Received by UCD: 2/4/2023 1:21:22 PM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Reports
Well Name: BOLL WEEVIL 27-34 FED COM	Well Location: T26S / R34E / SEC 27 / NWNW / 32.02107 / -103.462437	County or Parish/State: LEA / NM
Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM100569	Unit or CA Name:	Unit or CA Number:
<b>US Well Number:</b> 3002547949	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

## **Notice of Intent**

Sundry ID: 2761936

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Type of Submission: Notice of Intent

Date Sundry Submitted: 11/16/2023

Date proposed operation will begin: 11/16/2023

Type of Action: APD Change Time Sundry Submitted: 10:45

**Procedure Description:** Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: BHL change from 20 FSL & 1010 FWL to 20 FSL & 940 FWL, both 34-26S-34E Dedicated acreage change from 471.92 acs to 235.99 acs. TVD/MD change from 12800'/20278' to 12850'/20345' Casing program change: Surface, Intermediate, and Production Casing size changes. Cement volume changes to accommodate casing change. Please see attached revised C-102 and drilling & directional plans.

**NOI Attachments** 

## **Procedure Description**

8.625\_32lb\_P110EC\_SPRINT\_FJ\_VST\_20231116104247.pdf 10.75\_45.50\_J55\_BTC\_20231116104246.pdf 5.5\_20lb\_P110EC\_DWC\_C\_IS\_20231116104246.pdf BOLL\_WEEVIL\_27\_34\_FED\_COM\_2H\_Directional\_Plan\_11\_16\_23\_20231116104011.pdf BOLL\_WEEVIL\_27\_34\_FED\_COM\_2H\_20231116104010.pdf BOLL\_WEEVIL\_27\_34\_FED\_COM\_2H\_C\_102\_Pooling\_20231116104012.pdf

I	eceived by OCD: 12/4/2023 1:21:22 PM Well Name: BOLL WEEVIL 27-34 FED COM	Well Location: T26S / R34E / SEC 27 / NWNW / 32.02107 / -103.462437	County or Parish/State: LER 2 of 51 NM
	Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
	Lease Number: NMNM100569	Unit or CA Name:	Unit or CA Number:
	<b>US Well Number:</b> 3002547949	Well Status: Approved Application for Permit to Drill	<b>Operator:</b> DEVON ENERGY PRODUCTION COMPANY LP

## **Conditions of Approval**

## **Specialist Review**

Boll\_Weevil\_27\_34\_Fed\_Com\_2H\_Sundry\_ID\_2761936\_20231201083626.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: REBECCA DEAL Name: DEVON ENERGY PRODUCTION COMPANY LP Title: Regulatory Analyst Street Address: 333 W SHERIDAN AVE City: OKLAHOMA CITY State: OK Phone: (303) 299-1406 Email address: REBECCA.DEAL@DVN.COM

State:

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

## **BLM Point of Contact**

BLM POC Name: LONG VO BLM POC Phone: 5759885402 Disposition: Approved Signature: Long Vo BLM POC Title: Petroleum Engineer BLM POC Email Address: LVO@BLM.GOV Disposition Date: 12/01/2023

Zip:

Signed on: NOV 16, 2023 10:40 AM

## Received by OCD: 12/4/2023 1:21:22 PM

eceived by OCD. 12/4/202	J 1.41.44 I WI				ruge 5 0j	
	UNITED STAT DEPARTMENT OF THE BUREAU OF LAND MAN	4	0	ORM APPROVED MB No. 1004-0137 ires: October 31, 2021		
Do not use t	RY NOTICES AND REP his form for proposals ell. Use Form 3160-3 (A		5. If Indian, Allottee or	r Tribe Name		
	T IN TRIPLICATE - Other inst	ructions on page 2		<sup>7</sup> . If Unit of CA/Agree	ement, Name and/or No.	
1. Type of Well	Gas Well Other		8	3. Well Name and No.		
2. Name of Operator			9	9. API Well No.		
3a. Address		3b. Phone No. (include area code)	<b>e)</b>	10. Field and Pool or Exploratory Area		
4. Location of Well (Footage, Sec	., T.,R.,M., or Survey Description		1	11. Country or Parish, State		
12.	CHECK THE APPROPRIATE E	BOX(ES) TO INDICATE NATURE	E OF NOTIC	E, REPORT OR OTH	IER DATA	
TYPE OF SUBMISSION		TYP	PE OF ACT	ION		
Notice of Intent	Acidize	Deepen Hydraulic Fracturing		ction (Start/Resume) mation	Water Shut-Off Well Integrity	
Subsequent Report	Casing Repair Change Plans	New Construction Plug and Abandon	Recon	nplete orarily Abandon	Other	
Final Abandonment Notice		_	=	Disposal		
the proposal is to deepen dire- the Bond under which the wo completion of the involved op	ctionally or recomplete horizonta k will be perfonned or provide the reations. If the operation results	lly, give subsurface locations and m ne Bond No. on file with BLM/BIA. in a multiple completion or recompl	neasured and Required s letion in a n	l true vertical depths o ubsequent reports mus ew interval, a Form 31	rk and approximate duration thereof. If of all pertinent markers and zones. Attach st be filed within 30 days following 160-4 must be filed once testing has been he operator has detennined that the site	

14. I hereby certify that the foregoing is true and correct. Name ( <i>Printed/Typed</i> )			
т	ĩtle		
Signatura	Date		
Signature			
THE SPACE FOR FEDER	RAL OR STATE OF	ICE USE	
Approved by			
	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant o certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.			
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within		fully to make to any department or agency of the United	1 States

## (Instructions on page 2)

## **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13:* Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## **Additional Information**

## Location of Well

0. SHL: NWNW / 225 FNL / 1191 FWL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.02107 / LONG: -103.462437 (TVD: 0 feet, MD: 0 feet ) PPP: NWNW / 100 FNL / 1010 FWL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.021415 / LONG: -103.463021 (TVD: 12461 feet, MD: 12472 feet ) BHL: SWNW / 20 FSL / 1010 FWL / TWSP: 26S / RANGE: 34E / SECTION: 34 / LAT: 32.000335 / LONG: -103.463012 (TVD: 12800 feet, MD: 20278 feet ) OD<br/>8 5/8 in.Weight (b/<br/>M. 2.3<br/>Deminal 2.3<br/>Diam 2.3<br/>

Issued on: 16 Dec. 2020 by Logan Van Gorp

## **Connection Data Sheet**

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

PIPE PROPERTIES			C
IOD	8.625	in.	Connection Type
I ID	7.921	in.	Connection OD (nom):
l Cross Section Area	9.149	sqin.	Connection ID (nom):
уре	Hig	h Yield	Make-Up Loss
ld Strength	125	ksi	Critical Cross Section
eld Strength	140	ksi	Tension Efficiency
imate Tensile Strength	135	ksi	Compression Efficiency
			Internal Dressure Efficien

CONNECTION PRO	PERTIES	
Connection Type	Semi-Premium Inte	egral Flush
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	6.038	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

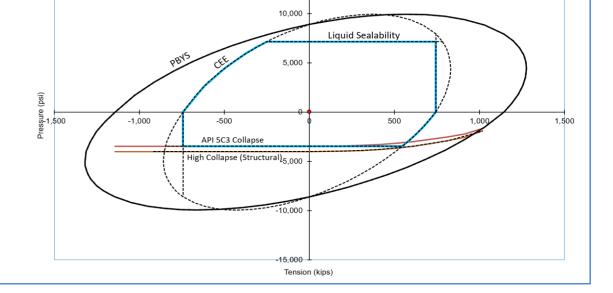
CONNECTION PERFORMANCES							
Tensile Yield Strength	744	klb					
Compression Resistance	744	klb					
Max. Internal Pressure	7,150	psi					
Structural Collapse Resistance	4,000	psi					
Max. Bending with Sealability	41	°/100ft					
Max. Bending with Sealability	10	°/100ft					

TORQUE VALUE	S	
Min. Make-up torque	15,000	ft.lb
Opt. Make-up torque	16,500	ft.lb
Max. Make-up torque	18,000	ft.lb
Max. Torque with Sealability (MTS)	TBD	ft.lb

\* 87.5% RBW

**VAM® SPRINT-FJ** is a semi-premium flush connection designed for shale applications, where maximum clearance and high tension

capacity are required for intermediate casing strings.



15,000

## Do you need help on this product? - Remember no one knows $\text{VAM}^{\textcircled{B}}$ like $\text{VAM}^{\textcircled{B}}$

- canada@vamfieldservice.com usa@vamfieldservice.com mexico@vamfieldservice.com brazil@vamfieldservice.com
- uk@vamfieldservice.com dubai@vamfieldservice.com nigeria@vamfieldservice.com angola@vamfieldservice.com

china@vamfieldservice.com baku@vamfieldservice.com singapore@vamfieldservice.com australia@vamfieldservice.com

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

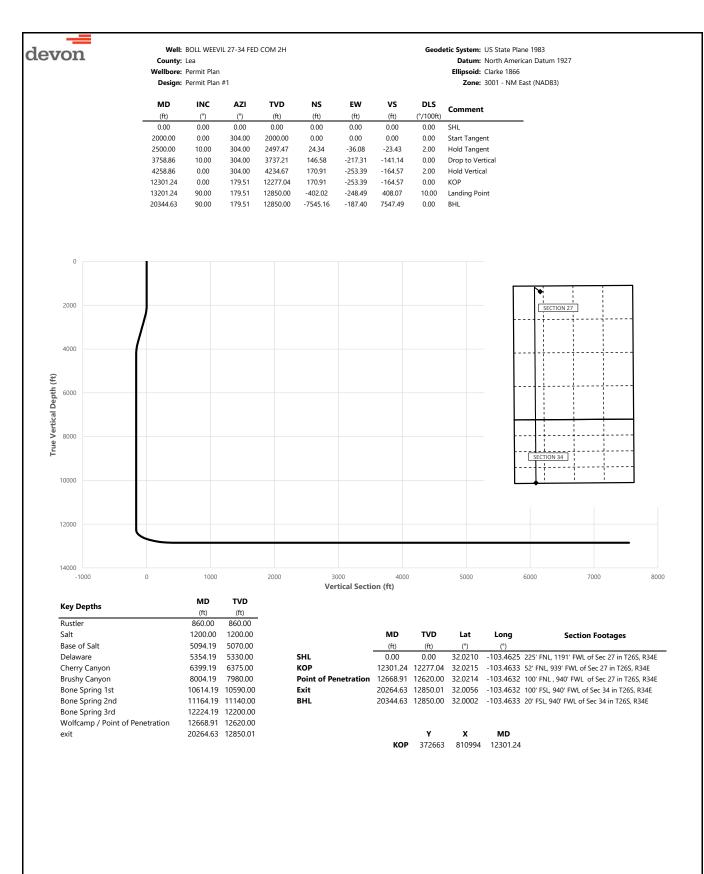






<u>10-3/4"</u>	<u>45.50#</u>	<u>0.400"</u>	<u>J-55</u>	
Dimensions (	Nominal)			
Outside Diameter Wall Inside Diameter Drift Weight, T&C Weight, PE	Ducucution		10.750 0.400 9.950 9.875 45.500 44.260	in. in. in. Ibs/ft Ibs/ft
Performance	Properties			
Collapse			2090	psi
Internal Yield Press	sure at Minimum Yield			
	PE		3580	psi
	STC		3580	psi
	втс		3580	psi
Yield Strength, Pip	e Body		715	1000 lbs
Joint Strength				
	STC		493	1000 lbs
	втс		796	1000 lbs
	BTC Special Clearance (	11.25" OD Cplg)	506	1000 lbs

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



i									
. —		14/0/-		/IL 27-34 FED	COM 211				Goodatic Suctamy LIS State Plane 1982
devon		Well: County:		11 27-34 FED	COIVI 2H				Geodetic System: US State Plane 1983 Datum: North American Datum 1927
		•	Permit Plan	I.					Ellipsoid: Clarke 1866
		Design:	Permit Plan	#1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	
_	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
	100.00	0.00	304.00	100.00	0.00	0.00	0.00	0.00 0.00	
	200.00 300.00	0.00 0.00	304.00 304.00	200.00 300.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00	
	400.00	0.00	304.00	400.00	0.00	0.00	0.00	0.00	
	500.00	0.00	304.00	500.00	0.00	0.00	0.00	0.00	
	600.00	0.00	304.00	600.00	0.00	0.00	0.00	0.00	
	700.00 800.00	0.00 0.00	304.00 304.00	700.00 800.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	
	860.00	0.00	304.00	860.00	0.00	0.00	0.00	0.00	Rustler
	900.00	0.00	304.00	900.00	0.00	0.00	0.00	0.00	
	1000.00	0.00	304.00	1000.00	0.00	0.00	0.00	0.00	
	1100.00	0.00	304.00	1100.00	0.00	0.00	0.00	0.00	C-14
	1200.00 1300.00	0.00 0.00	304.00 304.00	1200.00 1300.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	Salt,
	1400.00	0.00	304.00	1400.00	0.00	0.00	0.00	0.00	
	1500.00	0.00	304.00	1500.00	0.00	0.00	0.00	0.00	
	1600.00	0.00	304.00	1600.00	0.00	0.00	0.00	0.00	
	1700.00	0.00	304.00	1700.00	0.00 0.00	0.00	0.00	0.00 0.00	
	1800.00 1900.00	0.00 0.00	304.00 304.00	1800.00 1900.00	0.00	0.00 0.00	0.00 0.00	0.00	
	2000.00	0.00	304.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
	2100.00	2.00	304.00	2099.98	0.98	-1.45	-0.94	2.00	
	2200.00	4.00	304.00	2199.84	3.90	-5.79	-3.76	2.00	
	2300.00 2400.00	6.00 8.00	304.00 304.00	2299.45 2398.70	8.78 15.59	-13.01 -23.11	-8.45 -15.01	2.00 2.00	
	2500.00	10.00	304.00	2497.47	24.34	-36.08	-23.43	2.00	Hold Tangent
	2600.00	10.00	304.00	2595.95	34.05	-50.48	-32.78	0.00	
	2700.00	10.00	304.00	2694.43	43.76	-64.87	-42.13	0.00	
	2800.00 2900.00	10.00 10.00	304.00 304.00	2792.91 2891.39	53.47 63.18	-79.27 -93.67	-51.48 -60.83	0.00 0.00	
	3000.00	10.00	304.00	2989.87	72.89	-108.06	-70.18	0.00	
	3100.00	10.00	304.00	3088.35	82.60	-122.46	-79.53	0.00	
	3200.00	10.00	304.00	3186.83	92.31	-136.85	-88.88	0.00	
	3300.00	10.00	304.00	3285.31	102.02	-151.25	-98.23	0.00	
	3400.00 3500.00	10.00 10.00	304.00 304.00	3383.79 3482.27	111.73 121.44	-165.65 -180.04	-107.58 -116.93	0.00 0.00	
	3600.00	10.00	304.00	3580.75	131.15	-194.44	-126.28	0.00	
	3700.00	10.00	304.00	3679.23	140.86	-208.84	-135.63	0.00	
	3758.86	10.00	304.00	3737.21	146.58	-217.31	-141.14	0.00	Drop to Vertical
	3800.00 3900.00	9.18 7.18	304.00 304.00	3777.77 3876.74	150.41 158.36	-222.99 -234.78	-144.83 -152.48	2.00 2.00	
	4000.00	5.18	304.00	3976.16	164.38	-243.70	-158.28	2.00	
	4100.00	3.18	304.00	4075.89	168.45	-249.74	-162.20	2.00	
	4200.00	1.18	304.00	4175.81	170.58	-252.89	-164.24	2.00	
	4258.86 4300.00	0.00 0.00	304.00 179.51	4234.67 4275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	2.00 0.00	Hold Vertical
	4400.00	0.00	179.51	4375.81	170.91	-253.39	-164.57	0.00	
	4500.00	0.00	179.51	4475.81	170.91	-253.39	-164.57	0.00	
	4600.00	0.00	179.51	4575.81	170.91	-253.39	-164.57	0.00	
	4700.00 4800.00	0.00 0.00	179.51 179.51	4675.81 4775.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	4900.00	0.00	179.51	4875.81	170.91	-253.39	-164.57	0.00	
	5000.00	0.00	179.51	4975.81	170.91	-253.39	-164.57	0.00	
	5094.19	0.00	179.51	5070.00	170.91	-253.39	-164.57	0.00	Base of Salt
	5100.00	0.00	179.51	5075.81	170.91	-253.39	-164.57	0.00	
	5200.00 5300.00	0.00 0.00	179.51 179.51	5175.81 5275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	5354.19	0.00	179.51	5330.00	170.91	-253.39	-164.57	0.00	Delaware
	5400.00	0.00	179.51	5375.81	170.91	-253.39	-164.57	0.00	
	5500.00	0.00	179.51	5475.81	170.91	-253.39	-164.57	0.00	
	5600.00 5700.00	0.00 0.00	179.51 179.51	5575.81 5675.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	5700.00 5800.00	0.00	179.51	5675.81 5775.81	170.91	-253.39 -253.39	-164.57 -164.57	0.00	
	5900.00	0.00	179.51	5875.81	170.91	-253.39	-164.57	0.00	
	6000.00	0.00	179.51	5975.81	170.91	-253.39	-164.57	0.00	
	6100.00	0.00	179.51	6075.81	170.91	-253.39	-164.57	0.00	
	6200.00 6300.00	0.00 0.00	179.51 179.51	6175.81 6275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	6399.19	0.00	179.51	6375.00	170.91	-253.39	-164.57	0.00	Cherry Canyon

damer		Well:	BOLL WEE	/IL 27-34 FED	COM 2H				Geodetic System: US State Plane 1983
devon		County:							Datum: North American Datum 1927
			Permit Plan						Ellipsoid: Clarke 1866
		Design:	Permit Plar	ן#1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	Comment
-	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
	6400.00 6500.00	0.00 0.00	179.51 179.51	6375.81 6475.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	6600.00	0.00	179.51	6575.81	170.91	-253.39	-164.57	0.00	
	6700.00	0.00	179.51	6675.81	170.91	-253.39	-164.57	0.00	
	6800.00	0.00	179.51	6775.81	170.91	-253.39	-164.57	0.00	
	6900.00	0.00	179.51	6875.81	170.91	-253.39	-164.57	0.00	
	7000.00 7100.00	0.00 0.00	179.51 179.51	6975.81 7075.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	7200.00	0.00	179.51	7075.81	170.91	-253.39	-164.57	0.00	
	7300.00	0.00	179.51	7275.81	170.91	-253.39	-164.57	0.00	
	7400.00	0.00	179.51	7375.81	170.91	-253.39	-164.57	0.00	
	7500.00	0.00	179.51	7475.81	170.91	-253.39	-164.57	0.00	
	7600.00 7700.00	0.00	179.51	7575.81	170.91	-253.39	-164.57	0.00 0.00	
	7800.00	0.00 0.00	179.51 179.51	7675.81 7775.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00	
	7900.00	0.00	179.51	7875.81	170.91	-253.39	-164.57	0.00	
	8000.00	0.00	179.51	7975.81	170.91	-253.39	-164.57	0.00	
	8004.19	0.00	179.51	7980.00	170.91	-253.39	-164.57	0.00	Brushy Canyon
	8100.00	0.00	179.51	8075.81	170.91	-253.39	-164.57	0.00	
	8200.00 8300.00	0.00 0.00	179.51 179.51	8175.81 8275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	8400.00	0.00	179.51	8375.81	170.91	-253.39	-164.57	0.00	
	8500.00	0.00	179.51	8475.81	170.91	-253.39	-164.57	0.00	
	8600.00	0.00	179.51	8575.81	170.91	-253.39	-164.57	0.00	
	8700.00	0.00	179.51	8675.81	170.91	-253.39	-164.57	0.00	
	8800.00 8900.00	0.00 0.00	179.51 179.51	8775.81 8875.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	9000.00	0.00	179.51	8975.81	170.91	-253.39	-164.57	0.00	
	9100.00	0.00	179.51	9075.81	170.91	-253.39	-164.57	0.00	
	9200.00	0.00	179.51	9175.81	170.91	-253.39	-164.57	0.00	
	9300.00	0.00	179.51	9275.81	170.91	-253.39	-164.57	0.00	
	9400.00 9500.00	0.00 0.00	179.51 179.51	9375.81 9475.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	9600.00	0.00	179.51	9575.81	170.91	-253.39	-164.57	0.00	
	9700.00	0.00	179.51	9675.81	170.91	-253.39	-164.57	0.00	
	9800.00	0.00	179.51	9775.81	170.91	-253.39	-164.57	0.00	
	9900.00	0.00	179.51	9875.81	170.91	-253.39	-164.57	0.00	
	10000.00 10100.00	0.00 0.00	179.51 179.51	9975.81 10075.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	10200.00	0.00	179.51	10175.81	170.91	-253.39	-164.57	0.00	
	10300.00	0.00	179.51	10275.81	170.91	-253.39	-164.57	0.00	
	10400.00	0.00	179.51	10375.81	170.91	-253.39	-164.57	0.00	
	10500.00	0.00	179.51	10475.81	170.91	-253.39	-164.57	0.00	
	10600.00 10614.19	0.00 0.00	179.51 179.51	10575.81 10590.00	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	Bone Spring 1st
	10700.00	0.00	179.51	10675.81	170.91	-253.39	-164.57	0.00	bone spring ist
	10800.00	0.00	179.51	10775.81	170.91	-253.39	-164.57	0.00	
	10900.00	0.00	179.51	10875.81	170.91	-253.39	-164.57	0.00	
	11000.00	0.00	179.51	10975.81	170.91	-253.39	-164.57	0.00	
	11100.00 11164.19	0.00 0.00	179.51 179.51	11075.81 11140.00	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	Bone Spring 2nd
	11200.00	0.00	179.51	11175.81	170.91	-253.39	-164.57	0.00	· · · · · · · · · · · · · · · · · · ·
	11300.00	0.00	179.51	11275.81	170.91	-253.39	-164.57	0.00	
	11400.00	0.00	179.51	11375.81	170.91	-253.39	-164.57	0.00	
	11500.00 11600.00	0.00 0.00	179.51 179.51	11475.81 11575.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	11700.00	0.00	179.51	11675.81	170.91	-253.39	-164.57	0.00	
	11800.00	0.00	179.51	11775.81	170.91	-253.39	-164.57	0.00	
	11900.00	0.00	179.51	11875.81	170.91	-253.39	-164.57	0.00	
	12000.00	0.00	179.51	11975.81	170.91	-253.39	-164.57	0.00	
	12100.00	0.00	179.51	12075.81	170.91	-253.39	-164.57	0.00	
	12200.00 12224.19	0.00 0.00	179.51 179.51	12175.81 12200.00	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	Bone Spring 3rd
	12224.19	0.00	179.51	12200.00	170.91	-253.39	-164.57 -164.57	0.00	Done opining ord
	12301.24	0.00	179.51	12277.04	170.91	-253.39	-164.57	0.00	КОР
	12400.00	9.88	179.51	12375.32	162.42	-253.32	-156.08	10.00	
	12500.00	19.88	179.51	12471.84	136.78	-253.10	-130.46	10.00	
	12600.00 12668.91	29.88 36.77	179.51 179.51	12562.45 12620.00	94.77 56.94	-252.74 -252.42	-88.47 -50.65	10.00 10.00	Wolfcamp / Point of Penetration
	12668.91	39.88	179.51	12620.00	36.94 37.67	-252.42	-30.65	10.00	woncamp / Forne of Fenetration

I. —		Wall		/IL 27-34 FED	COM 2H				Geodetic System: US State Plane 1983
devon		County:		, 12 21 - 34 FEU	20171 217				Datum: North American Datum 1927
			Permit Plar	ı					Ellipsoid: Clarke 1866
		Design:	Permit Plar	n #1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	
	(ft)	(°)	(°)	(ft)	(ft)	<b>E VV</b> (ft)	<b>V3</b> (ft)	(°/100ft)	Comment
-	12800.00	49.88	179.51	12715.16	-32.80	-251.65	39.04	10.00	
	12900.00	59.88	179.51	12772.62	-114.48	-250.95	120.68	10.00	
	13000.00 13100.00	69.88	179.51	12815.02	-204.91	-250.18	211.05	10.00	
	13100.00	79.88 89.88	179.51 179.51	12841.08 12850.00	-301.32 -400.79	-249.35 -248.50	307.41 406.83	10.00 10.00	
	13201.24	90.00	179.51	12850.00	-402.02	-248.49	408.07	10.00	Landing Point
	13300.00	90.00	179.51	12850.00	-500.78	-247.65	506.78	0.00	
	13400.00	90.00	179.51	12850.00	-600.78	-246.79	606.72	0.00	
	13500.00 13600.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-700.78 -800.77	-245.94 -245.08	706.67 806.61	0.00 0.00	
	13700.00	90.00	179.51	12850.00	-900.77	-244.22	906.55	0.00	
	13800.00	90.00	179.51	12850.00	-1000.76	-243.37	1006.50	0.00	
	13900.00	90.00	179.51	12850.00	-1100.76	-242.51	1106.44	0.00	
	14000.00	90.00 90.00	179.51	12850.00 12850.00	-1200.76 -1300.75	-241.66 -240.80	1206.39	0.00	
	14100.00 14200.00	90.00 90.00	179.51 179.51	12850.00	-1400.75	-240.80	1306.33 1406.28	0.00 0.00	
	14300.00	90.00	179.51	12850.00	-1500.75	-239.09	1506.22	0.00	
	14400.00	90.00	179.51	12850.00	-1600.74	-238.24	1606.16	0.00	
	14500.00	90.00	179.51	12850.00	-1700.74	-237.38	1706.11	0.00	
	14600.00 14700.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-1800.74 -1900.73	-236.53 -235.67	1806.05 1906.00	0.00 0.00	
	14800.00	90.00	179.51	12850.00	-2000.73	-234.81	2005.94	0.00	
	14900.00	90.00	179.51	12850.00	-2100.72	-233.96	2105.89	0.00	
	15000.00	90.00	179.51	12850.00	-2200.72	-233.10	2205.83	0.00	
	15100.00	90.00	179.51	12850.00	-2300.72	-232.25	2305.77	0.00	
	15200.00 15300.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-2400.71 -2500.71	-231.39 -230.54	2405.72 2505.66	0.00 0.00	
	15400.00	90.00	179.51	12850.00	-2600.71	-229.68	2605.61	0.00	
	15500.00	90.00	179.51	12850.00	-2700.70	-228.83	2705.55	0.00	
	15600.00	90.00	179.51	12850.00	-2800.70	-227.97	2805.50	0.00	
	15700.00 15800.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-2900.70 -3000.69	-227.11 -226.26	2905.44 3005.38	0.00 0.00	
	15900.00	90.00	179.51	12850.00	-3100.69	-225.40	3105.33	0.00	
	16000.00	90.00	179.51	12850.00	-3200.68	-224.55	3205.27	0.00	
	16100.00	90.00	179.51	12850.00	-3300.68	-223.69	3305.22	0.00	
	16200.00 16300.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-3400.68 -3500.67	-222.84 -221.98	3405.16 3505.11	0.00 0.00	
	16400.00	90.00	179.51	12850.00	-3600.67	-221.13	3605.05	0.00	
	16500.00	90.00	179.51	12850.00	-3700.67	-220.27	3704.99	0.00	
	16600.00	90.00	179.51	12850.00	-3800.66	-219.42	3804.94	0.00	
	16700.00 16800.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-3900.66 -4000.65	-218.56 -217.70	3904.88 4004.83	0.00 0.00	
	16900.00	90.00	179.51	12850.00	-4100.65	-216.85	4104.77	0.00	
	17000.00	90.00	179.51	12850.01	-4200.65	-215.99	4204.72	0.00	
	17100.00	90.00	179.51	12850.01	-4300.64	-215.14	4304.66	0.00	
	17200.00 17300.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-4400.64 -4500.64	-214.28 -213.43	4404.60 4504.55	0.00 0.00	
	17400.00	90.00	179.51	12850.01	-4600.63	-212.57	4604.49	0.00	
	17500.00	90.00	179.51	12850.01	-4700.63	-211.72	4704.44	0.00	
	17600.00	90.00	179.51	12850.01	-4800.63	-210.86	4804.38	0.00	
	17700.00 17800.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-4900.62 -5000.62	-210.01 -209.15	4904.33 5004.27	0.00 0.00	
	17900.00	90.00	179.51	12850.01	-5100.61	-208.29	5104.21	0.00	
	18000.00	90.00	179.51	12850.01	-5200.61	-207.44	5204.16	0.00	
	18100.00	90.00	179.51	12850.01	-5300.61	-206.58	5304.10	0.00	
	18200.00 18300.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-5400.60 -5500.60	-205.73 -204.87	5404.05 5503.99	0.00 0.00	
	18400.00	90.00	179.51	12850.01	-5600.60	-204.02	5603.94	0.00	
	18500.00	90.00	179.51	12850.01	-5700.59	-203.16	5703.88	0.00	
	18600.00	90.00	179.51	12850.01	-5800.59	-202.31	5803.82	0.00	
	18700.00	90.00	179.51	12850.01	-5900.59	-201.45	5903.77	0.00	
	18800.00 18900.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-6000.58 -6100.58	-200.60 -199.74	6003.71 6103.66	0.00 0.00	
	19000.00	90.00	179.51	12850.01	-6200.57	-198.88	6203.60	0.00	
	19100.00	90.00	179.51	12850.01	-6300.57	-198.03	6303.55	0.00	
	19200.00	90.00	179.51	12850.01	-6400.57	-197.17	6403.49	0.00	
	19300.00 19400.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-6500.56 -6600.56	-196.32 -195.46	6503.43 6603.38	0.00 0.00	
	19400.00	90.00	179.51	12850.01	-6700.56	-195.46	6703.32	0.00	
	19600.00	90.00	179.51	12850.01	-6800.55	-193.75	6803.27	0.00	

devon		Well: BOLL WEEVIL 27-34 FED COM 2H 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)		
	19700.00	90.00	179.51	12850.01	-6900.55	-192.90	6903.21	0.00		
	19800.00	90.00	179.51	12850.01	-7000.55	-192.04	7003.16	0.00		
	19900.00	90.00	179.51	12850.01	-7100.54	-191.19	7103.10	0.00		
	20000.00	90.00	179.51	12850.01	-7200.54	-190.33	7203.04	0.00		
	20100.00	90.00	179.51	12850.01	-7300.53	-189.47	7302.99	0.00		
	20200.00	90.00	179.51	12850.01	-7400.53	-188.62	7402.93	0.00		
	20264.63	90.00	179.51	12850.01	-7465.16	-188.07	7467.53	0.00	exit	
	20300.00	90.00	179.51	12850.01	-7500.53	-187.76	7502.88	0.00		
	20344.63	90.00	179.51	12850.00	-7545.16	-187.40	7547.49	0.00	BHL	

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	Well: BOLL WEEVIL 27-34 FED COM 2H 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 (°)	#1 <b>TVD</b> (ft)	NS (ft)	<b>EW</b> (ft)	<b>VS</b> (ft)	<b>DLS</b> (°/100ft)	Comment	183)	

## 1. Geologic Formations

TVD of target	12850	Pilot hole depth	N/A
MD at TD:	20345	Deepest expected fresh water	

Basin

	Depth	Water/Mineral	
Formation	(TVD)	<b>Bearing/Target</b>	Hazards*
	from KB	Zone?	
Rustler	860		
Salt	1200		
Base of Salt	5070		
Delaware	5330		
Cherry Canyon	6375		
Brushy Canyon	7980		
Bone Spring 1st	10590		
Bone Spring 2nd	11140		
Bone Spring 3rd	12200		
Wolfcamp	12620		

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

		Wt			Casing	Interval	Casing	Interval	
Hole Size	Csg. Size	(PPF)	Grade	Conn	From (MD)	To (MD)	From (TVD)	To (TVD)	
14 3/4	10 3/4	45 1/2	J-55	BTC	0	885	0	885	
9 7/8	8 5/8	32	P110	Sprint FJ	0	12201	0	12201	
7 7/8	5 1/2	20	P110	DWC / C-IS+	0	20345	0	12850	

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

•All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.

## 3. Cementing Program (Primary Design)

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	# Sks	тос	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	537	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	563	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
Int I	488	8004	13.2	1.44	Tail: Class H / C + additives
Production	117	10301	9	3.27	Lead: Class H /C + additives
Production	1065	12301	13.2	1.44	Tail: Class H / C + additives

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Prod	10%

.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		~	Tested to:
			Anı	nular	X	50% of rated working pressure
Int 1	13-5/8"	5M		d Ram	Х	
int i	15 5/0	5101		e Ram		- 5M
			Doub	le Ram	Х	JIVI
			Other*			
			Annular (5M)		X	100% of rated working pressure
Production	13-5/8"	10M	Blind Ram		Х	
Fioduction	13-5/8	10101	Pipe Ram Double Ram			- 10M
					Х	10101
			Other*			
			Annul	ar (5M)		
	BI		Blind	d Ram		
			Pipe	e Ram		]
			Doub	le Ram		]
			Other*			
N A variance is requested for	the use of a	a diverter or	the surface	casing. See	attached for s	schematic.
Y A variance is requested to r	un a 5 M ai	nnular on a	10M system			

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

## 5. Mud Program (Three String Design)

Section	Туре	Weight (ppg)
Surface	FW Gel	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Production	OBM	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,	Logging, Coring and Testing							
	Will run GR/CNL from TD to surface (horizontal well - vertical portion of hole). Stated logs run will be in the							
Х	Completion Rpeort and sbumitted to the BLM.							
	No logs are planned based on well control or offset log information.							
	Drill stem test? If yes, explain.							
	Coring? If yes, explain.							

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

## 7. Drilling Conditions

Condition	Specfiy what type and where?			
BH pressure at deepest TVD	7016			
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 concentrationsgreater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176. If Hydrogen Sulfide is encounteredmeasured values and formations will be provided to the BLM.NH2S is present

Y H2S plan attached.

## 8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

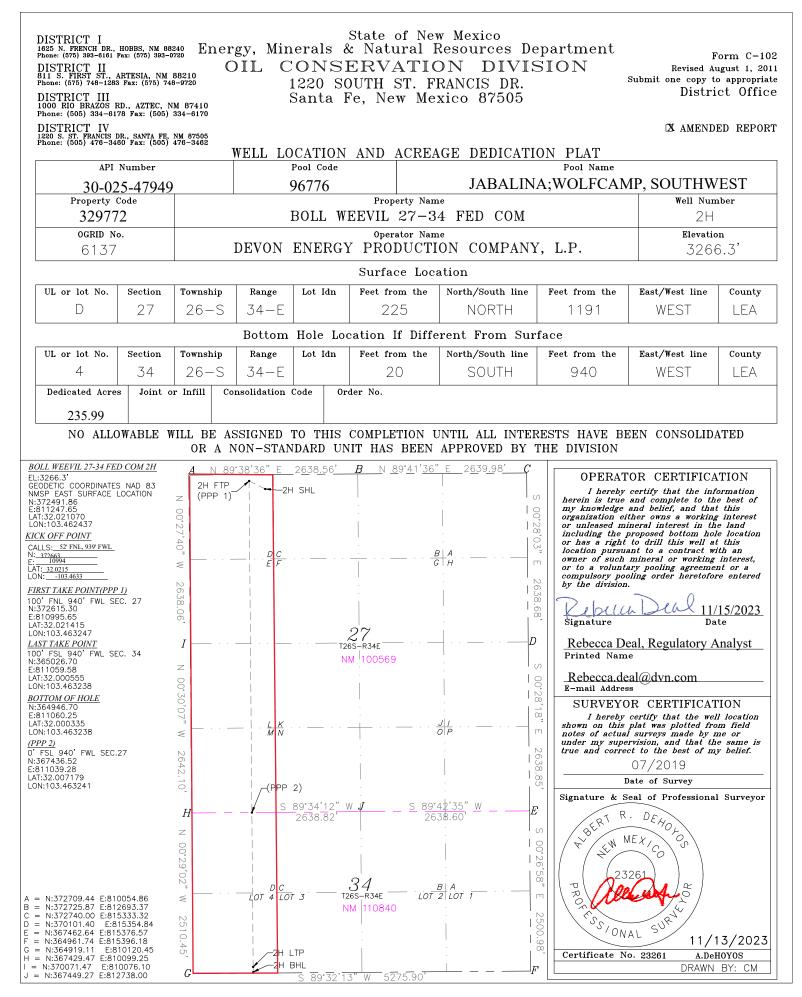
- 1 Spudder rig will move in and batch drill surface hole.
  - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).

 $^{3}$  The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.

- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
  - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

#### Attachments

X Directional Plan Other, describe



Released to Imaging: 12/20/2023 9:03:28 AM

## Received by OCD: 12/4/2023 1:21:22 PM

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As	Dril	led
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Operator Name:	Property Name:	Well Number
DEVON ENERGY PRODUCTION COMPANY, LP.	BOLL WEEVIL 27-34 FED COM	2H

## Kick Off Point (KOP)

UL	Section 27	Township 26S	Range 34E	Lot	Feet	52	From N/S FNL	Feet 939	From E/W FWL	County LEA
Latitu	Latitude							NAD		
32.0215					-	103.4633			83	

## First Take Point (FTP)

UL D	Section <b>27</b>	Township 26-S	Range <b>34-E</b>	Lot	Feet 100	From N/S NORTH	Feet 940	From E/W	County LEA
Latitude 32.021415				Longitude <b>103.46</b>	3247			NAD 83	

## Last Take Point (LTP)

UL	Section <b>34</b>	Township 26-S	Range <b>34-E</b>	Lot 4	Feet <b>100</b>	From N/S SOUTH	Feet 940	From E/W WEST	County LEA
Latitu	de				Longitud	le		NAD	
32.000555					103.	103.463238			83

Y

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

Is this well an infill well?

Ν

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

R	eceived by IOCD: 52/4/2023 1:21:22 PM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Reports
	Well Name: BOLL WEEVIL 27-34 FED COM	Well Location: T26S / R34E / SEC 27 / NWNW / 32.02107 / -103.462437	County or Parish/State: LEA / NM
	Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
	Lease Number: NMNM100569	Unit or CA Name:	Unit or CA Number:
	US Well Number: 3002547949	Well Status: Approved Application for Permit to Drill	Operator: DEVON ENERGY PRODUCTION COMPANY LP

## **Notice of Intent**

Sundry ID: 2761936

Type of Submission: Notice of Intent

Date Sundry Submitted: 11/16/2023

Date proposed operation will begin: 11/16/2023

Type of Action: APD Change Time Sundry Submitted: 10:45

**Procedure Description:** Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: BHL change from 20 FSL & 1010 FWL to 20 FSL & 940 FWL, both 34-26S-34E Dedicated acreage change from 471.92 acs to 235.99 acs. TVD/MD change from 12800'/20278' to 12850'/20345' Casing program change: Surface, Intermediate, and Production Casing size changes. Cement volume changes to accommodate casing change. Please see attached revised C-102 and drilling & directional plans.

**NOI Attachments** 

## **Procedure Description**

8.625\_32lb\_P110EC\_SPRINT\_FJ\_VST\_20231116104247.pdf 10.75\_45.50\_J55\_BTC\_20231116104246.pdf 5.5\_20lb\_P110EC\_DWC\_C\_IS\_20231116104246.pdf BOLL\_WEEVIL\_27\_34\_FED\_COM\_2H\_Directional\_Plan\_11\_16\_23\_20231116104011.pdf BOLL\_WEEVIL\_27\_34\_FED\_COM\_2H\_20231116104010.pdf BOLL\_WEEVIL\_27\_34\_FED\_COM\_2H\_C\_102\_Pooling\_20231116104012.pdf

R	eceived by OCD: 12/4/2023 1:21:22 PM Well Name: BOLL WEEVIL 27-34 FED COM	Well Location: T26S / R34E / SEC 27 / NWNW / 32.02107 / -103.462437	County or Parish/State: LeA 22 of \$1 NM
	Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
	Lease Number: NMNM100569	Unit or CA Name:	Unit or CA Number:
	<b>US Well Number:</b> 3002547949	Well Status: Approved Application for Permit to Drill	<b>Operator:</b> DEVON ENERGY PRODUCTION COMPANY LP

## 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: REBECCA DEAL** 

Signed on: NOV 16, 2023 10:40 AM

Name: DEVON ENERGY PRODUCTION COMPANY LP

State: OK

State:

Title: Regulatory Analyst

Street Address: 333 W SHERIDAN AVE

City: OKLAHOMA CITY

Phone: (303) 299-1406

Email address: REBECCA.DEAL@DVN.COM

Field

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

Zip:

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

	Devon Energy Production Company LP NMNM100569
LOCATION:	Section 27, T.26 S., R.34 E., NMPM
COUNTY:	Leave County, New Mexico
	· بو

WELL NAME & NO.:	Boll Weevil 27-34 Fed Com 2H
SURFACE HOLE FOOTAGE:	225'/N & 1191'/W
<b>BOTTOM HOLE FOOTAGE</b>	20'/S & 940'/W
ATS/API ID:	30002547949
APD ID:	10400046763
Sundry ID:	2761936

## COA

H2S	Yes 🔽		
Potash	None 🔽		
Cave/Karst	Low		
Potential			
Cave/Karst	Critical		
Potential			
Variance	🖸 None	🖸 Flex Hose	C Other
Wellhead	Conventional and Multibow	/Ⅰ ▼	
Other	□ 4 String	Capitan Reef	WIPP
		None 🔫	
Other	Pilot Hole	C Open Annulus	
	None 🔻		
Cementing	Contingency Squeeze	Echo-Meter	Primary Cement
	None -	Int 1 🔹	Squeeze
			None 🚽
Special	□ Water	COM	Unit
Requirements	Disposal/Injection		
Special	Batch Sundry		
Requirements			
Special	Break Testing	□ Offline	$\Box$ Casing
Requirements		Cementing	Clearance
Variance			

## A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Wolfcamp** formation. As a result, the Hydrogen Sulfide area must meet **43 CFR part 3170 Subpart 3176** 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 885 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 <u>8</u> <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 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.

## **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 7980' (488 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 563 sxs Class C)

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

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

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

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

- 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.
- 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 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 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 **10,000** (**10M**) psi. Variance is approved to use a **5000** (**5M**) Annular which shall be tested to **5000** (**5M**) psi.

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test.
- d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

## **D. SPECIAL REQUIREMENT (S)**

## **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR part 3170 Subpart 3171
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. <u>When the Communitization Agreement number is known, it shall also be on the sign.</u>

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

## $\boxtimes$ Eddy County

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

**BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV** (575) 361-2822

# Lea 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.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL
- All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after

installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR part 3170
  Subpart 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR**

## part 3170 Subpart 3172.

## C. DRILLING MUD

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

## D. WASTE MATERIAL AND FLUIDS

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

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

LVO 12/1/2023

#### R

Received by OCD: 12/4/2023	1:21:22 PM	Page 32 of
	UNITED STATES DEPARTMENT OF THE INTERIOR JREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021 5. Lease Serial No. NMNM100569
Do not use th	Y NOTICES AND REPORTS ON WELLS is form for proposals to drill or to re-enter an II. Use Form 3160-3 (APD) for such proposals.	6. If Indian, Allottee or Tribe Name
SUBMIT	IN TRIPLICATE - Other instructions on page 2	7. If Unit of CA/Agreement, Name and/or No.
	as Well Other	8. Well Name and No. BOLL WEEVIL 27-34 FED COM/2H
2. Name of Operator DEVON ENE	ERGY PRODUCTION COMPANY LP	9. API Well No. 3002547949
	AN AVE, OKLAHOMA CITY, 3b. Phone No. (include area code) (405) 235-3611	10. Field and Pool or Exploratory Area WC-025 G-08 S263412K/WOLFCAMP, SOUTHWEST
4. Location of Well <i>(Footage, Sec.,</i> SEC 27/T26S/R34E/NMP	T.,R.,M., or Survey Description)	11. Country or Parish, State LEA/NM
12. C	HECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NO	FICE, REPORT OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF A	CTION
Votice of Intent		duction (Start/Resume) Water Shut-Off clamation Well Integrity
Subsequent Report		complete Other nporarily Abandon
Final Abandonment Notice	Convert to Injection Plug Back Wa	ter Disposal
the proposal is to deepen direct the Bond under which the work completion of the involved ope completed. Final Abandonment is ready for final inspection.) Devon Energy Production BHL change from 20 FSL &	d Operation: Clearly state all pertinent details, including estimated starting onally or recomplete horizontally, give subsurface locations and measured will be perfonned or provide the Bond No. on file with BLM/BIA. Require rations. If the operation results in a multiple completion or recompletion in Notices must be filed only after all requirements, including reclamation, ha Company L.P. respectfully requests the following changes to the app & 1010 FWL to 20 FSL & 940 FWL, both 34-26S-34E from 471.92 acs to 235.99 acs.	and true vertical depths of all pertinent markers and zones. Attach ad subsequent reports must be filed within 30 days following a new interval, a Form 3160-4 must be filed once testing has been ave been completed and the operator has detennined that the site

TVD/MD change from 12800/20278 to 12850/20345'

Casing program change: Surface, Intermediate, and Production Casing size changes. Cement volume changes to accommodate casing change.

Please see attached revised C-102 and drilling & directional plans.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)       Regulatory Ana         REBECCA DEAL / Ph: (303) 299-1406       Title			
(Electronic Submission) Signature	Date	11/16/2	2023
THE SPACE FOR FEDE	RAL OR STATE OFIC	E USE	
Approved by			
	Title		Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject lead which would entitle the applicant to conduct operations thereon.			
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within		y to make to any c	lepartment or agency of the United States

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

## SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

*Item 13:* Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

## **Additional Information**

## Location of Well

0. SHL: NWNW / 225 FNL / 1191 FWL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.02107 / LONG: -103.462437 ( TVD: 0 feet, MD: 0 feet ) PPP: NWNW / 100 FNL / 1010 FWL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.021415 / LONG: -103.463021 ( TVD: 12461 feet, MD: 12472 feet ) BHL: SWNW / 20 FSL / 1010 FWL / TWSP: 26S / RANGE: 34E / SECTION: 34 / LAT: 32.000335 / LONG: -103.463012 ( TVD: 12800 feet, MD: 20278 feet ) Issued

## Issued on: 16 Dec. 2020 by Logan Van Gorp



## **Connection Data Sheet**

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

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

CONNECTION PROP	ERTIES	
Connection Type	Semi-Premium Inte	egral Flush
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	6.038	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

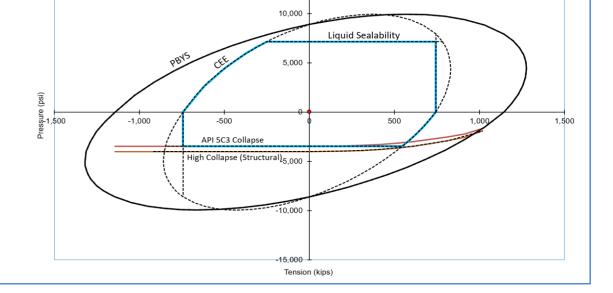
CONNECTION PERFORMANCES		
Tensile Yield Strength	744	klb
Compression Resistance	744	klb
Max. Internal Pressure	7,150	psi
Structural Collapse Resistance	4,000	psi
Max. Bending with Sealability	41	°/100ft
Max. Bending with Sealability	10	°/100ft

TORQUE VALUES		
Min. Make-up torque	15,000	ft.lb
Opt. Make-up torque	16,500	ft.lb
Max. Make-up torque	18,000	ft.lb
Max. Torque with Sealability (MTS)	TBD	ft.lb

\* 87.5% RBW

**VAM® SPRINT-FJ** is a semi-premium flush connection designed for shale applications, where maximum clearance and high tension

capacity are required for intermediate casing strings.



15,000

## Do you need help on this product? - Remember no one knows $\text{VAM}^{\circledast}$ like $\text{VAM}^{\circledast}$

- canada@vamfieldservice.com usa@vamfieldservice.com mexico@vamfieldservice.com brazil@vamfieldservice.com
- uk@vamfieldservice.com dubai@vamfieldservice.com nigeria@vamfieldservice.com angola@vamfieldservice.com

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

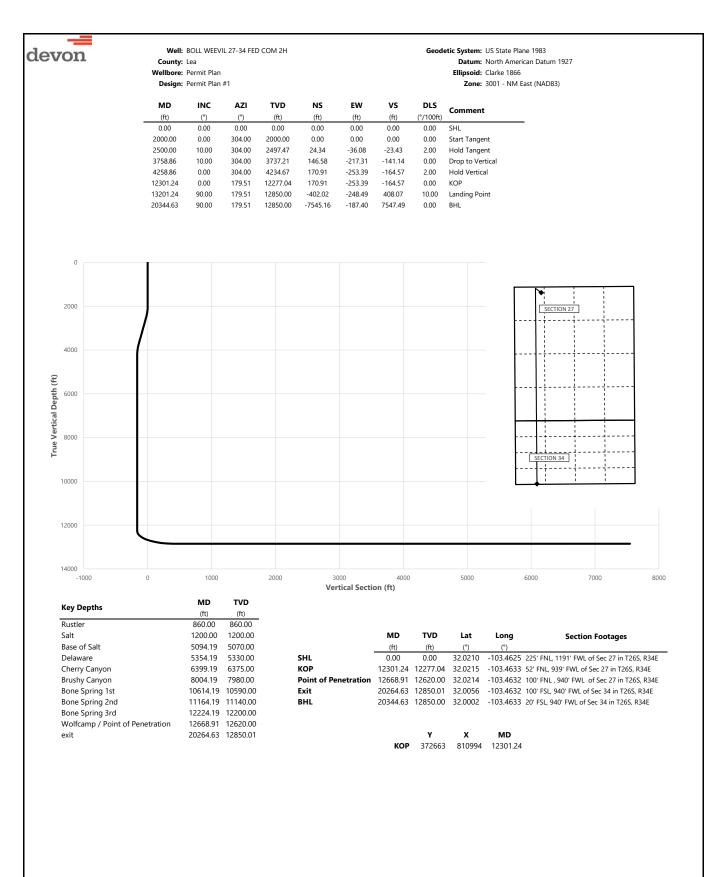






<u>10-3/4"</u>	<u>45.50#</u>	<u>0.400"</u>	<u>J-55</u>					
Dimensions (	Dimensions (Nominal)							
Outside Diameter10.750in.Wall0.400in.Inside Diameter9.950in.Drift9.875in.Weight, T&C45.500lbs/ftWeight, PE44.260lbs/ft								
<u>Performance</u>	Properties							
Collapse			2090	psi				
Internal Yield Pres	sure at Minimum Yield							
	PE		3580	psi				
	STC		3580	psi				
	BTC		3580	psi				
Yield Strength, Pip	e Body		715	1000 lbs				
Joint Strength								
	STC		493	1000 lbs				
	ВТС		796	1000 lbs				
	BTC Special Clearance (	11.25" OD Cplg)	506	1000 lbs				

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



		.المw		/IL 27-34 FED	сом 2н				Geodetic System: US State Plane 1983	
devon		County:		/IL 27-54 FED					Datum: North American Datum 1927	
			Permit Plan						Ellipsoid: Clarke 1866	
		Design:	Permit Plan	1#1					<b>Zone:</b> 3001 - NM East (NAD83)	
	MD (ft)	INC	AZI	TVD	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment	
-	0.00	(°) 0.00	(°) 0.00	(ft) 0.00	0.00	(ft) 0.00	(ft) 0.00	0.00	SHL	
	100.00	0.00	304.00	100.00	0.00	0.00	0.00	0.00		
	200.00	0.00	304.00	200.00	0.00	0.00	0.00	0.00		
	300.00 400.00	0.00 0.00	304.00 304.00	300.00 400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00		
	500.00	0.00	304.00	500.00	0.00	0.00	0.00	0.00		
	600.00	0.00	304.00	600.00	0.00	0.00	0.00	0.00		
	700.00	0.00	304.00	700.00	0.00	0.00	0.00	0.00		
	800.00	0.00	304.00	800.00	0.00	0.00	0.00	0.00	Ductlor	
	860.00 900.00	0.00 0.00	304.00 304.00	860.00 900.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	Rustler	
	1000.00	0.00	304.00	1000.00	0.00	0.00	0.00	0.00		
	1100.00	0.00	304.00	1100.00	0.00	0.00	0.00	0.00		
	1200.00	0.00	304.00	1200.00	0.00	0.00	0.00	0.00	Salt,	
	1300.00	0.00	304.00	1300.00	0.00	0.00	0.00	0.00		
	1400.00 1500.00	0.00 0.00	304.00 304.00	1400.00 1500.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00		
	1600.00	0.00	304.00	1600.00	0.00	0.00	0.00	0.00		
	1700.00	0.00	304.00	1700.00	0.00	0.00	0.00	0.00		
	1800.00	0.00	304.00	1800.00	0.00	0.00	0.00	0.00		
	1900.00 2000.00	0.00 0.00	304.00 304.00	1900.00 2000.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	Start Tangent	
	2000.00	2.00	304.00	2000.00	0.00	-1.45	-0.94	2.00	Start rangent	
	2200.00	4.00	304.00	2199.84	3.90	-5.79	-3.76	2.00		
	2300.00	6.00	304.00	2299.45	8.78	-13.01	-8.45	2.00		
	2400.00	8.00	304.00	2398.70	15.59	-23.11	-15.01	2.00		
	2500.00 2600.00	10.00 10.00	304.00 304.00	2497.47 2595.95	24.34 34.05	-36.08 -50.48	-23.43 -32.78	2.00 0.00	Hold Tangent	
	2700.00	10.00	304.00	2694.43	43.76	-64.87	-42.13	0.00		
	2800.00	10.00	304.00	2792.91	53.47	-79.27	-51.48	0.00		
	2900.00	10.00	304.00	2891.39	63.18	-93.67	-60.83	0.00		
	3000.00	10.00	304.00	2989.87	72.89	-108.06	-70.18	0.00		
	3100.00 3200.00	10.00 10.00	304.00 304.00	3088.35 3186.83	82.60 92.31	-122.46 -136.85	-79.53 -88.88	0.00 0.00		
	3300.00	10.00	304.00	3285.31	102.02	-151.25	-98.23	0.00		
	3400.00	10.00	304.00	3383.79	111.73	-165.65	-107.58	0.00		
	3500.00	10.00	304.00	3482.27	121.44	-180.04	-116.93	0.00		
	3600.00	10.00	304.00	3580.75	131.15	-194.44	-126.28	0.00		
	3700.00 3758.86	10.00 10.00	304.00 304.00	3679.23 3737.21	140.86 146.58	-208.84 -217.31	-135.63 -141.14	0.00 0.00	Drop to Vertical	
	3800.00	9.18	304.00	3777.77	150.41	-222.99	-144.83	2.00		
	3900.00	7.18	304.00	3876.74	158.36	-234.78	-152.48	2.00		
	4000.00	5.18	304.00	3976.16	164.38	-243.70	-158.28	2.00		
	4100.00 4200.00	3.18 1.18	304.00 304.00	4075.89 4175.81	168.45 170.58	-249.74 -252.89	-162.20 -164.24	2.00 2.00		
	4200.00 4258.86	0.00	304.00 304.00	4175.81 4234.67	170.58	-252.89	-164.24 -164.57	2.00	Hold Vertical	
	4300.00	0.00	179.51	4275.81	170.91	-253.39	-164.57	0.00		
	4400.00	0.00	179.51	4375.81	170.91	-253.39	-164.57	0.00		
	4500.00	0.00	179.51	4475.81	170.91	-253.39	-164.57	0.00		
	4600.00 4700.00	0.00 0.00	179.51 179.51	4575.81 4675.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00		
	4800.00	0.00	179.51	4075.81	170.91	-253.39	-164.57	0.00		
	4900.00	0.00	179.51	4875.81	170.91	-253.39	-164.57	0.00		
	5000.00	0.00	179.51	4975.81	170.91	-253.39	-164.57	0.00		
	5094.19	0.00	179.51 179.51	5070.00	170.91	-253.39	-164.57	0.00	Base of Salt	
	5100.00 5200.00	0.00 0.00	179.51 179.51	5075.81 5175.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00		
	5300.00	0.00	179.51	5275.81	170.91	-253.39	-164.57	0.00		
	5354.19	0.00	179.51	5330.00	170.91	-253.39	-164.57	0.00	Delaware	
	5400.00	0.00	179.51	5375.81	170.91	-253.39	-164.57	0.00		
	5500.00	0.00	179.51	5475.81	170.91	-253.39	-164.57	0.00		
	5600.00 5700.00	0.00 0.00	179.51 179.51	5575.81 5675.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00		
	5700.00 5800.00	0.00	179.51	5775.81	170.91	-253.39	-164.57 -164.57	0.00		
	5900.00	0.00	179.51	5875.81	170.91	-253.39	-164.57	0.00		
	6000.00	0.00	179.51	5975.81	170.91	-253.39	-164.57	0.00		
	6100.00	0.00	179.51	6075.81	170.91	-253.39	-164.57	0.00		
	6200.00 6300.00	0.00 0.00	179.51 179.51	6175.81 6275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00		
	6300.00 6399.19	0.00	179.51	6375.00	170.91	-253.39	-164.57 -164.57	0.00	Cherry Canyon	

. —		MA-II		/11 27 24 550	COM 211				Geodetic System: LIS State Plane 1092
devon		Well: County:		/IL 27-34 FED	COIVI 2H				Geodetic System: US State Plane 1983 Datum: North American Datum 1927
			Permit Plar	า					Ellipsoid: Clarke 1866
		Design:	Permit Plar	า #1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	
	(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
-	6400.00	0.00	179.51	6375.81	170.91	-253.39	-164.57	0.00	
	6500.00	0.00	179.51	6475.81	170.91	-253.39	-164.57	0.00	
	6600.00 6700.00	0.00 0.00	179.51 179.51	6575.81 6675.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	6800.00	0.00	179.51	6775.81	170.91	-253.39	-164.57	0.00	
	6900.00	0.00	179.51	6875.81	170.91	-253.39	-164.57	0.00	
	7000.00	0.00	179.51	6975.81	170.91	-253.39	-164.57	0.00	
	7100.00	0.00	179.51	7075.81	170.91	-253.39	-164.57	0.00	
	7200.00 7300.00	0.00 0.00	179.51 179.51	7175.81 7275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	7400.00	0.00	179.51	7375.81	170.91	-253.39	-164.57	0.00	
	7500.00	0.00	179.51	7475.81	170.91	-253.39	-164.57	0.00	
	7600.00	0.00	179.51	7575.81	170.91	-253.39	-164.57	0.00	
	7700.00 7800.00	0.00 0.00	179.51 179.51	7675.81 7775.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	7900.00	0.00	179.51	7875.81	170.91	-253.39	-164.57	0.00	
	8000.00	0.00	179.51	7975.81	170.91	-253.39	-164.57	0.00	
	8004.19	0.00	179.51	7980.00	170.91	-253.39	-164.57	0.00	Brushy Canyon
	8100.00 8200.00	0.00	179.51 179.51	8075.81 8175.81	170.91 170.91	-253.39 -253.39	-164.57	0.00 0.00	
	8200.00	0.00 0.00	179.51	8275.81	170.91	-253.39	-164.57 -164.57	0.00	
	8400.00	0.00	179.51	8375.81	170.91	-253.39	-164.57	0.00	
	8500.00	0.00	179.51	8475.81	170.91	-253.39	-164.57	0.00	
	8600.00	0.00	179.51	8575.81	170.91	-253.39	-164.57	0.00	
	8700.00 8800.00	0.00 0.00	179.51 179.51	8675.81 8775.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	8900.00	0.00	179.51	8875.81	170.91	-253.39	-164.57	0.00	
	9000.00	0.00	179.51	8975.81	170.91	-253.39	-164.57	0.00	
	9100.00	0.00	179.51	9075.81	170.91	-253.39	-164.57	0.00	
	9200.00 9300.00	0.00 0.00	179.51 179.51	9175.81 9275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	9400.00	0.00	179.51	9375.81	170.91	-253.39	-164.57	0.00	
	9500.00	0.00	179.51	9475.81	170.91	-253.39	-164.57	0.00	
	9600.00	0.00	179.51	9575.81	170.91	-253.39	-164.57	0.00	
	9700.00 9800.00	0.00 0.00	179.51 179.51	9675.81 9775.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	9900.00	0.00	179.51	9875.81	170.91	-253.39	-164.57	0.00	
	10000.00	0.00	179.51	9975.81	170.91	-253.39	-164.57	0.00	
	10100.00	0.00	179.51	10075.81	170.91	-253.39	-164.57	0.00	
	10200.00 10300.00	0.00 0.00	179.51 179.51	10175.81 10275.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	10400.00	0.00	179.51	10275.81	170.91	-253.39	-164.57	0.00	
	10500.00	0.00	179.51	10475.81	170.91	-253.39	-164.57	0.00	
	10600.00	0.00	179.51	10575.81	170.91	-253.39	-164.57	0.00	
	10614.19 10700.00	0.00 0.00	179.51 179.51	10590.00 10675.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	Bone Spring 1st
	10800.00	0.00	179.51	10775.81	170.91	-253.39	-164.57	0.00	
	10900.00	0.00	179.51	10875.81	170.91	-253.39	-164.57	0.00	
	11000.00	0.00	179.51	10975.81	170.91	-253.39	-164.57	0.00	
	11100.00 11164.19	0.00 0.00	179.51 179.51	11075.81 11140.00	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	Bone Spring 2nd
	11200.00	0.00	179.51	11175.81	170.91	-253.39	-164.57	0.00	bole sping zha
	11300.00	0.00	179.51	11275.81	170.91	-253.39	-164.57	0.00	
	11400.00	0.00	179.51	11375.81	170.91	-253.39	-164.57	0.00	
	11500.00 11600.00	0.00 0.00	179.51 179.51	11475.81 11575.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	11700.00	0.00	179.51	11675.81	170.91	-253.39	-164.57	0.00	
	11800.00	0.00	179.51	11775.81	170.91	-253.39	-164.57	0.00	
	11900.00	0.00	179.51	11875.81	170.91	-253.39	-164.57	0.00	
	12000.00	0.00	179.51	11975.81	170.91	-253.39	-164.57	0.00	
	12100.00 12200.00	0.00 0.00	179.51 179.51	12075.81 12175.81	170.91 170.91	-253.39 -253.39	-164.57 -164.57	0.00 0.00	
	12224.19	0.00	179.51	12200.00	170.91	-253.39	-164.57	0.00	Bone Spring 3rd
	12300.00	0.00	179.51	12275.81	170.91	-253.39	-164.57	0.00	
	12301.24	0.00	179.51	12277.04	170.91	-253.39	-164.57	0.00	КОР
	12400.00 12500.00	9.88 19.88	179.51 179.51	12375.32 12471.84	162.42 136.78	-253.32 -253.10	-156.08 -130.46	10.00 10.00	
	12600.00	29.88	179.51	12562.45	94.77	-252.74	-88.47	10.00	
	12668.91	36.77	179.51	12620.00	56.94	-252.42	-50.65	10.00	Wolfcamp / Point of Penetration
	12700.00	39.88	179.51	12644.38	37.67	-252.25	-31.39	10.00	

I. —		Wall		/IL 27-34 FED	COM 2H				Geodetic System: US State Plane 1983
devon		County:		, 12 21 - 34 FEU	20171 217				Datum: North American Datum 1927
			Permit Plar	ı					Ellipsoid: Clarke 1866
		Design:	Permit Plar	n #1					Zone: 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	
	(ft)	(°)	(°)	(ft)	(ft)	<b>E VV</b> (ft)	<b>V3</b> (ft)	(°/100ft)	Comment
-	12800.00	49.88	179.51	12715.16	-32.80	-251.65	39.04	10.00	
	12900.00	59.88	179.51	12772.62	-114.48	-250.95	120.68	10.00	
	13000.00 13100.00	69.88	179.51	12815.02	-204.91	-250.18	211.05	10.00	
	13100.00	79.88 89.88	179.51 179.51	12841.08 12850.00	-301.32 -400.79	-249.35 -248.50	307.41 406.83	10.00 10.00	
	13201.24	90.00	179.51	12850.00	-402.02	-248.49	408.07	10.00	Landing Point
	13300.00	90.00	179.51	12850.00	-500.78	-247.65	506.78	0.00	
	13400.00	90.00	179.51	12850.00	-600.78	-246.79	606.72	0.00	
	13500.00 13600.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-700.78 -800.77	-245.94 -245.08	706.67 806.61	0.00 0.00	
	13700.00	90.00	179.51	12850.00	-900.77	-244.22	906.55	0.00	
	13800.00	90.00	179.51	12850.00	-1000.76	-243.37	1006.50	0.00	
	13900.00	90.00	179.51	12850.00	-1100.76	-242.51	1106.44	0.00	
	14000.00	90.00 90.00	179.51	12850.00 12850.00	-1200.76 -1300.75	-241.66 -240.80	1206.39	0.00	
	14100.00 14200.00	90.00 90.00	179.51 179.51	12850.00	-1400.75	-240.80	1306.33 1406.28	0.00 0.00	
	14300.00	90.00	179.51	12850.00	-1500.75	-239.09	1506.22	0.00	
	14400.00	90.00	179.51	12850.00	-1600.74	-238.24	1606.16	0.00	
	14500.00	90.00	179.51	12850.00	-1700.74	-237.38	1706.11	0.00	
	14600.00 14700.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-1800.74 -1900.73	-236.53 -235.67	1806.05 1906.00	0.00 0.00	
	14800.00	90.00	179.51	12850.00	-2000.73	-234.81	2005.94	0.00	
	14900.00	90.00	179.51	12850.00	-2100.72	-233.96	2105.89	0.00	
	15000.00	90.00	179.51	12850.00	-2200.72	-233.10	2205.83	0.00	
	15100.00	90.00	179.51	12850.00	-2300.72	-232.25	2305.77	0.00	
	15200.00 15300.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-2400.71 -2500.71	-231.39 -230.54	2405.72 2505.66	0.00 0.00	
	15400.00	90.00	179.51	12850.00	-2600.71	-229.68	2605.61	0.00	
	15500.00	90.00	179.51	12850.00	-2700.70	-228.83	2705.55	0.00	
	15600.00	90.00	179.51	12850.00	-2800.70	-227.97	2805.50	0.00	
	15700.00 15800.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-2900.70 -3000.69	-227.11 -226.26	2905.44 3005.38	0.00 0.00	
	15900.00	90.00	179.51	12850.00	-3100.69	-225.40	3105.33	0.00	
	16000.00	90.00	179.51	12850.00	-3200.68	-224.55	3205.27	0.00	
	16100.00	90.00	179.51	12850.00	-3300.68	-223.69	3305.22	0.00	
	16200.00 16300.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-3400.68 -3500.67	-222.84 -221.98	3405.16 3505.11	0.00 0.00	
	16400.00	90.00	179.51	12850.00	-3600.67	-221.13	3605.05	0.00	
	16500.00	90.00	179.51	12850.00	-3700.67	-220.27	3704.99	0.00	
	16600.00	90.00	179.51	12850.00	-3800.66	-219.42	3804.94	0.00	
	16700.00 16800.00	90.00 90.00	179.51 179.51	12850.00 12850.00	-3900.66 -4000.65	-218.56 -217.70	3904.88 4004.83	0.00 0.00	
	16900.00	90.00	179.51	12850.00	-4100.65	-216.85	4104.77	0.00	
	17000.00	90.00	179.51	12850.01	-4200.65	-215.99	4204.72	0.00	
	17100.00	90.00	179.51	12850.01	-4300.64	-215.14	4304.66	0.00	
	17200.00 17300.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-4400.64 -4500.64	-214.28 -213.43	4404.60 4504.55	0.00 0.00	
	17400.00	90.00	179.51	12850.01	-4600.63	-212.57	4604.49	0.00	
	17500.00	90.00	179.51	12850.01	-4700.63	-211.72	4704.44	0.00	
	17600.00	90.00	179.51	12850.01	-4800.63	-210.86	4804.38	0.00	
	17700.00 17800.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-4900.62 -5000.62	-210.01 -209.15	4904.33 5004.27	0.00 0.00	
	17900.00	90.00	179.51	12850.01	-5100.61	-208.29	5104.21	0.00	
	18000.00	90.00	179.51	12850.01	-5200.61	-207.44	5204.16	0.00	
	18100.00	90.00	179.51	12850.01	-5300.61	-206.58	5304.10	0.00	
	18200.00 18300.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-5400.60 -5500.60	-205.73 -204.87	5404.05 5503.99	0.00 0.00	
	18400.00	90.00	179.51	12850.01	-5600.60	-204.02	5603.94	0.00	
	18500.00	90.00	179.51	12850.01	-5700.59	-203.16	5703.88	0.00	
	18600.00	90.00	179.51	12850.01	-5800.59	-202.31	5803.82	0.00	
	18700.00	90.00	179.51	12850.01	-5900.59	-201.45	5903.77	0.00	
	18800.00 18900.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-6000.58 -6100.58	-200.60 -199.74	6003.71 6103.66	0.00 0.00	
	19000.00	90.00	179.51	12850.01	-6200.57	-198.88	6203.60	0.00	
	19100.00	90.00	179.51	12850.01	-6300.57	-198.03	6303.55	0.00	
	19200.00	90.00	179.51	12850.01	-6400.57	-197.17	6403.49	0.00	
	19300.00 19400.00	90.00 90.00	179.51 179.51	12850.01 12850.01	-6500.56 -6600.56	-196.32 -195.46	6503.43 6603.38	0.00 0.00	
	19400.00	90.00	179.51	12850.01	-6700.56	-195.46	6703.32	0.00	
	19600.00	90.00	179.51	12850.01	-6800.55	-193.75	6803.27	0.00	

devon		County: Wellbore:			COM 2H		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)		_	
	19700.00	90.00	179.51	12850.01	-6900.55	-192.90	6903.21	0.00		-	
	19800.00	90.00	179.51	12850.01	-7000.55	-192.04	7003.16	0.00			
	19900.00	90.00	179.51	12850.01	-7100.54	-191.19	7103.10	0.00			
	20000.00	90.00	179.51	12850.01	-7200.54	-190.33	7203.04	0.00			
	20100.00	90.00	179.51	12850.01	-7300.53	-189.47	7302.99	0.00			
	20200.00	90.00	179.51	12850.01	-7400.53	-188.62	7402.93	0.00			
	20264.63	90.00	179.51	12850.01	-7465.16	-188.07	7467.53	0.00	exit		
	20300.00	90.00	179.51	12850.01	-7500.53	-187.76	7502.88	0.00			
	20344.63	90.00	179.51	12850.00	-7545.16	-187.40	7547.49	0.00	BHL		

	County: L Wellbore: F	BOLL WEEVIL ea Permit Plan Permit Plan #	Geodetic System: US State Plane 1983 Datum: North American Datum 1927 Ellipsoid: Clarke 1866 Zone: 3001 - NM East (NAD83)						
MD (ft)	INC (°)	<b>AZI</b> (°)	TVD (ft)	NS (ft)	EW (ft)	<b>VS</b> (ft)	<b>DLS</b> (°/100ft)	Comment	
 ()				,	(	(14)	()		

## 1. Geologic Formations

TVD of target	12850	Pilot hole depth	N/A
MD at TD:	20345	Deepest expected fresh water	

Basin

Dushi	Durith	Water/Mineral	
	Depth		
Formation	(TVD)	<b>Bearing/Target</b>	Hazards*
	from KB	Zone?	
Rustler	860		
Salt	1200		
Base of Salt	5070		
Delaware	5330		
Cherry Canyon	6375		
Brushy Canyon	7980		
Bone Spring 1st	10590		
Bone Spring 2nd	11140		
Bone Spring 3rd	12200		
Wolfcamp	12620		

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

	Wt				Casing	Interval	Casing Interval	
Hole Size	Csg. Size	(PPF)	Grade	Conn	From (MD)	To (MD)	From (TVD)	To (TVD)
14 3/4	10 3/4	45 1/2	J-55	BTC	0	885	0	885
9 7/8	8 5/8	32	P110	Sprint FJ	0	12201	0	12201
7 7/8	5 1/2	20	P110	DWC / C-IS+	0	20345	0	12850

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

•All casing strings will be tested in accordance with 43 CFR 3172. Must have table for contingency casing.

## 3. Cementing Program (Primary Design)

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	# Sks	тос	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	537	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	563	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
Int I	488	8004	13.2	1.44	Tail: Class H / C + additives
Production	117	10301	9	3.27	Lead: Class H /C + additives
Production	1065	12301	13.2	1.44	Tail: Class H / C + additives

Casing String	% Excess
Surface	50%
Intermediate 1	30%
Prod	10%

.

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	Туре		~	Tested to:
			Anı	Annular		50% of rated working pressure
Int 1	13-5/8"	5M		d Ram	Х	
Int I	15 5/0	5101		e Ram		5M
			Doub	le Ram	Х	5101
			Other*			
		10M	Annular (5M)		Х	100% of rated working pressure
Production	13-5/8"		Blind Ram		Х	
Tioduction		10101	Pipe Ram			10M
			Double Ram		Х	10101
			Other*			
			Annul	ar (5M)		
			Bline	d Ram		
			Pipe	Pipe Ram		
			Double Ram			
			Other*			
N A variance is requested for	the use of a	a diverter or	the surface	casing. See	attached for	schematic.
Y A variance is requested to r	un a 5 M ai	nnular on a	10M system	l		

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

## 5. Mud Program (Three String Design)

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

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

## 7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	7016
Abnormal temperature	No

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

Hydrogren S	Hydrogren Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations							
greater than	greater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176. If Hydrogen Sulfide is encountered							
measured values and formations will be provided to the BLM.								
Ν	H2S is present							

Y H2S plan attached.

### 8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

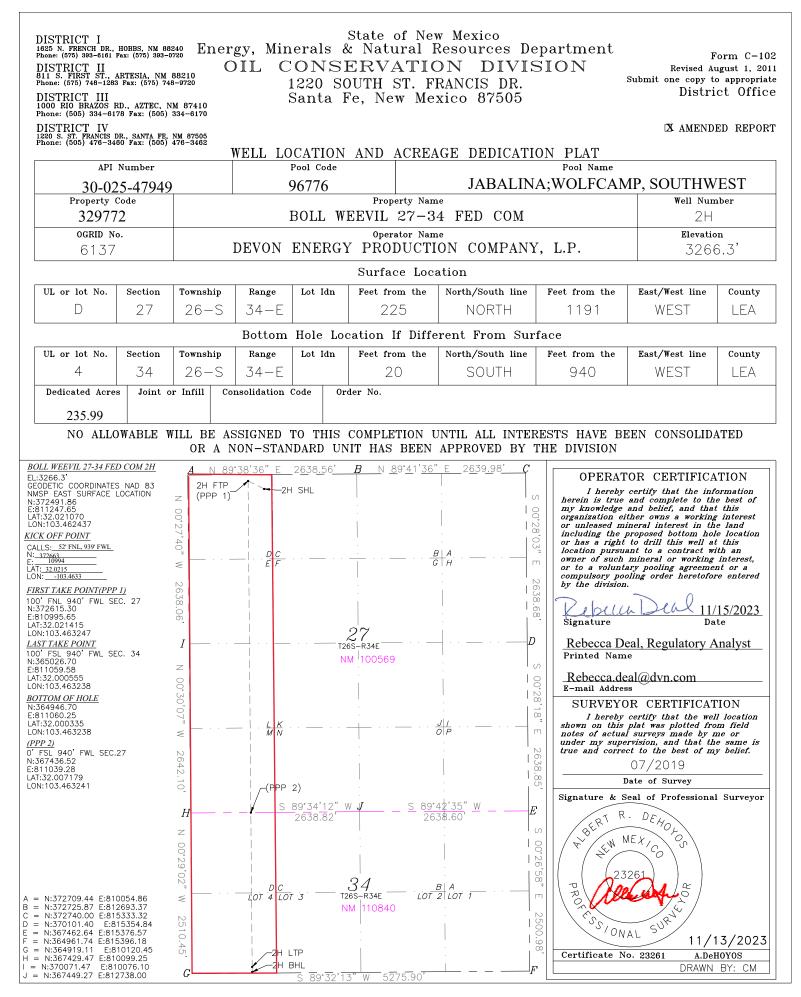
- 1 Spudder rig will move in and batch drill surface hole.
  - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).

 $^{3}$  The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.

- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. A that time an approved BOP stack will be nippled up and tested on the wellhead before drilling operations commences on each well.
  - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

#### Attachments

X Directional Plan Other, describe



Released to Imaging: 12/20/2023 9:03:28 AM

### Received by OCD: 12/4/2023 1:21:22 PM

I	r	l	t	e	ľ	l	t

x As Drilled
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API #			
Operator Name: DEVON ENERGY P COMPANY, LP.	RODUCTION	Property Name: BOLL WEEVIL 27-34 FED COM	Well Number 2H

# Kick Off Point (KOP)

UL	Section 27	Township 26S	Range 34E	Lot	Feet 52	From N/S FNL	Feet 939	From E/W FWL	County LEA
Latitude				Longitude				NAD	
32.0215				-103.4633			83		

# First Take Point (FTP)

UL D	Section <b>27</b>	Township 26-S	Range <b>34-E</b>	Lot	Feet 100	From N/S NORTH	Feet 940	From E/W	County LEA
Latitude 32.021415			Longitude <b>103.46</b>	3247	NAD 83				

# Last Take Point (LTP)

UL	Section <b>34</b>	Township 26-S	Range <b>34-E</b>	Lot 4	Feet 100	From N/S SOUTH	Feet 940	From E/W WEST	County LEA
Latitude				Longitud	Longitude			NAD	
32.000555			103.463238			83			

Y

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

Is this well an infill well?

N	

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

#### Boll Weevil 27-34 Fed Com 2H

Commo t		surface csg in a	14 3/4	inch hole.		Design				Surface		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	45.50		j 55	btc	17.76	5.05	0.54	885	9	0.90	9.54	40,268
"B"				btc				0				0
	w	/8.4#/g mud, 30min Sfc Csg Test	psig: 1,500	Tail Cmt	does not	circ to sfc.	Totals:	885				40,268
Comparison of	f Proposed	to Minimum Required Cem	ent 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	537	773	492	57	9.00	3971	5M				1.50
Burst Frac Grad	ient(s) for Se	egment(s) A, B = , b All > 0.	70 OK									
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		р 110	vam sprint fj	1.91	0.6	1.02	12,201	1	1.71	1.01	390,432
"B"								0				0
	w	/8.4#/g mud, 30min Sfc Csg Test	psig: -319				Totals:	12,201				390,432
		The cement	volume(s) are inten	ded to achieve a top of	0	ft from su	irface or a	885				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
9 7/8	0.1261	488	703	1546	-55	10.50	4182	5M				0.61
D V Tool(s):			7980				sum of sx	<u>Σ CuFt</u>				Σ%excess
by stage % :		32	28				1051	1998				29
Tail cmt 5 1/2		casing inside the	8 5/8			Design Fa	ctors			Prod 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse		Length	B@s	a-B	a-C	Weight
"A"		Glaue			30111		Burst	Longin				
	20.00	Glade	p 110	dwc/c is+	2.84	1.72	2.05	20,345	2	3.43	2.89	406,900
"B"	20.00	Grade	p 110	dwc/c is+				•	<u> </u>		2.89	406,900 <b>0</b>
<b>"B"</b> "C"	20.00	Graue	p 110	dwc/c is+				20,345	<u> </u>		2.89	,
-	20.00	Grade	p 110	dwc/c is+				20,345 <b>0</b>	<u> </u>		2.89	0
- "C"		/8.4#/g mud, 30min Sfc Csg Test	•					20,345 <b>0</b> 0	<u> </u>		2.89	<b>0</b> 0
"C" "D"		/8.4#/g mud, 30min Sfc Csg Test	psig: 2,827 volume(s) are inten				2.05 Totals:	20,345 0 0 0	<u> </u>			0 0 0
"C" "D" Hole	w, Annular	/8.4#/g mud, 30min Sfc Csg Test	psig: 2,827 volume(s) are inten 1 Stage	0 ded to achieve a top of Min	2.84 12001 1 Stage	1.72 ft from su Drilling	2.05 Totals: Irface or a Calc	20,345 0 0 20,345 200 Req'd	<u> </u>			0 0 406,900 overlap. Min Dist
"C" "D" Hole Size	w. Annular Volume	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt	0 ded to achieve a top of Min Cu Ft	2.84 12001 1 Stage % Excess	1.72 ft from su Drilling Mud Wt	2.05 Totals: Irface or a	20,345 0 0 20,345 200	<u> </u>			0 0 406,900 overlap. Min Dist Hole-Cplg
"C" "D" Hole Size 7 7/8	w, Annular Volume 0.1733	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage	psig: 2,827 volume(s) are inten 1 Stage	0 ded to achieve a top of Min	2.84 12001 1 Stage	1.72 ft from su Drilling	2.05 Totals: Irface or a Calc	20,345 0 0 20,345 200 Req'd	<u> </u>			0 0 406,900 overlap.
"C" "D" Hole Size 7 7/8	w, Annular Volume 0.1733	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt	0 ded to achieve a top of Min Cu Ft	2.84 12001 1 Stage % Excess	1.72 ft from su Drilling Mud Wt	2.05 Totals: Irface or a Calc	20,345 0 0 20,345 200 Req'd	<u> </u>			0 0 406,900 overlap. Min Dist Hole-Cplg
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt	w, Annular Volume 0.1733	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt	0 ded to achieve a top of Min Cu Ft	2.84 12001 1 Stage % Excess	1.72 ft from su Drilling Mud Wt	2.05 Totals: Irface or a Calc	20,345 0 0 20,345 200 Req'd	<u> </u>			0 0 406,900 overlap. Min Dist Hole-Cplg
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt	w, Annular Volume 0.1733	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	: psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916	0 ded to achieve a top of Min Cu Ft	2.84 12001 1 Stage % Excess	1.72 ft from su Drilling Mud Wt 10.50	2.05 Totals: Irface or a Calc MASP	20,345 0 0 20,345 200 Req'd	2	3.43		0 0 406,900 overlap. Min Dist Hole-Cplg
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt #N/A 0	w. Annular Volume 0.1733 tyld > 1.35	/8.4#/g mud, 30min Sfc Csg Test The cement v 1 Stage Cmt Sx 1182	: psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt	0 ded to achieve a top of Min Cu Ft 1446	2.84 12001 1 Stage % Excess 32	1.72 ft from su Drilling Mud Wt 10.50 Design	2.05 Totals: Inface or a Calc MASP Factors	20,345 0 0 20,345 200 Req'd BOPE	2	3.43	ing>	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt #N/A 0 Segment	w, Annular Volume 0.1733	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx	: psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916	0 ded to achieve a top of Min Cu Ft 1446 Coupling	2.84 12001 1 Stage % Excess	1.72 ft from su Drilling Mud Wt 10.50	2.05 Totals: Irface or a Calc MASP	20,345 0 0 20,345 200 Req'd BOPE	2	3.43		0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt #N/A 0 Segment "A"	w. Annular Volume 0.1733 tyld > 1.35	/8.4#/g mud, 30min Sfc Csg Test The cement v 1 Stage Cmt Sx 1182	: psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916	0 ded to achieve a top of Min Cu Ft 1446 Coupling 0.00	2.84 12001 1 Stage % Excess 32	1.72 ft from su Drilling Mud Wt 10.50 Design	2.05 Totals: Inface or a Calc MASP Factors	20,345 0 0 20,345 200 Req'd BOPE	2	3.43	ing>	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt #N/A 0 Segment	w Annular Volume 0.1733 tyld > 1.35 #/ft	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1182 Grade	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916 5 1/2	0 ded to achieve a top of Min Cu Ft 1446 Coupling	2.84 12001 1 Stage % Excess 32	1.72 ft from su Drilling Mud Wt 10.50 Design	2.05 Totals: Irface or a Calc MASP Factors Burst	20,345 0 0 20,345 200 Req'd BOPE	2	3.43	ing>	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight 0 0
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt #N/A 0 Segment "A"	w Annular Volume 0.1733 tyld > 1.35 #/ft	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1182 Grade /8.4#/g mud, 30min Sfc Csg Test	: psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916 5 1/2	0 ded to achieve a top of Min Cu Ft 1446 Coupling 0.00 0.00	2.84 12001 1 Stage % Excess 32 #N/A	1.72 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse	2.05 Totals: Inface or a Calc MASP Factors Burst Totals:	20,345 0 0 20,345 200 Req'd BOPE	2	3.43	ing> a-C	0 0 406,900 overlap. Min Dist Hole-Cply 0.79 Weight 0 0 0
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt #N/A 0 Segment "A" "B"	w, Annular Volume 0.1733 tyld > 1.35 tyld > 1.35 tyld > 1.35 tyld > 1.45 tyld	/8.4#/g mud, 30min Sfc Csg Test The cement 1 Stage Cmt Sx 1182 Grade /8.4#/g mud, 30min Sfc Csg Test Cmt vol ci	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916 5 1/2	0 ded to achieve a top of Min Cu Ft 1446 Coupling 0.00 0.00 his csg, TOC intended	2.84 12001 1 Stage % Excess 32 #N/A #N/A	1.72 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse	2.05 Totals: Inface or a Calc MASP Factors Burst Totals: Inface or a	20,345 0 0 20,345 200 Req'd BOPE	2	3.43	ing> a-C	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight 0 0 0 0 0 0 0 0 0 0 0 0
"C" "D" Hole Size 7 7/8 Class 'C' tail cm (Lass 'C' tail cm "A" "A" "B"	w, Annular Volume 0.1733 tyld > 1.35 tyld > 1.35 #/ft w, Annular	/8.4#/g mud, 30min Sfc Csg Test The cement 1 1 Stage Cmt Sx 1182 Grade /8.4#/g mud, 30min Sfc Csg Test Cmt vol ci 1 Stage	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916 5 1/2 spsig: alc below includes 1 1 Stage	0 ded to achieve a top of Min Cu Ft 1446 Coupling 0.00 0.00 0.00 his csg, TOC intended Min	2.84 12001 1 Stage % Excess 32 #N/A 1 Stage	1.72 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse ft from su Drilling	2.05 Totals: Inface or a Calc MASP Factors Burst Totals: Inface or a Calc	20,345 0 0 20,345 200 Req'd BOPE Length 0 0 #N/A Req'd	2	3.43	ing> a-C	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight 0 0 0 0 overlap. Min Dist
"C" "D" Hole Size 7 7/8 Class 'C' tail cmt diss 'C' tail cmt "A" "B" Hole Size	w, Annular Volume 0.1733 tyld > 1.35 tyld > 1.35 tyld > 1.35 tyld > 1.45 tyld	/8.4#/g mud, 30min Sfc Csg Test The cement of 1 Stage Cmt Sx 1182 Grade /8.4#/g mud, 30min Sfc Csg Test Cmt vol ca 1 Stage Cmt Sx	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916 5 1/2 5 1/2	0 ded to achieve a top of Min Cu Ft 1446 Coupling 0.00 0.00 0.00 his csg, TOC intended Min Cu Ft	2.84 12001 1 Stage % Excess 32 #N/A 1 Stage % Excess	1.72 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse	2.05 Totals: Inface or a Calc MASP Factors Burst Totals: Inface or a	20,345 0 0 20,345 200 Req'd BOPE	2	3.43	ing> a-C	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight 0 0 0 0 0 0 0 0 0 0 0 0
"C" "D" Hole Size 7 7/8 Class 'C' tail cm #N/A 0 Segment "A" "B" Hole	w, Annular Volume 0.1733 tyld > 1.35 tyld > 1.35 #/ft w, Annular	/8.4#/g mud, 30min Sfc Csg Test The cement 1 1 Stage Cmt Sx 1182 Grade /8.4#/g mud, 30min Sfc Csg Test Cmt vol ci 1 Stage	psig: 2,827 volume(s) are inten 1 Stage CuFt Cmt 1916 5 1/2 spsig: alc below includes 1 1 Stage	0 ded to achieve a top of Min Cu Ft 1446 Coupling 0.00 0.00 0.00 his csg, TOC intended Min Cu Ft 0	2.84 12001 1 Stage % Excess 32 #N/A 1 Stage	1.72 ft from su Drilling Mud Wt 10.50 <u>Design I</u> Collapse ft from su Drilling	2.05 Totals: Inface or a Calc MASP Factors Burst Totals: Inface or a Calc	20,345 0 0 20,345 200 Req'd BOPE Length 0 0 #N/A Req'd	2	3.43	ing> a-C	0 0 406,900 overlap. Min Dist Hole-Cplg 0.79 Weight 0 0 0 0 overlap. Min Dist

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District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

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

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	290888
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created Condition Condition Date By 12/20/2023 pkautz None

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CONDITIONS

Action 290888