cerved by OCD: 3/5/2023 8:19:51 PM		Sundry Print Repor
J.S. Department of the Interior SUREAU OF LAND MANAGEMENT		04/05/2023
Well Name: COTTON DRAW UNIT	Well Location: T24S / R31E / SEC 26 / NWNE /	County or Parish/State:
Well Number: 526H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM012121	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001548563	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Notice of Intent

Sundry ID: 2720828

Type of Submission: Notice of Intent

Date Sundry Submitted: 03/20/2023

Date proposed operation will begin: 03/14/2023

Type of Action: APD Change Time Sundry Submitted: 03:19

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to move the SHL on the subject well and a break test variance. Please see attached C102, Drill plan, directional plan. From currently permitted: 280 FNL & 1350 FEL, 26-24S-31E, NWNE To proposed: 305 FNL & 1355 FEL, 26-24S-31E, NWNE

NOI Attachments

Procedure Description

break_test_variance_BOP_20230320151714.pdf

COTTON_DRAW_UNIT_525H_Directional_Plan_03_07_23_20230320151645.pdf

SITE_MAP_20230320151644.pdf

WA017979182_COTTON_DRAW_UNIT_525H_WL_SIGNED_20230320151646.pdf

COTTON_DRAW_UNIT_525H_20230320151645.pdf

Accep	ted for record – NMOCD	
JRH	-05/03/2023	

Received by OCD: 4/5/2023 8:19:51 PM Well Name: COTTON DRAW UNIT	Well Location: T24S / R31E / SEC 26 / NWNE /	County or Parish/State: Page 2 of 29
Well Number: 526H	Type of Well: OIL WELL	Allottee or Tribe Name:
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US Well Number: 3001548563	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

Conditions of Approval

Additional

26_24__2_20230321143754.PDF

Cotton_Draw_Unit_526H_Dr_COA_Sundry_ID_2720828_20230321143754.pdf

State: OK

State:

Operator

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

Operator Electronic Signature: CHELSEY GREEN

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Professional

Street Address: 333 West Sheridan Avenue

City: Oklahoma City

Phone: (405) 228-8595

Email address: Chelsey.Green@dvn.com

Field

Representative Name: Street Address: City: Phone: Email address:

BLM Point of Contact

BLM POC Name: Bobby Ballard BLM POC Phone: 5752342235 Disposition: Approved Signature: Chris Walls Signed on: MAR 14, 2023 01:08 PM

BLM POC Title: Natural Resource Specialist BLM POC Email Address: bballard@blm.gov Disposition Date: 04/04/2023

Zip:

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

AMENDED REPORT

			WELL LO	DCATIO	N AND ACR	EAGE DEDIC	CATION PLA	ΔT	
¹ A	PI Number	•		² Pool Code	e		³ Pool Na	me	
30-015-4	8561			96641		PADUCA	BONE SPRING	ì	
⁴ Property C	ode		-		⁵ Property				⁶ Well Number
					COTTON DR	AW UNIT			525H
⁷ OGRID N	lo.				⁸ Operator	Name			⁹ Elevation
6137			DEV	ON ENE	RGY PRODUC	CTION COMPA	NY, L.P.		3542.6
¹⁰ Surface Location									
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West	line County
В	26	24 S	31 E		305	NORTH	1385	EAS	Г EDDY
			11	Bottom H	Iole Location	If Different Fr	om Surface		
UL or lot no.	Section	Townshi	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West	line County
0	2	25 S	31 E	20 SOUTH 1500 EAST					Г EDDY
Dedicated Acres	¹³ Joint	or Infill	¹⁴ Consolidatio	n Code	¹⁵ Order No.				
957.75									

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.

			17 ODED & TOD CEDTIELC & TION
NW CORNER SEC. 26	N89'40'18"E 2642.54 FT N89'40'12"E 2643.19 FT	NE CORNER SEC. 26	¹⁷ OPERATOR CERTIFICATION
LAT. = 32.1955957N L LONG. = 103.7571294'W	LAT = 32.1955982N LONG = 103.7485887W SURFACE	LAT. = 32.1956002'N LONG. = 103.7400460'W	I hereby certify that the information contained herein is true and complete
NMSP EAST (FT) N = 435369.65	NMSP EAST (FT) LOCATION 4	NMSP EAST (FT) N = 435400.01	to the best of my knowledge and belief, and that this organization either
E = 719574.94	$E = \frac{722216.85}{100} - \frac{100}{100} - 10$	E = 724859.42	owns a working interest or unleased mineral interest in the land including
w/4 CORNER SEC. 26	COTTON DRAW UNIT 525H ELEV. = 3542.6'	E/4 CORNER SEC. 26	the proposed bottom hole location or has a right to drill this well at this
LAT. = 32.1883253'N LONG. = 103.7571206'W	LAT. = 32,1947610'N (NAD83) LONG. = 103.7445220'W <u>SEC. 26</u>	LÁT. = 32.1883435'N LONG. = 103.7400437'W	location pursuant to a contract with an owner of such a mineral or working
NMSP EAST (FT) N = 432724.75 E = 719591.82 4	NMSP EASI (FI) N = 435087.09	NMSP EAST (FT) N = 432760.11	interest, or to a voluntary pooling agreement or a compulsory pooling order
E = /19391.62 g	E = 723476.52 <i>FIRST TAKE POINT</i>	E = 724874.69	heretofore entered by the division.
	× 100' FNL, 1500' FEL ■ LAT. = 32.1953243'N		Maria
SECTION CORNER	LONG. = 103.7448938'W	SECTION CORNER	
LAT. = 32.1810717/N 2 LONG. = 103.7571150/W	2 N89'38'50"E N89'37'57"E	LAT. = 32.1810840'N LONG. = 103.7400384'W	Signature Date
NMSP EAST (FT) N = 430086.02 b	2642.25 FT QUARTER CORNER 2642.20 FT LAT. = 32.1810772'N	NMSP EAST (FT) N = 430119.23	CHELSEY GREEN
E = 719607.70	2 LONG. = 105.7485766'W NMSP EAST (FT)	E = 724890.89	Printed Name
	$k = \frac{N}{E} = \frac{430102.29}{-722249.33} + $		
100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100			chelsey.green@dvn.com E-mail Address
W/4 CORNER SEC. 35 LAT. = 32.1738064'N LONG. = 103.7571418'W		 E/4 CORNER SEC. 35 LAT. = 32.1738251'N LONG. = 103.7400606'W 	E-mail Address
NMSP EAST (FT) N = 427442.95 L	SEC -35	NMSP EAST (FT) N = 427478.46	
E = 719613.55			¹⁸ SURVEYOR CERTIFICATION
	Section Corner + -		I hereby certify that the well location shown on this plat
SECTION CORNER	LAT. = 32 1667033'N LONG. = 103.7486249'W NMSP EAST (FT)	SECTION CORNER	was plotted from field notes of actual surveys made by
LAT. = 32.1667474'N LONG. = 103.7571765'W NMSP EAST (FT)	Ž N = 424873.17 N89'57'44"W E = 722262.79 N89'58'33"W	5 LAT. = 32.1666605'N LONG. = 103.7400854'W	me or under my supervision, and that the same is true
N = 424874.92 E = 719616.56	L4 2646.B1 FT L3 L2 2643.D8 FT L1	NMSP EAST (FT) N = 424872.06 E = 724905.29	and correct to the best of my belief.
	266903		FEBRUARY 13, 2023
	► LAST TAKE POINT ↓ 100' FSL, 1500' FEL	3	Date of Survey
w/4 CORNER SEC. 2 LAT. = 32.1595170'N	R LAT. = 32.1523971'N E LONG. = 103.7449483'W	E/4 CORNER SEC. 2 LAT. = 32,1593306'N	Non ME
LONG. = 103.7571486'W	BOTTOM OF HOLE	LONG. = 103.7400976'W	
NMSP EAST (FT) N = 422244.67 E = 719639.29	LONG. = 103.7449484'W	NMSP EAST (FT) = N = 422205.54 - E = 724916.21	
	R = 41959500 E = 723429,30	2	
SW CORNER SEC. 2 LAT. = 32.1522404'N	и	SE CORNER SEC. 2 LAT. = 32.1520886'N	Signature and Seal of Professional Surveyor:
LONG. = 1103.7572192'W NMSP EAST (FT)	LONG. = 103.7466898'W - LTP NMSP EAST (FT) - R/ BOTTOM N = 419578.11 I/ OF HOLE	LONG. = 103.7401028'W NMSP EAST (FT)	Certificate Number: EXTRAPANE LABA MILLO, LS 12797
N = 419597.42 E = 719631.59	£ = 722271.47	B N = 419570.97 E = 724929.11	PROFESS VALUAO. 8012B
	N89'34'51'W 2640.53 FT N89'50'46 W 2658.23 FT		

Received by OCD: 4/5/2023 8:19:51 PM

Х

I	r	J	τ	е	r	J	τ	

As	Drilled	

API #

30-015-48561			
Operator Name:		Property Name:	Well Number
DEVON ENERGY P COMPANY, L.P.	RODUCTION	COTTON DRAW UNIT	525H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
В	26	24S	31E		43	NORTH	1500	EAST	EDDY
Latitude				Longitude				NAD	
32.19	54				103.7450				83

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
B	26	24S	31E		100	NORTH	1500	EAST	EDDY
	Latitude Longitude 32.1953243 103.744				Longitude 103.7448	3938			NAD 83

Last Take Point (LTP)

UL O	Section 2	Township 25S	Range 31E	Lot	Feet 100	From N/S SOUTH	Feet 1500	From E/W EAST	County EDDY
Latitude					Longitud	le		NAD	
32.1523971				103.7	449483		83		

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

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:	Property Name:	Well Number
	•	

KZ 06/29/2018

1. Geologic Formations

TVD of target	8990	Pilot hole depth	N/A
MD at TD:	24525	Deepest expected fresh water	

Basin

Formation	Depth (TVD)	Water/Mineral Bearing/Target	Hazards*
	from KB	Zone?	
Rustler	660		
Salt	1010		
Base of Salt	4400		
Cherry Canyon	5360		
Brushy Canyon	6680		
1st Bone Spring Lime	8290		
Leonard	8535		

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

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2. Casing Program	m
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		Wt			Casing	Interval	Casing	Interval
Hole Size	Csg. Size	(PPF)	Grade Conn		From (MD)	To (MD)	From (TVD)	To (TVD)
17 1/2	13 3/8	48	H40	BTC	0	685	0	685
12 1/4	9 5/8	40	J-55	BTC	0	8490	0	8490
8 3/4	5 1/2	17	P110	BTC	0	24525	0	8990

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

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	534	Surf	13.2	1.4	Lead: Class C Cement + additives
Let 1	988	Surf	9.0	3.3	Lead: Class C Cement + additives
Int 1	154	7990	13.2	1.4	Tail: Class H / C + additives
Draduction	40	7990	9.0	3.3	Lead: Class H /C + additives
Production	3103	8444	13.2	1.4	Tail: Class H / C + additives

3. Cementing Program (3-String Primary Design)

Cementing Program (Primary Design)Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the 8-5/8" 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	30%
Production	10%

COTTON DRAW UNIT 525H

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	T	уре	~	Tested to:																																			
			Anı	nular	X	50% of rated working pressure																																			
Int 1	13-58"	5M	Blind	d Ram	Х																																				
Int I	15-56	5101	1	Ram		5M																																			
			Doub	le Ram	Х	5111																																			
			Other*																																						
			An	nular	Х	50% of rated working pressure																																			
Production	13-5/8"	5M	Blind	d Ram	Х																																				
Fioduction	13-3/8	13-3/8	15-5/8 514	15-5/8	15-5/8	15-5/8	13-3/8 3101	15-5/6	13-5/8	15-5/8	13-5/0 5141	15-5/6 51	15-5/6 51	15-5/8 51	15-5/6 5101	15-5/6 5141	15-5/6	13-3/8 3101	15-5/6 5141	15 5/6 514	15-5/6	13-3/8 3141	15 5/6 514	15-5/6 5141	15-5/6 5141	13-3/8 3141	13-5/6 5101	13-3/8	13-3/8	13-3/8 JIVI	15-5/6 5141	15-5/6 5141	5111	5101	5111	5101	5111	Pipe	e Ram		5M
													Doub	le Ram	X	5101																									
			Other*																																						
			Annul	ar (5M)																																					
			Bline	d Ram																																					
			Pipe	Ram]																																			
			Doub	le Ram																																					
			Other*																																						

COTTON DRAW UNIT 525H

5. Mud Program (Three String Design)

Section	Туре	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	Brine	10-10.5
Production	WBM	8.5-9

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

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

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 Report and sbumitted to the BLM.
	No logs are planned based on well control or offset log information.
	Drill stem test? If yes, explain.
	Coring? If yes, explain.

Additional	logs planned	Interval
	Resistivity	
	Density	
Х	CBL	Production casing
Х	Mud log	KOP to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	4207
Abnormal temperature	No

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

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

Ν	H2S is present
Y	H2S plan attached.

COTTON DRAW UNIT 525H

8. Other facets of operation

Is this a walking operation? Potentially

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

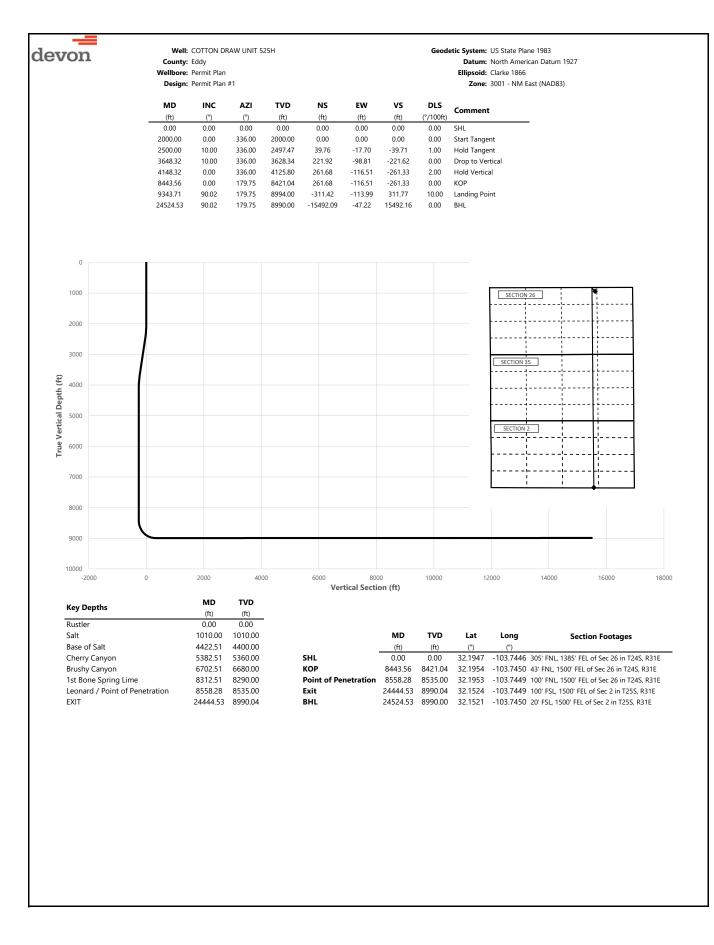
NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
- 3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pad.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. At that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan Other, describe



Number Number<	devon		Well:	COTTON D	RAW UNIT 52	25H				Geodetic System: US State Plane 1983
Department Term Department Department <th>uevon</th> <th></th> <th>-</th> <th>,</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	uevon		-	,						
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0 0 1 m			Design.	rennit rian	#					zone. Sour - Nivi East (NADOS)
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darren		Well:	COTTON D	RAW UNIT 5	25H				Geodetic System: US State Plane 1983
devon		County:	Eddy						Datum: North American Datum 1927
			Permit Plan Permit Plan						Ellipsoid: Clarke 1866 Zone: 3001 - NM East (NAD83)
		Design:	i ennit Pidf	1.001					LUIE. JUUT - MINI EAST (IMADOS)
	MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
-	(ft) 6400.00	(°) 0.00	(°) 179.75	(ft) 6377.49	(ft) 261.68	(ft) -116.51	(ft) -261.33	(°/100ft) 0.00	
	6500.00	0.00	179.75	6477.49	261.68	-116.51	-261.33	0.00	
	6600.00	0.00	179.75	6577.49	261.68	-116.51	-261.33	0.00	
	6700.00	0.00	179.75	6677.49	261.68	-116.51	-261.33	0.00	Deale Course
	6702.51 6800.00	0.00 0.00	179.75 179.75	6680.00 6777.49	261.68 261.68	-116.51 -116.51	-261.33 -261.33	0.00 0.00	Brushy Canyon
	6900.00	0.00	179.75	6877.49	261.68	-116.51	-261.33	0.00	
	7000.00	0.00	179.75	6977.49	261.68	-116.51	-261.33	0.00	
	7100.00	0.00	179.75	7077.49	261.68	-116.51	-261.33	0.00	
	7200.00	0.00	179.75	7177.49	261.68	-116.51	-261.33	0.00	
	7300.00 7400.00	0.00 0.00	179.75 179.75	7277.49 7377.49	261.68 261.68	-116.51 -116.51	-261.33 -261.33	0.00 0.00	
	7500.00	0.00	179.75	7477.49	261.68	-116.51	-261.33	0.00	
	7600.00	0.00	179.75	7577.49	261.68	-116.51	-261.33	0.00	
	7700.00	0.00	179.75	7677.49	261.68	-116.51	-261.33	0.00	
	7800.00	0.00	179.75	7777.49	261.68	-116.51	-261.33	0.00	
	7900.00 8000.00	0.00	179.75 179.75	7877.49	261.68	-116.51	-261.33	0.00	
	8100.00	0.00 0.00	179.75	7977.49 8077.49	261.68 261.68	-116.51 -116.51	-261.33 -261.33	0.00 0.00	
	8200.00	0.00	179.75	8177.49	261.68	-116.51	-261.33	0.00	
	8300.00	0.00	179.75	8277.49	261.68	-116.51	-261.33	0.00	
	8312.51	0.00	179.75	8290.00	261.68	-116.51	-261.33	0.00	1st Bone Spring Lime
	8400.00	0.00	179.75	8377.49	261.68	-116.51	-261.33	0.00	KOD
	8443.56 8500.00	0.00 5.64	179.75 179.75	8421.04 8477.39	261.68 258.91	-116.51 -116.50	-261.33 -258.55	0.00 10.00	КОР
	8558.28	11.47	179.75	8535.00	250.24	-116.46	-249.88	10.00	Leonard / Point of Penetration
	8600.00	15.64	179.75	8575.55	240.46	-116.42	-240.10	10.00	
	8700.00	25.64	179.75	8669.01	205.25	-116.26	-204.89	10.00	
	8800.00	35.64	179.75	8754.93	154.34	-116.04	-153.99	10.00	
	8900.00 9000.00	45.64 55.64	179.75 179.75	8830.71 8894.05	89.29 12.06	-115.75 -115.41	-88.93 -11.71	10.00 10.00	
	9100.00	65.64	179.75	8943.01	-74.98	-115.03	75.33	10.00	
	9200.00	75.64	179.75	8976.11	-169.21	-114.61	169.56	10.00	
	9300.00	85.64	179.75	8992.35	-267.75	-114.18	268.10	10.00	
	9343.71	90.02	179.75	8994.00	-311.42	-113.99	311.77	10.00	Landing Point
	9400.00 9500.00	90.02 90.02	179.75 179.75	8993.98 8993.96	-367.71 -467.71	-113.74 -113.30	368.06 468.05	0.00 0.00	
	9600.00	90.02	179.75	8993.93	-567.71	-112.86	568.05	0.00	
	9700.00	90.02	179.75	8993.91	-667.71	-112.42	668.05	0.00	
	9800.00	90.02	179.75	8993.88	-767.71	-111.98	768.05	0.00	
	9900.00	90.02	179.75	8993.85	-867.71	-111.54	868.04	0.00	
	10000.00 10100.00	90.02 90.02	179.75 179.75	8993.83 8993.80	-967.71 -1067.70	-111.10 -110.66	968.04 1068.04	0.00 0.00	
	10200.00	90.02	179.75	8993.78	-1167.70	-110.00	1168.03	0.00	
	10300.00	90.02	179.75	8993.75	-1267.70	-109.78	1268.03	0.00	
	10400.00	90.02	179.75	8993.72	-1367.70	-109.34	1368.03	0.00	
	10500.00	90.02	179.75	8993.70	-1467.70	-108.90	1468.03	0.00	
	10600.00 10700.00	90.02 90.02	179.75 179.75	8993.67 8993.64	-1567.70 -1667.70	-108.46 -108.02	1568.02 1668.02	0.00 0.00	
	10700.00	90.02	179.75	8993.64 8993.62	-1767.70	-108.02	1768.02	0.00	
	10900.00	90.02	179.75	8993.59	-1867.70	-107.14	1868.02	0.00	
	11000.00	90.02	179.75	8993.57	-1967.70	-106.70	1968.01	0.00	
	11100.00	90.02	179.75	8993.54	-2067.70	-106.26	2068.01	0.00	
	11200.00 11300.00	90.02 90.02	179.75 179.75	8993.51 8993.49	-2167.69 -2267.69	-105.82 -105.38	2168.01 2268.00	0.00 0.00	
	11400.00	90.02	179.75	8993.49 8993.46	-2267.69	-105.58	2368.00	0.00	
	11500.00	90.02	179.75	8993.43	-2467.69	-104.50	2468.00	0.00	
	11600.00	90.02	179.75	8993.41	-2567.69	-104.06	2568.00	0.00	
	11700.00	90.02	179.75	8993.38	-2667.69	-103.62	2667.99	0.00	
	11800.00	90.02	179.75	8993.36	-2767.69	-103.18	2767.99	0.00	
	11900.00 12000.00	90.02 90.02	179.75 179.75	8993.33 8993.30	-2867.69 -2967.69	-102.74 -102.30	2867.99 2967.98	0.00 0.00	
	12100.00	90.02	179.75	8993.28	-3067.69	-102.30	3067.98	0.00	
	12200.00	90.02	179.75	8993.25	-3167.68	-101.42	3167.98	0.00	
	12300.00	90.02	179.75	8993.22	-3267.68	-100.98	3267.98	0.00	
	12400.00	90.02	179.75	8993.20	-3367.68	-100.54	3367.97	0.00	
	12500.00 12600.00	90.02 90.02	179.75 179.75	8993.17 8993.15	-3467.68 -3567.68	-100.10 -99.66	3467.97 3567.97	0.00 0.00	
	12800.00	90.02	179.75	8993.13	-3667.68	-99.00	3667.97	0.00	
	12800.00	90.02	179.75	8993.09	-3767.68	-98.78	3767.96	0.00	

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		Well	COTTON D	RAW UNIT 5	25H				Geodetic System	US State Plane 198	33
devon		County:			2511				•	North American D	
			Permit Plan						•	Clarke 1866	
		Design:	Permit Plan	#1					Zone:	3001 - NM East (N	IAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment		
-	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	comment		_
	12900.00 13000.00	90.02 90.02	179.75 179.75	8993.07 8993.04	-3867.68 -3967.68	-98.34 -97.90	3867.96 3967.96	0.00 0.00			
	13100.00	90.02	179.75	8993.01	-4067.68	-97.46	4067.95	0.00			
	13200.00	90.02	179.75	8992.99	-4167.67	-97.02	4167.95	0.00			
	13300.00	90.02	179.75	8992.96	-4267.67	-96.58	4267.95	0.00			
	13400.00 13500.00	90.02 90.02	179.75 179.75	8992.94 8992.91	-4367.67 -4467.67	-96.14 -95.70	4367.95 4467.94	0.00 0.00			
	13600.00	90.02	179.75	8992.88	-4567.67	-95.26	4567.94	0.00			
	13700.00	90.02	179.75	8992.86	-4667.67	-94.82	4667.94	0.00			
	13800.00 13900.00	90.02 90.02	179.75 179.75	8992.83 8992.81	-4767.67 -4867.67	-94.38 -93.94	4767.93 4867.93	0.00 0.00			
	14000.00	90.02	179.75	8992.78	-4967.67	-93.50	4967.93	0.00			
	14100.00	90.02	179.75	8992.75	-5067.67	-93.06	5067.93	0.00			
	14200.00	90.02	179.75	8992.73	-5167.66	-92.62	5167.92	0.00			
	14300.00 14400.00	90.02 90.02	179.75 179.75	8992.70 8992.67	-5267.66 -5367.66	-92.18 -91.74	5267.92 5367.92	0.00 0.00			
	14500.00	90.02	179.75	8992.65	-5467.66	-91.30	5467.92	0.00			
	14600.00	90.02	179.75	8992.62	-5567.66	-90.86	5567.91	0.00			
	14700.00	90.02	179.75	8992.60	-5667.66	-90.42	5667.91	0.00			
	14800.00 14900.00	90.02 90.02	179.75 179.75	8992.57 8992.54	-5767.66 -5867.66	-89.98 -89.54	5767.91 5867.90	0.00 0.00			
	15000.00	90.02	179.75	8992.52	-5967.66	-89.10	5967.90	0.00			
	15100.00	90.02	179.75	8992.49	-6067.66	-88.66	6067.90	0.00			
	15200.00	90.02	179.75	8992.46	-6167.66	-88.22	6167.90	0.00			
	15300.00 15400.00	90.02 90.02	179.75 179.75	8992.44 8992.41	-6267.65 -6367.65	-87.78 -87.34	6267.89 6367.89	0.00 0.00			
	15500.00	90.02	179.75	8992.39	-6467.65	-86.90	6467.89	0.00			
	15600.00	90.02	179.75	8992.36	-6567.65	-86.46	6567.88	0.00			
	15700.00	90.02	179.75 179.75	8992.33	-6667.65	-86.02	6667.88	0.00			
	15800.00 15900.00	90.02 90.02	179.75	8992.31 8992.28	-6767.65 -6867.65	-85.58 -85.14	6767.88 6867.88	0.00 0.00			
	16000.00	90.02	179.75	8992.25	-6967.65	-84.70	6967.87	0.00			
	16100.00	90.02	179.75	8992.23	-7067.65	-84.25	7067.87	0.00			
	16200.00 16300.00	90.02 90.02	179.75 179.75	8992.20 8992.18	-7167.65 -7267.64	-83.81 -83.37	7167.87 7267.87	0.00 0.00			
	16400.00	90.02	179.75	8992.15	-7367.64	-82.93	7367.86	0.00			
	16500.00	90.02	179.75	8992.12	-7467.64	-82.49	7467.86	0.00			
	16600.00	90.02	179.75	8992.10	-7567.64	-82.05	7567.86	0.00			
	16700.00 16800.00	90.02 90.02	179.75 179.75	8992.07 8992.04	-7667.64 -7767.64	-81.61 -81.17	7667.85 7767.85	0.00 0.00			
	16900.00	90.02	179.75	8992.02	-7867.64	-80.73	7867.85	0.00			
	17000.00	90.02	179.75	8991.99	-7967.64	-80.29	7967.85	0.00			
	17100.00	90.02 90.02	179.75 179.75	8991.97 8991.94	-8067.64	-79.85 -79.41	8067.84	0.00 0.00			
	17200.00 17300.00	90.02 90.02	179.75	8991.94	-8167.64 -8267.63	-79.41	8167.84 8267.84	0.00			
	17400.00	90.02	179.75	8991.89	-8367.63	-78.53	8367.83	0.00			
	17500.00	90.02	179.75	8991.86	-8467.63	-78.09	8467.83	0.00			
	17600.00 17700.00	90.02 90.02	179.75 179.75	8991.84 8991.81	-8567.63 -8667.63	-77.65 -77.21	8567.83 8667.83	0.00 0.00			
	17800.00	90.02	179.75	8991.78	-8767.63	-76.77	8767.82	0.00			
	17900.00	90.02	179.75	8991.76	-8867.63	-76.33	8867.82	0.00			
	18000.00	90.02	179.75	8991.73	-8967.63	-75.89	8967.82	0.00			
	18100.00 18200.00	90.02 90.02	179.75 179.75	8991.70 8991.68	-9067.63 -9167.63	-75.45 -75.01	9067.82 9167.81	0.00 0.00			
	18300.00	90.02	179.75	8991.65	-9267.63	-74.57	9267.81	0.00			
	18400.00	90.02	179.75	8991.63	-9367.62	-74.13	9367.81	0.00			
	18500.00	90.02	179.75	8991.60	-9467.62	-73.69	9467.80	0.00			
	18600.00 18700.00	90.02 90.02	179.75 179.75	8991.57 8991.55	-9567.62 -9667.62	-73.25 -72.81	9567.80 9667.80	0.00 0.00			
	18800.00	90.02	179.75	8991.52	-9767.62	-72.37	9767.80	0.00			
	18900.00	90.02	179.75	8991.49	-9867.62	-71.93	9867.79	0.00			
	19000.00	90.02	179.75	8991.47	-9967.62	-71.49	9967.79	0.00			
	19100.00 19200.00	90.02 90.02	179.75 179.75	8991.44 8991.42	-10067.62 -10167.62	-71.05 -70.61	10067.79 10167.78	0.00 0.00			
	19300.00	90.02	179.75	8991.39	-10267.62	-70.01	10267.78	0.00			
	19400.00	90.02	179.75	8991.36	-10367.61	-69.73	10367.78	0.00			
	19500.00	90.02	179.75	8991.34	-10467.61	-69.29	10467.78	0.00			
	19600.00 19700.00	90.02 90.02	179.75 179.75	8991.31 8991.28	-10567.61 -10667.61	-68.85 -68.41	10567.77 10667.77	0.00 0.00			
	19800.00	90.02	179.75	8991.26	-10767.61	-67.97	10767.77	0.00			

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devon		Well:	COTTON D	RAW UNIT 5	25H				Geodetic System: US State Plane 1983
uevon		County:							Datum: North American Datum 1927
			Permit Plar						Ellipsoid: Clarke 1866
	Design: Permit Plan #1			n #1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
	19900.00	90.02	179.75	8991.23	-10867.61	-67.53	10867.76	0.00	
	20000.00	90.02	179.75	8991.21	-10967.61	-67.09	10967.76	0.00	
	20100.00	90.02	179.75	8991.18	-11067.61	-66.65	11067.76	0.00	
	20200.00	90.02	179.75	8991.15	-11167.61	-66.21	11167.76	0.00	
	20300.00	90.02	179.75	8991.13	-11267.61	-65.77	11267.75	0.00	
	20400.00	90.02	179.75	8991.10	-11367.60	-65.33	11367.75	0.00	
	20500.00	90.02	179.75	8991.07	-11467.60	-64.89	11467.75	0.00	
	20600.00 20700.00	90.02 90.02	179.75 179.75	8991.05 8991.02	-11567.60 -11667.60	-64.45 -64.01	11567.75 11667.74	0.00 0.00	
	20700.00	90.02	179.75	8991.02	-11767.60	-64.01	11767.74	0.00	
	20900.00	90.02	179.75	8990.97	-11867.60	-63.13	11867.74	0.00	
	21000.00	90.02	179.75	8990.94	-11967.60	-62.69	11967.73	0.00	
	211000.00	90.02	179.75	8990.92	-12067.60	-62.25	12067.73	0.00	
	21200.00	90.02	179.75	8990.89	-12167.60	-61.81	12167.73	0.00	
	21300.00	90.02	179.75	8990.87	-12267.60	-61.37	12267.73	0.00	
	21400.00	90.02	179.75	8990.84	-12367.60	-60.93	12367.72	0.00	
	21500.00	90.02	179.75	8990.81	-12467.59	-60.49	12467.72	0.00	
	21600.00	90.02	179.75	8990.79	-12567.59	-60.05	12567.72	0.00	
	21700.00	90.02	179.75	8990.76	-12667.59	-59.61	12667.71	0.00	
	21800.00	90.02	179.75	8990.73	-12767.59	-59.17	12767.71	0.00	
	21900.00	90.02	179.75	8990.71	-12867.59	-58.73	12867.71	0.00	
	22000.00	90.02	179.75	8990.68	-12967.59	-58.29	12967.71	0.00	
	22100.00	90.02	179.75	8990.66	-13067.59	-57.85	13067.70	0.00	
	22200.00	90.02 90.02	179.75	8990.63 8990.60	-13167.59	-57.41 -56.97	13167.70	0.00 0.00	
	22300.00 22400.00	90.02 90.02	179.75 179.75	8990.60	-13267.59 -13367.59	-56.53	13267.70 13367.70	0.00	
	22500.00	90.02	179.75	8990.55	-13467.58	-56.09	13467.69	0.00	
	22600.00	90.02	179.75	8990.52	-13567.58	-55.65	13567.69	0.00	
	22700.00	90.02	179.75	8990.50	-13667.58	-55.21	13667.69	0.00	
	22800.00	90.02	179.75	8990.47	-13767.58	-54.77	13767.68	0.00	
	22900.00	90.02	179.75	8990.45	-13867.58	-54.33	13867.68	0.00	
	23000.00	90.02	179.75	8990.42	-13967.58	-53.89	13967.68	0.00	
	23100.00	90.02	179.75	8990.39	-14067.58	-53.45	14067.68	0.00	
	23200.00	90.02	179.75	8990.37	-14167.58	-53.01	14167.67	0.00	
	23300.00	90.02	179.75	8990.34	-14267.58	-52.57	14267.67	0.00	
	23400.00	90.02	179.75	8990.31	-14367.58	-52.13	14367.67	0.00	
	23500.00	90.02	179.75	8990.29	-14467.57	-51.69	14467.66	0.00	
	23600.00	90.02	179.75	8990.26	-14567.57	-51.25	14567.66	0.00	
	23700.00	90.02	179.75	8990.24	-14667.57	-50.81	14667.66	0.00	
	23800.00	90.02	179.75	8990.21	-14767.57	-50.37	14767.66	0.00	
	23900.00	90.02	179.75	8990.18	-14867.57	-49.93	14867.65	0.00	
	24000.00 24100.00	90.02 90.02	179.75 179.75	8990.16 8990.13	-14967.57 -15067.57	-49.49 -49.05	14967.65 15067.65	0.00 0.00	
	24100.00	90.02 90.02	179.75	8990.13	-15067.57	-49.05 -48.61	15067.65	0.00	
	24200.00	90.02	179.75	8990.08	-15267.57	-48.17	15267.64	0.00	
	24300.00	90.02	179.75	8990.05	-15367.57	-47.73	15367.64	0.00	
	24444.53	90.02	179.75	8990.04	-15412.09	-47.53	15412.16	0.00	EXIT
	24500.00	90.02	179.75	8990.03	-15467.56	-47.29	15467.64	0.00	

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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



Received by OCD: 4/5/2023 8:19:51 PM

Page 18 of 29 26-24-31-B Sundry ID 2720828 Cotton Draw Unit 526H Eddy NM0012121 Devon Energy Production Company LP 13-22c 3-21-2023 LV.xlsm

Cotton Draw Unit 526H

13 3/8		surface csg in a	17 1/2	inch hole.		Design	Factors			Surfac	e	
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	48.00		h 40	btc	14.54	2.13	0.37	775	5	0.63	4.01	37,200
"B"				btc				0				0
	w/8	.4#/g mud, 30min Sfc Csg Test	psig: 873	Tail Cmt	does not	circ to sfc.	Totals:	775	-			37,200
omparison of	f Proposed to	o Minimum Required Cem	ent Volumes									
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Reg'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cpl
17 1/2	0.6946	534	748	538	39	9.00	2763	3M				1.56
urst Frac Grac	dient(s) for Se	gment(s) A, B = , b All >	0.70, OK.									
9 5/8		asing inside the	13 3/8		· — · — · — ·	Design	Factors		a a	Int 1		
Segment	#/ft	Grade	13 3/8	Coupling	Body	Collapse	Burst	Longth	P	a-B	a-C	Weight
"A"	40.00	Graue	i 55	btc	1.85	0.55	0.94	Length	B@s	а-ь 1.78		339,600
"B"	40.00		j 55	DIC	C0.1	0.55	0.94	8,490 0	1	1./0	0.93	339,600 0
B	10	4#/a mud 20mil: 65 6 mil					T-+-1					
	w/8	4#/g mud, 30min Sfc Csg Test		dad to achieve a terr of	0	ft from su	Totals:	8,490 775				339,600
Hole	Annular			ded to achieve a top of		Drilling						overlap. Min Dist
Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Mud Wt	Calc MASP	Req'd				Hole-Cpl
12 1/4	0.3132	510	714	2708	~74			BOPE				0.81
12 1/4	0.3132	510		2700	-74	10.50	2225	3M				Σ%exces
N T												
D V Tool(s):		26	6680				sum of sx	<u>Σ CuFt</u>				47
by stage % : Class 'C' tail cm		26 gment(s): A, B, C, D = 0.47	52	blem!!			<u>sum of sx</u> 1498	<u>2 CuFt</u> 3974				47
by stage % : Class 'C' tail cm	dient(s) for Se		52	blem!!		Design Fa	1498		a	Prod	1	47
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2	dient(s) for Se	gment(s): A, B, C, D = 0.47	52 , b, c, d <0.70 a Pro	blem!!	Body	Design Fa	1498		B@s	Prod a-B	1 a-C	47 Weight
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2	dient(s) for Se	gment(s): A, B, C, D = 0.47 asing inside the	52 , b, c, d <0.70 a Pro		Body 3.57		1498	3974	B@s 3		a-C	Weight
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment	dient(s) for Se c: #/ft	gment(s): A, B, C, D = 0.47 asing inside the	52 , b, c, d <0.70 a Pro 9 5/8	Coupling		Collapse	1498 <u>ctors</u> Burst	3974	<u> </u>	a-B	a-C	Weight
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment "A"	dient(s) for Se ca #/ft 17.00	gment(s): A, B, C, D = 0.47 asing inside the Grade	52 , b, c, d <0.70 a Pro 9 5/8 p 110	Coupling		Collapse	1498 <u>ctors</u> Burst	3974 Length 24,525 0	<u> </u>	a-B	a-C	Weigh 416,929 0
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment "A"	dient(s) for Se ca #/ft 17.00	gment(s): A, B, C, D = 0.47 asing inside the Grade 1.4#/g mud, 30min Sfc Csg Test	52 , b, c, d <0.70 a Pro 95/8 p 110 p 120	Coupling		Collapse	1498 <u>ctors</u> Burst 2.53 Totals:	3974 Length 24,525	<u> </u>	a-B	a-C	Weigh 416,929 0
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment "A"	dient(s) for Se ca #/ft 17.00	gment(s): A, B, C, D = 0.47 asing inside the Grade 1.4#/g mud, 30min Sfc Csg Test	52 , b, c, d <0.70 a Pro 95/8 p 110 p 120	Coupling btc	3.57	Collapse 1.78	1498 <u>ctors</u> Burst 2.53 Totals:	3974 Length 24,525 0 24,525	<u> </u>	a-B	a-C	Weight 416,928 0 416,928 overlap.
by stage % : class 'C' tail cm Burst Frac Grac Tail cmt 51/2 Segment "A" "B"	dient(s) for Se c: #/ft 17.00 w/8	gment(s): A, B, C, D = 0.47 asing inside the Grade .4#/g mud, 30min Sfc Csg Test The cement	52 , b, c, d <0.70 a Pro 9 5/8 p 110 p 110 p sig: 1,978 volume(s) are inten	Coupling btc ded to achieve a top of	3.57 8290	Collapse 1.78 ft from su	1498 ctors Burst 2.53 Totals: inface or a	3974 Length 24,525 0 24,525 200 Req'd	<u> </u>	a-B	a-C	Weigh 416,929 0 416,929 overlap. Min Dist
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment "A" "B" Hole	dient(s) for Se c: #/ft 17.00 w/8 Annular	gment(s): A, B, C, D = 0.47 asing inside the Grade .4#/g mud, 30min Sfc Csg Test The cement 1 Stage	52 , b, c, d <0.70 a Pro 9 5/8 p 110 p 110 psig: 1,978 volume(s) are inten 1 Stage	Coupling btc ded to achieve a top of Min	3.57 8290 1 Stage	Collapse 1.78 ft from su Drilling	1498 ctors Burst 2.53 Totals: Inface or a Calc	3974 Length 24,525 0 24,525 200	<u> </u>	a-B	a-C	Weigh 416,929 0 416,929 overlap. Min Dist
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment "A" "B" Hole Size	dient(s) for Se ca #/ft 17.00 w/8 Annular Volume 0.2526	gment(s): A, B, C, D = 0.47 asing inside the Grade 4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	52 , b, c, d <0.70 a Pro 9 5/8 p 110 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt	Coupling btc ded to achieve a top of Min Cu Ft	3.57 8290 1 Stage % Excess	Collapse 1.78 ft from su Drilling Mud Wt	1498 ctors Burst 2.53 Totals: Inface or a Calc	3974 Length 24,525 0 24,525 200 Req'd	<u> </u>	a-B	a-C	Weight 416,925 0 416,925 overlap. Min Dist Hole-Cpl
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 51/2 Segment "A" "B" Hole Size 8 3/4 Class 'C' tail cm	dient(s) for Se ca #/ft 17.00 w/8 Annular Volume 0.2526	gment(s): A, B, C, D = 0.47 asing inside the Grade 4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	52 , b, c, d <0.70 a Pro 9 5/8 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt 4476	Coupling btc ded to achieve a top of Min Cu Ft	3.57 8290 1 Stage % Excess	Collapse 1.78 ft from su Drilling Mud Wt 9.00	1498 ctors Burst 2.53 Totals: urface or a Calc MASP	3974 Length 24,525 0 24,525 200 Req'd	3	a-B 4.78	a-C 3.36	Weight 416,925 0 416,925 overlap. Min Dist Hole-Cpl
by stage % : class 'C' tail cm Tail cmt 5 1/2 Segment "A" "B" Hole Size 8 3/4 class 'C' tail cm #N/A 0	dient(s) for Se c: #/ft 17.00 w/8 Annular Volume 0.2526 tt yld > 1.35	gment(s): A, B, C, D = 0.47 asing inside the Grade 2.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 3143	52 , b, c, d <0.70 a Pro 9 5/8 p 110 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt	Coupling btc ded to achieve a top of Min Cu Ft 4103	3.57 8290 1 Stage % Excess 9	Collapse 1.78 ft from su Drilling Mud Wt 9.00 Design	1498 ctors Burst 2.53 Totals: urface or a Calc MASP	3974 Length 24,525 0 24,525 200 Req'd	3	a-B	a-C 3.36	Weight 416,929 0 416,929 overlap. Min Dist Hole-Cpl 1.35
by stage % : Class 'C' tail cm Burst Frac Grac Tail cmt 51/2 Segment "A" "B" Hole Size 8 3/4 Class 'C' tail cm #N/A 0	dient(s) for Se ca #/ft 17.00 w/8 Annular Volume 0.2526	gment(s): A, B, C, D = 0.47 asing inside the Grade 4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	52 , b, c, d <0.70 a Pro 9 5/8 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt 4476	Coupling btc ded to achieve a top of Min Cu Ft	3.57 8290 1 Stage % Excess	Collapse 1.78 ft from su Drilling Mud Wt 9.00	1498 ctors Burst 2.53 Totals: urface or a Calc MASP	3974 Length 24,525 0 24,525 200 Req'd	3	a-B 4.78	a-C 3.36	Weight 416,925 0 416,925 overlap. Min Dist Hole-Cpl
by stage % : class 'C' tail cm Burst Frac Grac Tail cmt 51/2 Segment "A" "B" Hole Size 8 3/4 class 'C' tail cm #N/A 0 Segment	dient(s) for Se c: #/ft 17.00 w/8 Annular Volume 0.2526 tt yld > 1.35	gment(s): A, B, C, D = 0.47 asing inside the Grade 2.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 3143	52 , b, c, d <0.70 a Pro 9 5/8 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt 4476	Coupling btc ded to achieve a top of Min Cu Ft 4103 Coupling	3.57 8290 1 Stage % Excess 9	Collapse 1.78 ft from su Drilling Mud Wt 9.00 Design	1498 ctors Burst 2.53 Totals: Inface or a Calc MASP Factors	3974 Length 24,525 0 24,525 200 Req'd BOPE	3	a-B 4.78	a-C 3.36 asing>	Weight 416,924 0 416,925 overlap. Min Dist Hole-Cpl 1.35 Weight
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by stage % : class 'C' tail cm Burst Frac Grac Tail cmt 5 1/2 Segment "A" "B" Hole Size 8 3/4 class 'C' tail cm #N/A 0 Segment "A"	dient(s) for Se c: #/ft 17.00 w/8 Annular Volume 0.2526 ut yld > 1.35 #/ft	gment(s): A, B, C, D = 0.47 asing inside the Grade .4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 3143 Grade .4#/g mud, 30min Sfc Csg Test	52 b, c, d <0.70 a Pro 9 5/8 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt 4476 5 1/2	Coupling btc ded to achieve a top of Min Cu Ft 4103	3.57 8290 1 Stage % Excess 9	Collapse 1.78 ft from su Drilling Mud Wt 9.00 Design	1498 ctors Burst 2.53 Totals: urface or a Calc MASP Factors Burst Totals:	3974 Length 24,525 0 24,525 200 Req'd BOPE	3	a-B 4.78	a-C 3.36 asing> a-C	Weigh 416,92 0 416,92 overlap. Min Dis Hole-Cpl 1.35 Weigh 0 0
by stage % : Class 'C' tail cm Burst Frac Grad Tail cmt 5 1/2 Segment "A" "B" Hole Size 8 3/4 Class 'C' tail cm #N/A 0 Segment "A"	dient(s) for Se c: #/ft 17.00 w/8 Annular Volume 0.2526 ut yld > 1.35 #/ft	gment(s): A, B, C, D = 0.47 asing inside the Grade 4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 3143 Grade 4#/g mud, 30min Sfc Csg Test Cmt vol c	52 b, c, d <0.70 a Pro 9 5/8 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt 4476 5 1/2	Coupling btc ded to achieve a top of Min Cu Ft 4103 Coupling 0.00 0.00	3.57 8290 1 Stage % Excess 9 #N/A	Collapse 1.78 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse	1498 ctors Burst 2.53 Totals: urface or a Calc MASP Factors Burst Totals:	3974 Length 24,525 0 24,525 200 Req'd BOPE Length 0 0 0 #N/A	3	a-B 4.78	a-C 3.36 asing> a-C	Weigh 416,92 0 416,92 overlap. Min Dis Hole-Cpi 1.35 Weigh 0 0 0 0 0 0 0 0
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by stage % : class 'C' tail cm Surst Frac Grac Tail cmt 5 1/2 Segment "A" "B" Hole Size 8 3/4 class 'C' tail cm #N/A 0 Segment "A" "B" Hole	dient(s) for Se c: #/ft 17.00 w/8 Annular Volume 0.2526 tt yld > 1.35 #/ft w/8 Annular	gment(s): A, B, C, D = 0.47 asing inside the Grade 1.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 3143 Grade 1.4#/g mud, 30min Sfc Csg Test Cmt vol c 1 Stage	52 , b, c, d <0.70 a Pro 9 5/8 p 110 psig: 1,978 volume(s) are inten 1 Stage CuFt Cmt 4476 5 1/2	Coupling btc ded to achieve a top of Min Cu Ft 4103 Coupling 0.00 0.00 0.00 this csg, TOC intended Min	3.57 8290 1 Stage % Excess 9 #N/A 1 Stage	Collapse 1.78 ft from su Drilling Mud Wt 9.00 <u>Design</u> Collapse ft from su Drilling	1498 ctors Burst 2.53 Totals: urface or a Calc MASP Factors Burst Totals: urface or a Calc	3974 Length 24,525 0 24,525 200 Req'd BOPE Length 0 0 0 #N/A	3	a-B 4.78	a-C 3.36 asing> a-C	Weight 416,923 0 416,924 overlap. Min Dist Hole-Cpl 1.35 Weight 0 0 0

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PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

	Devon Energy Production Company LP NMNM012121
LOCATION:	Section 26, T.24 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Cotton Draw Unit 526H
SURFACE HOLE FOOTAGE:	305'/N & 1385'/E
BOTTOM HOLE FOOTAGE	20'/S & 1500'/E
ATS/API ID:	3001548563
APD ID:	10400065585
Sundry ID:	2720828

COA

H2S	• Yes	🖸 No	
Potash	🖸 None	Secretary	🖸 R-111-P
Cave/Karst Potential	🖸 Low	🖸 Medium	🖸 High
Cave/Karst Potential	Critical		
Variance	🖸 None	Flex Hose	Other
Wellhead	Conventional	🖸 Multibowl	🖸 Both
Wellhead Variance	Diverter		
Other	4 String	Capitan Reef	WIPP
Other	✓ Fluid Filled	🗌 Pilot Hole	🗌 Open Annulus
Cementing	Contingency	EchoMeter	Primary Cement
	Cement Squeeze		Squeeze
Special Requirements	U Water Disposal	COM	Unit Unit
Special Requirements	□ Batch Sundry		
Special Requirements	Break Testing	□ Offline	□ Casing
Variance		Cementing	Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Cotton Draw** pool. 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 13-3/8 inch surface casing shall be set at approximately 775 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of $\underline{8}$ <u>hours</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 9-5/8 inch intermediate casing is:

Option 1 (Single Stage):

• Cement to surface. If cement does not circulate see B.1.a, c-d above.

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 6680' (510 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 988 sxs Class C)

Operator has proposed to pump down 13-3/8" X 9-5/8" 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 9-5/8" 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.

- 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.
 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 **9-5/8** 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 **13-3/8** 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)

<u>Unit Wells</u>

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

Commercial Well Determination

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

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 (575-361-2822 Eddy 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.

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• 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 Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
 - Lea County
 Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)
 689-5981
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <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</u> <u>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

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin

after cut-off or once cement reaches 500 psi compressive strength (including lead 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 Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
- C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

LVO 3/21/2023

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

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

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CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	204736
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
john.harrison	None	5/3/2023

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