246.18	-195.70	0.00	
4200.00	10.00	50.00	4171.64	217.73	259.48	-206.28	0.00	
4300.00	10.00	50.00	4270.12	228.89	272.78	-216.85	0.00	
4400.00	10.00	50.00	4368.60	240.05	286.08	-227.43	0.00	
4500.00	10.00	50.00	4467.08	251.21	299.38	-238.00	0.00	
4594.35	10.00	50.00	4560.00	261.75	311.94	-247.98	0.00	Lamar
4600.00	10.00	50.00	4565.56	262.38	312.69	-248.58	0.00	
4634.97	10.00	50.00	4600.00	266.28	317.34	-252.28	0.00	Bell Canyon
4700.00	10.00	50.00	4664.04	273.54	325.99	-259.15	0.00	
4800.00	10.00	50.00	4762.52	284.70	339.29	-269.73	0.00	
4876.93	10.00	50.00	4838.28	293.29	349.52	-277.86	0.00	Drop to Vertical
4900.00	9.54	50.00	4861.02	295.80	352.52	-280.25	2.00	
5000.00	7.54	50.00	4959.91	305.35	363.90	-289.29	2.00	
5100.00	5.54	50.00	5059.25	312.66	372.62	-296.22	2.00	
5200.00	3.54	50.00	5158.93	317.75	378.68	-301.04	2.00	
5300.00	1.54	50.00	5258.83	320.60	382.07	-303.74	2.00	
5376.93	0.00	50.00	5335.75	321.26	382.87	-304.37	2.00	Hold Vertical
5400.00	0.00	179.69	5358.82	321.26	382.87	-304.37	0.00	
5500.00	0.00	179.69	5458.82	321.26	382.87	-304.37	0.00	
5545.18	0.00	179.69	5504.00	321.26	382.87	-304.37	0.00	Cherry Canyon
5600.00	0.00	179.69	5558.82	321.26	382.87	-304.37	0.00	
5700.00	0.00	179.69	5658.82	321.26	382.87	-304.37	0.00	
5800.00	0.00	179.69	5758.82	321.26	382.87	-304.37	0.00	
5900.00	0.00	179.69	5858.82	321.26	382.87	-304.37	0.00	
6000.00	0.00	179.69	5958.82	321.26	382.87	-304.37	0.00	

Purrito 18-19 Fed Com 621H



**Well:** Purrito 18-19 Fed Com 621H  
**County:** Lea  
**Wellbore:** Permit Plan  
**Design:** Permit Plan #1

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

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
6100.00	0.00	179.69	6058.82	321.26	382.87	-304.37	0.00	
6200.00	0.00	179.69	6158.82	321.26	382.87	-304.37	0.00	
6300.00	0.00	179.69	6258.82	321.26	382.87	-304.37	0.00	
6400.00	0.00	179.69	6358.82	321.26	382.87	-304.37	0.00	
6500.00	0.00	179.69	6458.82	321.26	382.87	-304.37	0.00	
6600.00	0.00	179.69	6558.82	321.26	382.87	-304.37	0.00	
6700.00	0.00	179.69	6658.82	321.26	382.87	-304.37	0.00	
6800.00	0.00	179.69	6758.82	321.26	382.87	-304.37	0.00	
6826.18	0.00	179.69	6785.00	321.26	382.87	-304.37	0.00	Brushy Canyon
6900.00	0.00	179.69	6858.82	321.26	382.87	-304.37	0.00	
7000.00	0.00	179.69	6958.82	321.26	382.87	-304.37	0.00	
7100.00	0.00	179.69	7058.82	321.26	382.87	-304.37	0.00	
7200.00	0.00	179.69	7158.82	321.26	382.87	-304.37	0.00	
7300.00	0.00	179.69	7258.82	321.26	382.87	-304.37	0.00	
7400.00	0.00	179.69	7358.82	321.26	382.87	-304.37	0.00	
7500.00	0.00	179.69	7458.82	321.26	382.87	-304.37	0.00	
7600.00	0.00	179.69	7558.82	321.26	382.87	-304.37	0.00	
7700.00	0.00	179.69	7658.82	321.26	382.87	-304.37	0.00	
7800.00	0.00	179.69	7758.82	321.26	382.87	-304.37	0.00	
7900.00	0.00	179.69	7858.82	321.26	382.87	-304.37	0.00	
8000.00	0.00	179.69	7958.82	321.26	382.87	-304.37	0.00	
8100.00	0.00	179.69	8058.82	321.26	382.87	-304.37	0.00	
8200.00	0.00	179.69	8158.82	321.26	382.87	-304.37	0.00	
8300.00	0.00	179.69	8258.82	321.26	382.87	-304.37	0.00	
8400.00	0.00	179.69	8358.82	321.26	382.87	-304.37	0.00	
8436.18	0.00	179.69	8395.00	321.26	382.87	-304.37	0.00	Bone Spring Lime
8500.00	0.00	179.69	8458.82	321.26	382.87	-304.37	0.00	
8600.00	0.00	179.69	8558.82	321.26	382.87	-304.37	0.00	
8700.00	0.00	179.69	8658.82	321.26	382.87	-304.37	0.00	
8800.00	0.00	179.69	8758.82	321.26	382.87	-304.37	0.00	
8900.00	0.00	179.69	8858.82	321.26	382.87	-304.37	0.00	
9000.00	0.00	179.69	8958.82	321.26	382.87	-304.37	0.00	
9100.00	0.00	179.69	9058.82	321.26	382.87	-304.37	0.00	
9200.00	0.00	179.69	9158.82	321.26	382.87	-304.37	0.00	
9300.00	0.00	179.69	9258.82	321.26	382.87	-304.37	0.00	
9400.00	0.00	179.69	9358.82	321.26	382.87	-304.37	0.00	
9500.00	0.00	179.69	9458.82	321.26	382.87	-304.37	0.00	
9566.18	0.00	179.69	9525.00	321.26	382.87	-304.37	0.00	1st Bone Spring Sand
9600.00	0.00	179.69	9558.82	321.26	382.87	-304.37	0.00	
9700.00	0.00	179.69	9658.82	321.26	382.87	-304.37	0.00	
9800.00	0.00	179.69	9758.82	321.26	382.87	-304.37	0.00	
9900.00	0.00	179.69	9858.82	321.26	382.87	-304.37	0.00	
10000.00	0.00	179.69	9958.82	321.26	382.87	-304.37	0.00	
10100.00	0.00	179.69	10058.82	321.26	382.87	-304.37	0.00	
10200.00	0.00	179.69	10158.82	321.26	382.87	-304.37	0.00	
10200.18	0.00	179.69	10159.00	321.26	382.87	-304.37	0.00	Bone Spring 2nd
10300.00	0.00	179.69	10258.82	321.26	382.87	-304.37	0.00	
10400.00	0.00	179.69	10358.82	321.26	382.87	-304.37	0.00	
10500.00	0.00	179.69	10458.82	321.26	382.87	-304.37	0.00	
10600.00	0.00	179.69	10558.82	321.26	382.87	-304.37	0.00	
10691.18	0.00	179.69	10650.00	321.26	382.87	-304.37	0.00	3rd Bone Spring Lime
10700.00	0.00	179.69	10658.82	321.26	382.87	-304.37	0.00	
10800.00	0.00	179.69	10758.82	321.26	382.87	-304.37	0.00	
10900.00	0.00	179.69	10858.82	321.26	382.87	-304.37	0.00	
11000.00	0.00	179.69	10958.82	321.26	382.87	-304.37	0.00	
11100.00	0.00	179.69	11058.82	321.26	382.87	-304.37	0.00	
11200.00	0.00	179.69	11158.82	321.26	382.87	-304.37	0.00	
11268.30	0.00	179.69	11227.12	321.26	382.87	-304.37	0.00	KOP
11300.00	3.17	179.69	11258.80	320.39	382.87	-303.49	10.00	
11400.00	13.17	179.69	11357.66	306.19	382.95	-289.31	10.00	
11443.92	17.56	179.69	11400.00	294.56	383.01	-277.68	10.00	Bone Spring 3rd
11500.00	23.17	179.69	11452.56	275.05	383.12	-258.19	10.00	
11600.00	33.17	179.69	11540.60	227.90	383.38	-211.07	10.00	
11700.00	43.17	179.69	11619.12	166.18	383.72	-149.39	10.00	
11800.00	53.17	179.69	11685.72	91.76	384.13	-75.03	10.00	
11900.00	63.17	179.69	11738.40	6.91	384.59	9.77	10.00	
12000.00	73.17	179.69	11775.53	-85.80	385.10	102.41	10.00	
12100.00	83.17	179.69	11796.01	-183.55	385.64	200.09	10.00	
12159.05	89.08	179.69	11800.00	-242.44	385.96	258.94	10.00	Landing Point
12200.00	89.08	179.69	11800.66	-283.39	386.19	299.86	0.00	

Purrito 18-19 Fed Com 621H



Well: Purrito 18-19 Fed Com 621H  
County: Lea  
Wellbore: Permit Plan  
Design: Permit Plan #1

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

MD (ft)	INC (")	AZI (")	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
12300.00	89.08	179.69	11802.27	-383.37	386.74	399.77	0.00	
12400.00	89.08	179.69	11803.89	-483.36	387.29	499.69	0.00	
12500.00	89.08	179.69	11805.50	-583.34	387.84	599.60	0.00	
12600.00	89.08	179.69	11807.12	-683.33	388.39	699.52	0.00	
12700.00	89.08	179.69	11808.73	-783.31	388.94	799.43	0.00	
12800.00	89.08	179.69	11810.35	-883.30	389.49	899.35	0.00	
12900.00	89.08	179.69	11811.96	-983.28	390.04	999.26	0.00	
13000.00	89.08	179.69	11813.57	-1083.27	390.59	1099.18	0.00	
13100.00	89.08	179.69	11815.19	-1183.25	391.14	1199.09	0.00	
13200.00	89.08	179.69	11816.80	-1283.24	391.69	1299.01	0.00	
13300.00	89.08	179.69	11818.42	-1383.23	392.24	1398.92	0.00	
13400.00	89.08	179.69	11820.03	-1483.21	392.79	1498.84	0.00	
13500.00	89.08	179.69	11821.64	-1583.20	393.34	1598.75	0.00	
13600.00	89.08	179.69	11823.26	-1683.18	393.89	1698.67	0.00	
13700.00	89.08	179.69	11824.87	-1783.17	394.44	1798.59	0.00	
13800.00	89.08	179.69	11826.49	-1883.15	394.99	1898.50	0.00	
13900.00	89.08	179.69	11828.10	-1983.14	395.54	1998.42	0.00	
14000.00	89.08	179.69	11829.71	-2083.12	396.09	2098.33	0.00	
14100.00	89.08	179.69	11831.33	-2183.11	396.64	2198.25	0.00	
14200.00	89.08	179.69	11832.94	-2283.09	397.19	2298.16	0.00	
14300.00	89.08	179.69	11834.56	-2383.08	397.74	2398.08	0.00	
14400.00	89.08	179.69	11836.17	-2483.07	398.29	2497.99	0.00	
14500.00	89.08	179.69	11837.78	-2583.05	398.84	2597.91	0.00	
14600.00	89.08	179.69	11839.40	-2683.04	399.39	2697.82	0.00	
14637.47	89.08	179.69	11840.00	-2720.51	399.59	2735.27	0.00	Wolfcamp / Point
14700.00	89.08	179.69	11841.01	-2783.02	399.94	2797.74	0.00	
14800.00	89.08	179.69	11842.63	-2883.01	400.49	2897.65	0.00	
14900.00	89.08	179.69	11844.24	-2982.99	401.04	2997.57	0.00	
15000.00	89.08	179.69	11845.85	-3082.98	401.59	3097.49	0.00	
15100.00	89.08	179.69	11847.47	-3182.96	402.14	3197.40	0.00	
15200.00	89.08	179.69	11849.08	-3282.95	402.69	3297.32	0.00	
15300.00	89.08	179.69	11850.70	-3382.93	403.24	3397.23	0.00	
15400.00	89.08	179.69	11852.31	-3482.92	403.79	3497.15	0.00	
15500.00	89.08	179.69	11853.92	-3582.91	404.34	3597.06	0.00	
15600.00	89.08	179.69	11855.54	-3682.89	404.89	3696.98	0.00	
15700.00	89.08	179.69	11857.15	-3782.88	405.44	3796.89	0.00	
15800.00	89.08	179.69	11858.77	-3882.86	405.99	3896.81	0.00	
15900.00	89.08	179.69	11860.38	-3982.85	406.54	3996.72	0.00	
16000.00	89.08	179.69	11862.00	-4082.83	407.09	4096.64	0.00	
16100.00	89.08	179.69	11863.61	-4182.82	407.64	4196.55	0.00	
16200.00	89.08	179.69	11865.22	-4282.80	408.19	4296.47	0.00	
16300.00	89.08	179.69	11866.84	-4382.79	408.74	4396.38	0.00	
16400.00	89.08	179.69	11868.45	-4482.77	409.29	4496.30	0.00	
16500.00	89.08	179.69	11870.07	-4582.76	409.84	4596.22	0.00	
16600.00	89.08	179.69	11871.68	-4682.75	410.39	4696.13	0.00	
16700.00	89.08	179.69	11873.29	-4782.73	410.94	4796.05	0.00	
16800.00	89.08	179.69	11874.91	-4882.72	411.49	4895.96	0.00	
16900.00	89.08	179.69	11876.52	-4982.70	412.04	4995.88	0.00	
17000.00	89.08	179.69	11878.14	-5082.69	412.59	5095.79	0.00	
17100.00	89.08	179.69	11879.75	-5182.67	413.14	5195.71	0.00	
17200.00	89.08	179.69	11881.36	-5282.66	413.69	5295.62	0.00	
17300.00	89.08	179.69	11882.98	-5382.64	414.24	5395.54	0.00	
17400.00	89.08	179.69	11884.59	-5482.63	414.79	5495.45	0.00	
17500.00	89.08	179.69	11886.21	-5582.61	415.34	5595.37	0.00	
17600.00	89.08	179.69	11887.82	-5682.60	415.89	5695.28	0.00	
17700.00	89.08	179.69	11889.43	-5782.59	416.44	5795.20	0.00	
17800.00	89.08	179.69	11891.05	-5882.57	416.99	5895.12	0.00	
17900.00	89.08	179.69	11892.66	-5982.56	417.54	5995.03	0.00	
18000.00	89.08	179.69	11894.28	-6082.54	418.09	6094.95	0.00	
18100.00	89.08	179.69	11895.89	-6182.53	418.64	6194.86	0.00	
18200.00	89.08	179.69	11897.50	-6282.51	419.19	6294.78	0.00	
18300.00	89.08	179.69	11899.12	-6382.50	419.74	6394.69	0.00	
18400.00	89.08	179.69	11900.73	-6482.48	420.29	6494.61	0.00	
18500.00	89.08	179.69	11902.35	-6582.47	420.84	6594.52	0.00	
18600.00	89.08	179.69	11903.96	-6682.45	421.39	6694.44	0.00	
18700.00	89.08	179.69	11905.58	-6782.44	421.94	6794.35	0.00	
18800.00	89.08	179.69	11907.19	-6882.43	422.49	6894.27	0.00	
18900.00	89.08	179.69	11908.80	-6982.41	423.04	6994.18	0.00	
19000.00	89.08	179.69	11910.42	-7082.40	423.59	7094.10	0.00	
19100.00	89.08	179.69	11912.03	-7182.38	424.14	7194.02	0.00	

Purrito 18-19 Fed Com 621H



**Well:** Purrito 18-19 Fed Com 621H  
**County:** Lea  
**Wellbore:** Permit Plan  
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**Geodetic System:** US State Plane 1983  
**Datum:** North American Datum 1927  
**Ellipsoid:** Clarke 1866  
**Zone:** 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
19200.00	89.08	179.69	11913.65	-7282.37	424.69	7293.93	0.00	
19300.00	89.08	179.69	11915.26	-7382.35	425.24	7393.85	0.00	
19400.00	89.08	179.69	11916.87	-7482.34	425.79	7493.76	0.00	
19500.00	89.08	179.69	11918.49	-7582.32	426.34	7593.68	0.00	
19600.00	89.08	179.69	11920.10	-7682.31	426.89	7693.59	0.00	
19700.00	89.08	179.69	11921.72	-7782.29	427.44	7793.51	0.00	
19800.00	89.08	179.69	11923.33	-7882.28	427.99	7893.42	0.00	
19900.00	89.08	179.69	11924.94	-7982.27	428.54	7993.34	0.00	
20000.00	89.08	179.69	11926.56	-8082.25	429.09	8093.25	0.00	
20100.00	89.08	179.69	11928.17	-8182.24	429.64	8193.17	0.00	
20200.00	89.08	179.69	11929.79	-8282.22	430.19	8293.08	0.00	
20300.00	89.08	179.69	11931.40	-8382.21	430.74	8393.00	0.00	
20400.00	89.08	179.69	11933.01	-8482.19	431.29	8492.91	0.00	
20500.00	89.08	179.69	11934.63	-8582.18	431.84	8592.83	0.00	
20600.00	89.08	179.69	11936.24	-8682.16	432.39	8692.75	0.00	
20700.00	89.08	179.69	11937.86	-8782.15	432.94	8792.66	0.00	
20800.00	89.08	179.69	11939.47	-8882.14	433.49	8892.58	0.00	
20900.00	89.08	179.69	11941.08	-8982.12	434.04	8992.49	0.00	
21000.00	89.08	179.69	11942.70	-9082.11	434.59	9092.41	0.00	
21100.00	89.08	179.69	11944.31	-9182.09	435.14	9192.32	0.00	
21200.00	89.08	179.69	11945.93	-9282.08	435.69	9292.24	0.00	
21300.00	89.08	179.69	11947.54	-9382.06	436.24	9392.15	0.00	
21400.00	89.08	179.69	11949.15	-9482.05	436.79	9492.07	0.00	
21500.00	89.08	179.69	11950.77	-9582.03	437.34	9591.98	0.00	
21600.00	89.08	179.69	11952.38	-9682.02	437.89	9691.90	0.00	
21700.00	89.08	179.69	11954.00	-9782.00	438.44	9791.81	0.00	
21800.00	89.08	179.69	11955.61	-9881.99	438.99	9891.73	0.00	
21900.00	89.08	179.69	11957.23	-9981.98	439.54	9991.65	0.00	
21992.71	89.08	179.69	11958.72	-10074.67	440.05	10084.28	0.00	Exit
22000.00	89.08	179.69	11958.84	-10081.96	440.09	10091.56	0.00	
22072.71	89.08	179.69	11960.00	-10154.66	440.46	10164.21	0.00	BHL

## Purrito 18-19 Fed Com 621H

**1. Geologic Formations**

TVD of target	11959	Pilot hole depth	N/A
MD at TD:	22073	Deepest expected fresh water	

**Basin**

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	830		
Salado	1236		
Top of Salt	2306		
Base of Salt	3234		
Lamar	4560		
Bell Canyon	4600		
Cherry Canyon	5504		
Brushy Canyon	6785		
Bone Spring Lime	8395		
1st Bone Spring Sand	9525		
Bone Spring 2nd	10159		
3rd Bone Spring Lime	10650		
Bone Spring 3rd	11400		
Wolfcamp	11840		

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



## Purrito 18-19 Fed Com 621H

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

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
14 3/4	10 3/4	40 1/2	J-55	BTC	0	855	0	855
9 7/8	8 5/8	32	P110	Sprint FJ	0	11400	0	11400
7 7/8	5 1/2	17	P110	BTC	0	22073	0	11959

• 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	# Skis	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	519	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	332	Surf	9	3.27	Lead: Class C Cement + additives
	535	6785	13.2	1.44	Tail: Class H / C + additives
Int 1 Bradenhead Squeeze	471	Surf	13.2	1.44	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	332	Surf	9	3.27	Lead: Class C Cement + additives
	535	6785	13.2	1.44	Tail: Class H / C + additives
Production	117	9268	9	3.27	Lead: Class H / C + additives
	1430	11268	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%



Purrito 18-19 Fed Com 621H

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

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

**5. Mud Program (Three String Design)**

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

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

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

**6. Logging and Testing Procedures**

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

Additional logs planned		Interval
	Resistivity	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	Specify what type and where?
BH pressure at deepest TVD	6529
Abnormal temperature	No

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

Hydrogen Sulfide (H<sub>2</sub>S) monitors will be installed prior to drilling out the surface shoe. If H<sub>2</sub>S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.

N	H <sub>2</sub> S is present
Y	H <sub>2</sub> S 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. At that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
  - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

<u>X</u>	Directional Plan
<u>          </u>	Other, describe

18-23-32-1 Sundry ID 2740151 Purrito 18-19 Fed Com 621H.xlsm

## Purrito 18-19 Fed Com 621H

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	Weight		
"A"	40.50		j 55	btc	15.98	3.48	0.5	972	7	0.84	6.57	39,366		
"B"				btc				0				0		
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				Tail Cmt	does not	circ to sfc.	Totals:	972				39,366		
Comparison of Proposed to Minimum Required Cement Volumes														
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist		
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg		
14 3/4	0.5563	519	747	541	38	9.00	3710	5M				1.50		
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.														
Site plot (pipe racks 3 or 4) as per O.D. 1.10/D 3.1 not found														

8 5/8		casing inside the		10 3/4		Design Factors				Int 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	32.00		p 110	vam sprint fj	2.04	0.64	1.1	11,400	1	1.84	1.08	364,800
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 30						Totals:			11,400			364,800
The cement volume(s) are intended to achieve a top of 0						ft from surface or a			972			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
9 7/8	0.1261	867	1856	1456	27	10.50	3892	5M				0.61
r D V Tool(s):			6785				sum of sx	Σ CuFt				Σ%excess
t by stage % :			219	15			1567	2864				97
Class 'C' tail cmt yld > 1.35												

Tail cmt												
5 1/2		casing inside the		8 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	17.00		p 110	btc	2.68	1.15	1.63	22,073	2	2.73	1.92	375,241
"B"								0				0
"C"								0				0
"D"				0				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,631												
						Totals:			22,073			375,241
The cement volume(s) are intended to achieve a top of						11200	ft from surface or a		200			overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
7 7/8	0.1733	1547	2442	1885	30	10.50						0.91
Class 'C' tail cmt yld > 1.35												

#N/A											
0			5 1/2	Design Factors				<Choose Casing>			
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@S	a-B	a-C	Weight
"A"			0.00				0				0
"B"			0.00				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	0			0
Cmt vol calc below includes this csg, TOC intended				#N/A	ft from surface or a		#N/A				overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A						
#N/A Capitan Reef est top XXXX.											

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Devon Energy Production Company LP</b>
<b>LEASE NO.:</b>	<b>NMNM18848</b>
<b>LOCATION:</b>	Section 18, T.23 S., R.32 E., NMPM
<b>COUNTY:</b>	Lea County, New Mexico

<b>WELL NAME &amp; NO.:</b>	<b>Purrito 18-19 Fed Com 621H</b>
<b>SURFACE HOLE FOOTAGE:</b>	375'/N & 605'/W
<b>BOTTOM HOLE FOOTAGE:</b>	20'/S & 990'/W
<b>ATS/API ID:</b>	<b>3002551230</b>
<b>APD ID:</b>	<b>10400069204</b>
<b>Sundry ID:</b>	N/a

COA

H2S	Yes <input type="button" value="v"/>		
Potash	None <input type="button" value="v"/>		
Cave/Karst Potential	Low <input type="button" value="v"/>		
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Other
Wellhead	Conventional and Multibowl <input type="button" value="v"/>		
Other	<input type="checkbox"/> 4 String	Capitan Reef <input type="button" value="v"/> None <input type="button" value="v"/>	<input type="checkbox"/> WIPP
Other	Pilot Hole <input type="button" value="v"/> None <input type="button" value="v"/>	<input type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze <input type="button" value="v"/> None <input type="button" value="v"/>	Echo-Meter <input type="button" value="v"/> Int 1 <input type="button" value="v"/>	Primary Cement Squeeze <input type="button" value="v"/> None <input type="button" value="v"/>
Special Requirements	<input type="checkbox"/> Water Disposal/Injection	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry		
Special Requirements Variance	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Offline Cementing	<input type="checkbox"/> Casing Clearance

## A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated 500 feet prior to drilling into the **Sand Dunes/Triste Draw, Wildcat, and Bone Springs** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

## B. CASING

1. The **10-3/4 inch** surface casing shall be set at approximately **972 feet** (a minimum of **25 feet (Lea 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 **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The minimum required fill of cement behind the **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. **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.**

**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 6785' (867 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 700 sxs Class C)**

**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.**

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

**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 5000 (5M) 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 Onshore Order 1 and 2.
- 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**

- 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 **14-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](mailto: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 integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in 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 7/18/2023

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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 248810

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 248810
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	WHEN DETERMINING TOP OF CEMENT MUST NOT RUN Echo-meter. CEMENT TOP MUST BE DETERMINED BY CBL.	8/7/2023
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A CBL MUST BE RUN ON THAT STRING OF CASING.	8/7/2023