## Sundry Print Reports

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

Well Name: BOLL WEEVIL 27-34 FED Well Location: T26S / R34E / SEC 27 / County or Parish/State: LEA /

COM NWNE / 32.021 / -103.4552

Well Number: 5H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM100569 Unit or CA Name: Unit or CA Number:

US Well Number: 3002547952 Operator: DEVON ENERGY

PRODUCTION COMPANY LP

## **Notice of Intent**

**Sundry ID: 2787591** 

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/30/2024 Time Sundry Submitted: 10:34

Date proposed operation will begin: 07/01/2024

**Procedure Description:** Engineering Only - Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: Casing program change to slim hole design: Surface, Intermediate, and Production Casing size changes. Cement volume changes to accommodate casing change. Offline cement variance request. Please see attached revised drilling & directional plans and supporting documentation.

## **NOI Attachments**

## **Procedure Description**

 $7\_625\_29\_7lb\_P110HSCY\_MOFXL\_20240430102730.pdf$ 

5.5\_20lb\_P110EC\_VAM\_SPRINT\_TC\_SC\_20240430102730.pdf

BOLL\_WEEVIL\_27\_34\_FED\_COM\_5H\_Slim\_Hole\_20240430102409.pdf

BOLL\_WEEVIL\_27\_34\_FED\_COM\_5H\_Directional\_Plan\_11\_16\_23\_20240430102202.pdf

9.625\_40lb\_J\_55\_20240430102201.pdf

eived by OCD: 5/13/2024 3:29:56 AM Well Name: BOLL WEEVIL 27-34 FED

COM

Well Location: T26S / R34E / SEC 27 /

NWNE / 32.021 / -103.4552

County or Parish/State: LEA/ 2 of

Well Number: 5H

Type of Well: OIL WELL

**Allottee or Tribe Name:** 

Lease Number: NMNM100569

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number: 3002547952** 

**Operator: DEVON ENERGY** PRODUCTION COMPANY LP

## **Conditions of Approval**

## **Specialist Review**

Boll Weevil 27 34 Fed Com 5H Sundry ID 2787591 20240509115802.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** Signed on: APR 30, 2024 10:29 AM

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

### **Field**

**Representative Name:** 

**Street Address:** 

City:

State:

Zip:

Phone:

**Email address:** 

## **BLM Point of Contact**

**BLM POC Name: LONG VO BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5759885402 BLM POC Email Address: LVO@BLM.GOV

**Disposition:** Approved Disposition Date: 05/09/2024

Signature: Long Vo

Page 2 of 2

Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR RUBEAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

	Expires:	Octo	ber 3
Lease Serial No	2		

BURI	EAU OF LAND MANAGEMENT	5. Lease Serial No.	S. Lease Serial No. NMNM100569		
Do not use this t	OTICES AND REPORTS ON Worm for proposals to drill or to Use Form 3160-3 (APD) for suc	6. If Indian, Allottee	or Tribe Name		
SUBMIT IN T	TRIPLICATE - Other instructions on pag	ne 2	7. If Unit of CA/Agre	eement, Name and/or No.	
1. Type of Well			0 W-11 N 1 N-		
Oil Well Gas W	<del>-</del>		8. Well Name and No	BOLL WEEVIL 27-34 FED COM/5H	
2. Name of Operator DEVON ENERG	BY PRODUCTION COMPANY LP		9. API Well No. 3002	2547952	
3a. Address 333 WEST SHERIDAN	AVE, OKLAHOMA CITY, 3b. Phone No. (405) 235-36	(include area code) 11	10. Field and Pool or WC-025 G-08 S26	Exploratory Area 63412K/WOLFCAMP, SOUTHWEST	
4. Location of Well (Footage, Sec., T.,R SEC 27/T26S/R34E/NMP	.,M., or Survey Description)		11. Country or Parish LEA/NM	ı, State	
12. CHE	CK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE OF	NOTICE, REPORT OR OT	HER DATA	
TYPE OF SUBMISSION		ТҮРЕ О	F ACTION		
Notice of Intent		raulic Fracturing	Production (Start/Resume) Reclamation	Well Integrity	
Subsequent Report		Construction and Abandon	Recomplete Temporarily Abandon	Other	
Final Abandonment Notice		Back	Water Disposal		
is ready for final inspection.)  Engineering Only - Devon Ene Casing program change to slin accommodate casing change. Please see attached revised d	rigy Production Company L.P. respectfund hole design: Surface, Intermediate, an Offline cement variance request. rilling & directional plans and supporting	illy requests the follow	ring changes to the appro	ved APD:	
14. I hereby certify that the foregoing is REBECCA DEAL / Ph: (303) 299-1		Regulatory An	alyst		
Signature (Electronic Submission	Date	04/30/2	2024		
	THE SPACE FOR FED	ERAL OR STATE	OFICE USE		
Approved by					
LONG VO / Ph: (575) 988-5402 / A	pproved	Petroleun Title	n Engineer	05/09/2024 Date	
	ned. Approval of this notice does not warran equitable title to those rights in the subject led duct operations thereon.		BAD		
	B U.S.C Section 1212, make it a crime for an		d willfully to make to any d	epartment or agency of the United 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

(Form 3160-5, page 2)

## **Additional Information**

#### **Location of Well**

0. SHL: NWNE / 225 FNL / 1814 FEL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.021 / LONG: -103.4552 ( TVD: 0 feet, MD: 0 feet ) PPP: NWNE / 100 FNL / 2600 FEL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.0214 / LONG: -103.4576 ( TVD: 12620 feet, MD: 12751 feet ) BHL: SWSE / 20 FSL / 2600 FEL / TWSP: 26S / RANGE: 34E / SECTION: 34 / LAT: 32.0002 / LONG: -103.4577 ( TVD: 12750 feet, MD: 20284 feet )



etal One Corp.	MO-FXL			MO-FXL 7-5/8 29.7	
	WIO-FAL	CDS#	P110H	ISCY	
Metal <mark>O</mark> ne	*1 Pipe Body: BMP P110HSC	*1 Pipe Body: BMP P110HSCY MinYS125ksi			125ksi
	Min95%WT			Min959	%WT
	Connection Data	a Sheet	Date	20-Se	p-23
	Geometry	<u>Imperia</u>	ıl	<u>S.I.</u>	
	Pine Rody		_		
	Pipe Body Grade *	P110HSCY		P110HSCY	
	Pipe OD ( D )	7 5/8	in	193.68	mm
MO-FXL	Weight	29.70	lb/ft	44.25	
MO-I XL	Actual weight	29.70	ID/IL	43.26	kg/m
	Wall Thickness (t)	0.375	in	9.53	kg/m
	Pipe ID ( d )	6.875	in	174.63	mm
	/				mm
	Pipe body cross section	8.541	in <sup>2</sup>	5,510	mm <sup>2</sup>
	Drift Dia.	6.750	in	171.45	mm
	Connection				
<b>1</b>	Box OD ( W )	7.625	in	193.68	mm
	PIN ID	6.875	in	174.63	mm
	Make up Loss	4.219	in	107.16	mm
Box	Box Critical Area	5.714	in <sup>2</sup>	3686	mm <sup>2</sup>
	DOX CITICAL ALEA				
area	Joint load officionay	70			
Y	Joint load efficiency	70	% / 10 / 1	70	%
Y	Thread Taper		/ 10 ( 1.	2" per ft )	<b>%</b>
area d			/ 10 ( 1.		<b> </b> %
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The use of this information is at the reader/user's risk and no warranty is implied or expressed by Metal One Corporation or its parents, subsidiaries or affiliates (herein collectively referred to as "Metal One") with respect to the use of information contained herein. The information provided on this Connection Data Shee is for informational purposes only, and was prepared by reference to engineering information that is specific to the subject products, without regard to safetyrelated factors, all of which are the sole responsibility of the operators and users of the subject connectors. Metal One assumes no responsibility for any errors with respect to this information.

Statements regarding the suitability of products for certain types of applications are based on Metal One's knowledge of typical requirements that are often placed on Metal One products in standard well configurations. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application

The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to http://www.mtlo.co.jp/mo-con/ images/top/WebsiteTerms Active 20333287 1.pdf the contents of which are incorporated by reference into this Connection Data Sheet.

Issued on: 24 Oct. 2022 by Logan Van Gorp



**Connection Data Sheet** 

OD	Weight (lb/ft)	Wall Th.	Grade	API Drift:	Connection
5 1/2 in.	Nominal: 20.00 Plain End: 19.83	0.361 in.	P110 EC	4.653 in.	VAM® SPRINT-TC SC

PIPE PROPERTIES						
Nominal OD	5.500	in.				
Nominal ID	4.778	in.				
Nominal Cross Section Area	5.828	sqin.				
Grade Type	Hig	h Yield				
Min. Yield Strength	125	ksi				
Max. Yield Strength	140	ksi				
Min. Ultimate Tensile Strength	135	ksi				

CONNECTION PROPERTIES		
Connection Type		T&C
Connection OD (nom):	5.900	in.
Connection ID (nom):	4.829	in.
Make-Up Loss	3.972	in.
Coupling Length	8.753	in.
Critical Cross Section	5.828	sqin.
Tension Efficiency	100.0	% of pipe
Compression Efficiency	100.0	% of pipe
Internal Pressure Efficiency	100.0	% of pipe
External Pressure Efficiency	100.0	% of pipe

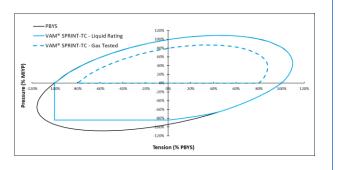
CONNECTION PERFORMANCE	S	
Tensile Yield Strength	729	klb
Compression Resistance	729	klb
Internal Yield Pressure	14,360	psi
Collapse Resistance	12,080	psi
Max. Structural Bending	104	°/100ft
Max. Bending with ISO/API Sealability	30	°/100ft
Max. Load on Coupling Face	290	klb

TORQUE VALUES						
Min. Make-up torque	23,000	ft.lb				
Opt. Make-up torque	24,000	ft.lb				
Max. Make-up torque	25,000	ft.lb				
Max. Torque with Sealability (MTS)	39,200	ft.lb				
Min. Locked Flank Torque	1,200	ft.lb				
Max. Locked Flank Torque	16,800	ft.lb				

\* 87.5% RBW

Thread compound must be applied as a thin even layer

VAM® SPRINT-TC is a threaded and coupled connection innovatively designed for extreme shale applications. Its high tension rating and ultra high torque capacity make it ideal to run a fill string length as production casing in shale wells with extended horizontal sections.



Do you need help on this product? - Remember no one knows  $VAM^{\scriptsize\textcircled{\tiny{1}}}$  like  $VAM^{\scriptsize\textcircled{\tiny{1}}}$ 

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



## 1. Geologic Formations

TVD of target	12750	Pilot hole depth	N/A
MD at TD:	20284	Deepest expected fresh water	

## Basin

Dasin	Depth	Water/Mineral	
F4			Hazards*
Formation	(TVD)	Bearing/Target	Hazarus*
	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		

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

2. Casing Program (Primary Design)

		Wt			Casing Interva		Casing	Interval
Hole Size	Csg. Size	(PPF)	Grade	Conn	From (MD)	To (MD)	From (TVD)	To (TVD)
13 1/2	9 5/8	40	J-55	ВТС	0	940	0	940
8 3/4	7 5/8	29.7	P110HSCY	MOFXL	0	12145	0	12145
6 3/4	5 1/2	20	P110	Sprint-TC SC	0	20284	0	12750

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

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt.	Yld (ft3/sack)	Slurry Description
Surface	497	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	312	Surf	9	3.27	Lead: Class C Cement + additives
IIIt I	385	7980	13.2	1.44	Tail: Class H / C + additives
Int 1	405	Surf	13.2	1.44	Squeeze Lead: Class C Cement + additives
Intermediate	312	Surf	9	3.27	Lead: Class C Cement + additives
Squeeze	385	7980	13.2	1.44	Tail: Class H / C + additives
Production	62	10245	9	3.27	Lead: Class H /C + additives
Floduction	513	12245	13.2	1.44	Tail: Class H / C + additives

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

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

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements

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

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	T	ype	✓	Tested to:
			Anı	nular	X	50% of rated working pressure
Int 1	13-5/8"	5M	Blind	d Ram	X	
IIIL I	13-3/6	JIVI	Pipe	Ram		5M
			Doub	le Ram	X	JIVI
			Other*			
			Annul	ar (5M)	X	100% of rated working pressure
Production	13-5/8"	10M	Blind	d Ram	X	
Production	13-3/8	TOM	Pipe	Ram		10M
			Doub	le Ram	X	TOW
			Other*			
			Annul	ar (5M)		
			Blind	d Ram		
			Pipe	Ram		
			Doub	le Ram		
			Other*			
N A variance is requested for	the use of	a diverter or	n the surface	casing. See	attached for	schematic.
Y A variance is requested to	run a 5 M a	nnular on a	10M system	1		

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

Additional	logs planned	Interval
	Resistivity	Int. shoe to KOP
	Density	Int. shoe to KOP
X	CBL	Production casing
X	Mud log	Intermediate shoe to TD
	PEX	

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	6962
Abnormal temperature	No

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

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

IN	H2S is present
Y	H2S plan attached.

#### **BOLL WEEVIL 27-34 FED COM 5H**

#### 8. Other facets of operation

Is this a walking operation? Potentially

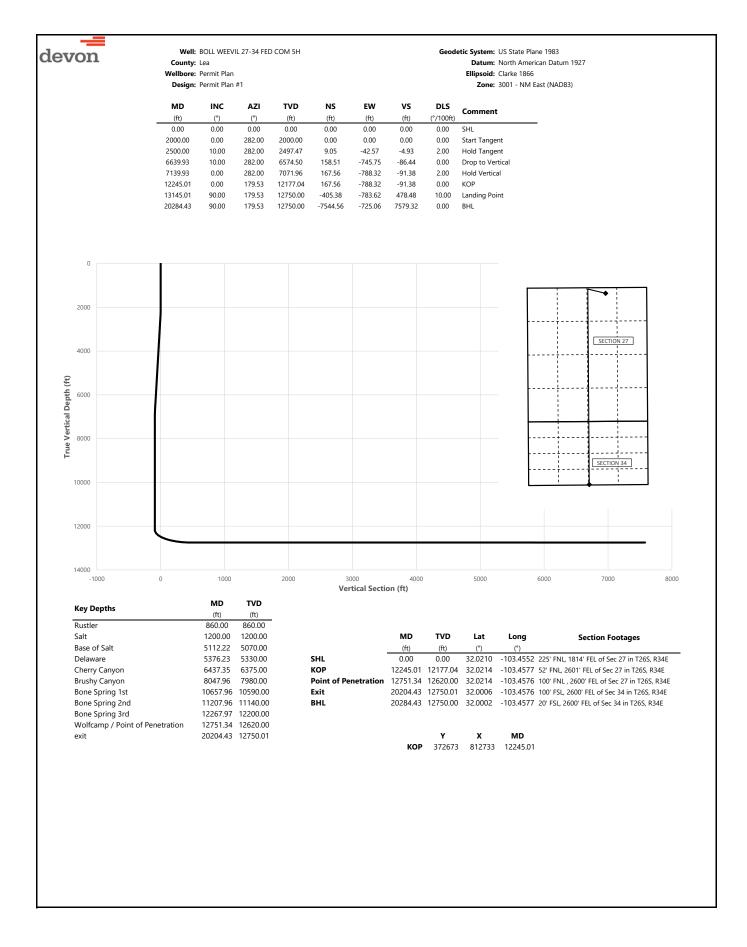
- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and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

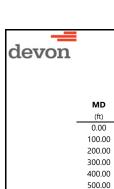
NOTE: During batch operations the drilling rig will be moved from well to well however, it will not be removed from the pad until all wells have production casing run/cemented.

Will be pre-setting casing? Potentially

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

Attachi	nents
X	Directional Plan
	Other, describe





 Well:
 BOLL WEEVIL 27-34 FED COM 5H
 Geodetic System:
 US State Plane 1983

 County:
 Lea
 Datum:
 North American Datum 1927

 Wellbore:
 Permit Plan
 Ellipsoid:
 Clarke 1866

 Design:
 Permit Plan #1
 Zone:
 3001 - NM East (NAD83)

		Design:	Permit Plan	1#1					<b>Zone:</b> 3001 - NM East (NAD83)
	MD	INC	AZI	TVD	NS	EW	vs	DLS	<b></b>
	(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	282.00	100.00	0.00	0.00	0.00	0.00	
	200.00	0.00	282.00	200.00	0.00	0.00	0.00	0.00	
	300.00	0.00	282.00	300.00	0.00	0.00	0.00	0.00	
	400.00	0.00	282.00	400.00	0.00	0.00	0.00	0.00	
	500.00	0.00	282.00	500.00	0.00	0.00	0.00	0.00	
	600.00	0.00	282.00	600.00	0.00	0.00	0.00	0.00	
	700.00	0.00	282.00	700.00	0.00	0.00	0.00	0.00	
	800.00	0.00	282.00	800.00	0.00	0.00	0.00	0.00	
	860.00	0.00	282.00	860.00	0.00	0.00	0.00	0.00	Rustler
	900.00	0.00	282.00	900.00	0.00	0.00	0.00	0.00	
	1000.00	0.00	282.00	1000.00	0.00	0.00	0.00	0.00	
	1100.00	0.00	282.00	1100.00	0.00	0.00	0.00	0.00	
	1200.00	0.00	282.00	1200.00	0.00	0.00	0.00	0.00	Salt,
	1300.00	0.00	282.00	1300.00	0.00	0.00	0.00	0.00	
	1400.00	0.00	282.00	1400.00	0.00	0.00	0.00	0.00	
	1500.00	0.00	282.00	1500.00	0.00	0.00	0.00	0.00	
	1600.00	0.00	282.00	1600.00	0.00	0.00	0.00	0.00	
	1700.00	0.00	282.00	1700.00	0.00	0.00	0.00	0.00	
	1800.00	0.00	282.00	1800.00	0.00	0.00	0.00	0.00	
	1900.00	0.00	282.00	1900.00	0.00	0.00	0.00	0.00	
	2000.00	0.00	282.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
	2100.00	2.00	282.00	2099.98	0.36	-1.71	-0.20	2.00	
	2200.00	4.00	282.00	2199.84	1.45	-6.83	-0.79	2.00	
	2300.00	6.00	282.00	2299.45	3.26	-15.35	-1.78	2.00	
	2400.00	8.00	282.00	2398.70	5.80	-27.27	-3.16	2.00	
	2500.00	10.00	282.00	2497.47	9.05	-42.57	-4.93	2.00	Hold Tangent
	2600.00	10.00	282.00	2595.95	12.66	-59.56	-6.90	0.00	
	2700.00	10.00	282.00	2694.43	16.27	-76.54	-8.87	0.00	
	2800.00	10.00	282.00	2792.91	19.88	-93.53	-10.84	0.00	
	2900.00	10.00	282.00	2891.39	23.49	-110.51	-12.81	0.00	
	3000.00	10.00	282.00	2989.87	27.10	-127.50	-14.78	0.00	
	3100.00	10.00	282.00	3088.35	30.71	-144.48	-16.75	0.00	
	3200.00	10.00	282.00	3186.83	34.32	-161.47	-18.72	0.00	
	3300.00	10.00	282.00	3285.31	37.93	-178.45	-20.69	0.00	
	3400.00	10.00	282.00	3383.79	41.54	-195.44	-22.65	0.00	
	3500.00	10.00	282.00	3482.27	45.15	-212.43	-24.62	0.00	
	3600.00	10.00	282.00	3580.75	48.76	-229.41 246.40	-26.59	0.00	
	3700.00	10.00	282.00	3679.23	52.37	-246.40 262.28	-28.56	0.00	
	3800.00	10.00	282.00	3777.72 3876.20	55.98 59.59	-263.38 -280.37	-30.53 -32.50	0.00	
	3900.00 4000.00	10.00 10.00	282.00 282.00	3876.20 3974.68	59.59 62.20	-280.37 207.25	-32.50	0.00	
					63.20	-297.35	-34.47		
	4100.00 4200.00	10.00 10.00	282.00 282.00	4073.16 4171.64	66.81 70.42	-314.34 -331.32	-36.44 -38.40	0.00	
	4300.00	10.00	282.00	4171.64	74.03	-331.32 -348.31	-36.40 -40.37	0.00	
	4400.00	10.00	282.00	4368.60	74.03 77.64	-346.31	-40.37 -42.34	0.00	
	4500.00	10.00	282.00	4467.08	81.25	-365.29	-42.34 -44.31	0.00	
	4600.00	10.00	282.00	4565.56	84.86	-302.26 -399.26	-44.31 -46.28	0.00	
	4700.00	10.00	282.00	4664.04	88.47	-399.26 -416.25	-46.26 -48.25	0.00	
	4800.00	10.00	282.00	4762.52	92.09	-410.23	-50.22	0.00	
	4900.00	10.00	282.00	4861.00	95.70	-450.22	-52.19	0.00	
	5000.00	10.00	282.00	4959.48	99.31	-467.21	-54.16	0.00	
	5100.00	10.00	282.00	5057.97	102.92	-484.19	-56.12	0.00	
	5112.22	10.00	282.00	5070.00	103.36	-486.27	-56.36	0.00	Base of Salt
	5200.00	10.00	282.00	5156.45	106.53	-501.18	-58.09	0.00	
	5300.00	10.00	282.00	5254.93	110.14	-518.16	-60.06	0.00	
	5376.23	10.00	282.00	5330.00	112.89	-531.11	-61.56	0.00	Delaware
	5400.00	10.00	282.00	5353.41	113.75	-535.15	-62.03	0.00	<del></del>
	5500.00	10.00	282.00	5451.89	117.36	-552.13	-64.00	0.00	
	5600.00	10.00	282.00	5550.37	120.97	-569.12	-65.97	0.00	
	5700.00	10.00	282.00	5648.85	124.58	-586.10	-67.94	0.00	
	5800.00	10.00	282.00	5747.33	128.19	-603.09	-69.91	0.00	
	5900.00	10.00	282.00	5845.81	131.80	-620.07	-71.87	0.00	
	6000.00	10.00	282.00	5944.29	135.41	-637.06	-73.84	0.00	
	6100.00	10.00	282.00	6042.77	139.02	-654.04	-75.81	0.00	
	6200.00	10.00	282.00	6141.25	142.63	-671.03	-77.78	0.00	
	6300.00	10.00	282.00	6239.73	146.24	-688.02	-79.75	0.00	
	6400.00	10.00	282.00	6338.22	149.85	-705.00	-81.72	0.00	
	6437.35	10.00	282.00	6375.00	151.20	-711.34	-82.45	0.00	Cherry Canyon
	6500.00	10.00	282.00	6436.70	153.46	-721.99	-83.69	0.00	) )-
				0 0				00	



Well: BOLL WEEVIL 27-34 FED COM 5H

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)

	Design.	Permit Plan	1 # 1					Zone: 3001 - NM East (NAD8
MD	INC	AZI	TVD	NS	EW	vs	DLS	
		(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
(ft) 6600.00	(°) 10.00	282.00	6535.18	(π) 157.07	-738.97	-85.66	0.00	
6639.93	10.00	282.00	6574.50	158.51	-736.37	-86.44	0.00	Drop to Vertical
6700.00		282.00		160.55		-87.56	2.00	Drop to vertical
	8.80		6633.76		-755.35			
6800.00	6.80	282.00	6732.83	163.38	-768.62	-89.10	2.00	
6900.00	4.80	282.00	6832.32	165.48	-778.50	-90.24	2.00	
7000.00	2.80	282.00	6932.09	166.85	-784.98	-90.99	2.00	
7100.00	0.80	282.00	7032.04	167.51	-788.05	-91.35	2.00	
7139.93	0.00	282.00	7071.96	167.56	-788.32	-91.38	2.00	Hold Vertical
7200.00	0.00	179.53	7132.04	167.56	-788.32	-91.38	0.00	
7300.00	0.00	179.53	7232.04	167.56	-788.32	-91.38	0.00	
7400.00	0.00	179.53	7332.04	167.56	-788.32	-91.38	0.00	
7500.00	0.00	179.53	7432.04	167.56	-788.32	-91.38	0.00	
7600.00	0.00	179.53	7532.04	167.56	-788.32	-91.38	0.00	
7700.00	0.00	179.53	7632.04	167.56	-788.32	-91.38	0.00	
7800.00	0.00	179.53	7732.04	167.56	-788.32	-91.38	0.00	
7900.00	0.00	179.53	7832.04	167.56	-788.32	-91.38	0.00	
3000.00	0.00	179.53	7932.04	167.56	-788.32	-91.38	0.00	
047.96	0.00	179.53	7980.00	167.56	-788.32	-91.38	0.00	Brushy Canyon
100.00	0.00	179.53	8032.04	167.56	-788.32	-91.38	0.00	
3200.00	0.00	179.53	8132.04	167.56	-788.32	-91.38	0.00	
8300.00	0.00	179.53	8232.04	167.56	-788.32	-91.38	0.00	
3400.00	0.00	179.53	8332.04	167.56	-788.32	-91.38	0.00	
3500.00	0.00	179.53	8432.04	167.56	-788.32	-91.38	0.00	
8600.00	0.00	179.53	8532.04	167.56	-788.32	-91.38	0.00	
700.00	0.00	179.53	8632.04	167.56	-788.32	-91.38	0.00	
8800.00	0.00	179.53	8732.04	167.56	-788.32	-91.38	0.00	
8900.00	0.00	179.53	8832.04	167.56	-788.32	-91.38	0.00	
9000.00	0.00	179.53	8932.04	167.56	-788.32	-91.38	0.00	
9100.00	0.00	179.53	9032.04	167.56	-788.32	-91.38	0.00	
9200.00	0.00	179.53	9132.04	167.56	-788.32	-91.38	0.00	
9300.00	0.00	179.53	9232.04	167.56	-788.32	-91.38	0.00	
9400.00	0.00	179.53	9332.04	167.56	-788.32	-91.38	0.00	
9500.00	0.00	179.53	9432.04	167.56	-788.32	-91.38	0.00	
9600.00	0.00	179.53	9532.04	167.56	-788.32	-91.38	0.00	
700.00	0.00	179.53	9632.04	167.56	-788.32	-91.38	0.00	
00.008	0.00	179.53	9732.04	167.56	-788.32	-91.38	0.00	
9900.00	0.00	179.53	9832.04	167.56	-788.32	-91.38	0.00	
00.000	0.00	179.53	9932.04	167.56	-788.32	-91.38	0.00	
0100.00	0.00	179.53	10032.04	167.56	-788.32	-91.38	0.00	
0200.00	0.00	179.53	10132.04	167.56	-788.32	-91.38	0.00	
0300.00	0.00	179.53	10232.04	167.56	-788.32	-91.38	0.00	
0400.00	0.00	179.53	10332.04	167.56	-788.32	-91.38	0.00	
0500.00	0.00	179.53	10432.04	167.56	-788.32	-91.38	0.00	
0600.00	0.00	179.53	10532.04	167.56	-788.32	-91.38	0.00	
0657.96	0.00	179.53	10592.04	167.56	-788.32	-91.38	0.00	Bone Spring 1st
0700.00	0.00	179.53	10632.04	167.56	-788.32	-91.38	0.00	Some Spring 1st
0800.00	0.00	179.53	10032.04	167.56	-788.32	-91.38	0.00	
	0.00	179.53	10732.04	167.56	-788.32 -788.32	-91.38 -91.38	0.00	
0900.00								
1000.00	0.00	179.53	10932.04	167.56	-788.32	-91.38	0.00	
1100.00	0.00	179.53	11032.04	167.56	-788.32	-91.38	0.00	
1200.00	0.00	179.53	11132.04	167.56	-788.32	-91.38	0.00	D 6 : 0 !
1207.96	0.00	179.53	11140.00	167.56	-788.32	-91.38	0.00	Bone Spring 2nd
1300.00	0.00	179.53	11232.04	167.56	-788.32	-91.38	0.00	
1400.00	0.00	179.53	11332.04	167.56	-788.32	-91.38	0.00	
1500.00	0.00	179.53	11432.04	167.56	-788.32	-91.38	0.00	
1600.00	0.00	179.53	11532.04	167.56	-788.32	-91.38	0.00	
1700.00	0.00	179.53	11632.04	167.56	-788.32	-91.38	0.00	
1800.00	0.00	179.53	11732.04	167.56	-788.32	-91.38	0.00	
1900.00	0.00	179.53	11832.04	167.56	-788.32	-91.38	0.00	
2000.00	0.00	179.53	11932.04	167.56	-788.32	-91.38	0.00	
2100.00	0.00	179.53	12032.04	167.56	-788.32	-91.38	0.00	
2200.00	0.00	179.53	12132.04	167.56	-788.32	-91.38	0.00	
2245.01	0.00	179.53	12177.04	167.56	-788.32	-91.38	0.00	KOP
2267.97	2.30	179.53	12200.00	167.10	-788.32	-90.92	10.00	Bone Spring 3rd
2300.00	5.50	179.53	12231.95	164.93	-788.30	-88.76	10.00	
2400.00	15.50	179.53	12330.15	146.73	-788.15	-70.66	10.00	
2500.00		179.53				-70.66	10.00	
2600.00	25.50		12423.70	111.75	-787.87 787.45			
	35.50	179.53	12509.76	61.07 -3.79	-787.45 -786.92	14.54 79.06	10.00 10.00	
	AE EO						COUNT	
2700.00 2751.34	45.50 50.63	179.53 179.53	12585.70 12620.00	-41.97	-786.60	117.03	10.00	Wolfcamp / Point of Penetration



Well: BOLL WEEVIL 27-34 FED COM 5H

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)

	Design:	Permit Plan	1#1					<b>Zone:</b> 3001 - NM East (NAD83)
MD	INC	AZI	TVD	NS	EW	vs	DLS	_
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
12800.00	55.50	179.53	12649.23	-80.85	-786.29	155.70	10.00	<del></del>
12900.00	65.50	179.53	12698.41	-167.78	-785.57	242.16	10.00	
13000.00	75.50	179.53	12731.75	-261.92	-784.80	335.79	10.00	
13100.00	85.50	179.53	12748.23	-360.42	-783.99	433.76	10.00	
13145.01	90.00	179.53	12750.00	-405.38	-783.62	478.48	10.00	Landing Point
13200.00	90.00	179.53	12750.00	-460.37	-783.17	533.18	0.00	
13300.00	90.00	179.53	12750.00	-560.36	-782.35	632.64	0.00	
13400.00	90.00	179.53	12750.00	-660.36	-781.53	732.10	0.00	
13500.00	90.00	179.53	12750.00	-760.36	-780.71	831.56	0.00	
13600.00	90.00	179.53	12750.00	-860.35	-779.89	931.02	0.00	
13700.00	90.00	179.53	12750.00	-960.35	-779.07	1030.48	0.00	
13800.00	90.00	179.53	12750.00	-1060.35	-778.25	1129.93	0.00	
13900.00	90.00	179.53	12750.00	-1160.34	-777.43	1229.39	0.00	
14000.00	90.00	179.53	12750.00	-1260.34	-776.61	1328.85	0.00	
14100.00	90.00	179.53	12750.00	-1360.34	-775.79	1428.31	0.00	
14200.00	90.00	179.53	12750.00	-1460.33	-774.97	1527.77	0.00	
14300.00	90.00	179.53	12750.00	-1560.33	-774.15	1627.23	0.00	
14400.00	90.00	179.53	12750.00	-1660.33	-773.33	1726.69	0.00	
14500.00	90.00	179.53	12750.00	-1760.32	-772.51	1826.15	0.00	
14600.00	90.00	179.53	12750.00	-1860.32	-771.69 770.86	1925.61	0.00	
14700.00	90.00	179.53 179.53	12750.00	-1960.32 -2060.31	-770.86 -770.04	2025.07	0.00	
14800.00 14900.00	90.00 90.00	179.53 179.53	12750.00 12750.00	-2060.31 -2160.31	-770.04 -769.22	2124.53 2223.99	0.00	
15000.00								
15100.00	90.00 90.00	179.53 179.53	12750.00 12750.00	-2260.31 -2360.30	-768.40 -767.58	2323.45 2422.91	0.00	
15200.00	90.00	179.53	12750.00	-2360.30	-767.58 -766.76	2522.37	0.00	
15300.00	90.00	179.53	12750.00	-2560.30	-765.76	2621.83	0.00	
15400.00	90.00	179.53	12750.00	-2660.29	-765.12	2721.29	0.00	
15500.00	90.00	179.53	12750.00	-2760.29	-764.30	2820.75	0.00	
15600.00	90.00	179.53	12750.00	-2860.29	-763.48	2920.21	0.00	
15700.00	90.00	179.53	12750.00	-2960.28	-762.66	3019.67	0.00	
15800.00	90.00	179.53	12750.00	-3060.28	-761.84	3119.13	0.00	
15900.00	90.00	179.53	12750.00	-3160.28	-761.02	3218.58	0.00	
16000.00	90.00	179.53	12750.00	-3260.27	-760.20	3318.04	0.00	
16100.00	90.00	179.53	12750.00	-3360.27	-759.38	3417.50	0.00	
16200.00	90.00	179.53	12750.00	-3460.27	-758.56	3516.96	0.00	
16300.00	90.00	179.53	12750.00	-3560.26	-757.74	3616.42	0.00	
16400.00	90.00	179.53	12750.00	-3660.26	-756.91	3715.88	0.00	
16500.00	90.00	179.53	12750.00	-3760.26	-756.09	3815.34	0.00	
16600.00	90.00	179.53	12750.00	-3860.25	-755.27	3914.80	0.00	
16700.00	90.00	179.53	12750.00	-3960.25	-754.45	4014.26	0.00	
16800.00	90.00	179.53	12750.00	-4060.25	-753.63	4113.72	0.00	
16900.00	90.00	179.53	12750.00	-4160.24	-752.81	4213.18	0.00	
17000.00	90.00	179.53	12750.01	-4260.24	-751.99	4312.64	0.00	
17100.00	90.00	179.53	12750.01	-4360.24	-751.17	4412.10	0.00	
17200.00	90.00	179.53	12750.01	-4460.23	-750.35	4511.56	0.00	
17300.00	90.00	179.53	12750.01	-4560.23	-749.53	4611.02	0.00	
17400.00	90.00	179.53	12750.01	-4660.23	-748.71	4710.48	0.00	
17500.00	90.00	179.53	12750.01	-4760.22	-747.89	4809.94	0.00	
17600.00	90.00	179.53	12750.01	-4860.22	-747.07	4909.40	0.00	
17700.00	90.00	179.53	12750.01	-4960.22	-746.25	5008.86	0.00	
17800.00	90.00	179.53	12750.01	-5060.21	-745.43	5108.32	0.00	
17900.00 18000.00	90.00 90.00	179.53 179.53	12750.01 12750.01	-5160.21 -5260.21	-744.61 -743.79	5207.77 5307.23	0.00	
18100.00	90.00	179.53	12750.01	-5260.21	-743.79 -742.97	5406.69	0.00	
18200.00	90.00	179.53	12750.01	-5460.20	-742.97 -742.14	5506.15	0.00	
18300.00	90.00	179.53	12750.01	-5560.20	-742.14	5605.61	0.00	
18400.00	90.00	179.53	12750.01	-5660.19	-741.52	5705.07	0.00	
18500.00	90.00	179.53	12750.01	-5760.19	-739.68	5804.53	0.00	
18600.00	90.00	179.53	12750.01	-5860.19	-738.86	5903.99	0.00	
18700.00	90.00	179.53	12750.01	-5960.18	-738.04	6003.45	0.00	
18800.00	90.00	179.53	12750.01	-6060.18	-737.22	6102.91	0.00	
18900.00	90.00	179.53	12750.01	-6160.18	-736.40	6202.37	0.00	
19000.00	90.00	179.53	12750.01	-6260.17	-735.58	6301.83	0.00	
19100.00	90.00	179.53	12750.01	-6360.17	-734.76	6401.29	0.00	
	90.00	179.53	12750.01	-6460.17	-733.94	6500.75	0.00	
19200.00		170 52	12750.01	-6560.16	-733.12	6600.21	0.00	
	90.00	179.53						
19200.00	90.00 90.00	179.53	12750.01	-6660.16	-732.30	6699.67	0.00	
19200.00 19300.00				-6660.16 -6760.16	-732.30 -731.48	6699.67 6799.13	0.00 0.00	



Well: BOLL WEEVIL 27-34 FED COM 5H

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	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment
19700.00	90.00	179.53	12750.01	-6960.15	-729.84	6998.05	0.00	
19800.00	90.00	179.53	12750.01	-7060.15	-729.02	7097.51	0.00	
19900.00	90.00	179.53	12750.01	-7160.14	-728.20	7196.97	0.00	
20000.00	90.00	179.53	12750.01	-7260.14	-727.37	7296.42	0.00	
20100.00	90.00	179.53	12750.01	-7360.14	-726.55	7395.88	0.00	
20200.00	90.00	179.53	12750.01	-7460.13	-725.73	7495.34	0.00	
20204.43	90.00	179.53	12750.01	-7464.56	-725.70	7499.75	0.00	exit
20284.43	90.00	179.53	12750.00	-7544.56	-725.06	7579.32	0.00	BHI

 Well:
 BOLL WEEVIL 27-34 FED COM 5H
 Geodetic System:
 US State Plane 1983

 County:
 Lea
 Datum:
 North American Datum 1927

 Wellbore:
 Permit Plan
 Ellipsoid:
 Clarke 1866

 Design:
 Permit Plan #1
 Zone:
 3001 - NM East (NAD83)

INC TVD MD AZI NS EW ٧S DLS Comment (ft) (°) (°) (ft) (ft) (ft) (ft) (°/100ft)



## **U. S. Steel Tubular Products** 9.625" 40.00lbs/ft (0.395" Wall) J55

1/24/2019 2:45:24 PM

MECHANICAL PROPERTIES	Pipe	втс	LTC	STC	
Minimum Yield Strength	55,000				psi
Maximum Yield Strength	80,000				psi
Minimum Tensile Strength	75,000				psi
DIMENSIONS	Pipe	втс	LTC	STC	
Outside Diameter	9.625	10.625	10.625	10.625	in.
Wall Thickness	0.395				in.
Inside Diameter	8.835	8.835	8.835	8.835	in.
Standard Drift	8.679	8.679	8.679	8.679	in.
Alternate Drift	8.750	8.750	8.750	8.750	in.
Nominal Linear Weight, T&C	40.00				lbs/ft
Plain End Weight	38.97				lbs/ft
PERFORMANCE	Pipe	втс	LTC	STC	
Minimum Collapse Pressure	2,570	2,570	2,570	2,570	psi
Minimum Internal Yield Pressure	3,950	3,950	3,950	3,950	psi
Minimum Pipe Body Yield Strength	630				1,000 lbs
Joint Strength		714	520	452	1,000 lbs
Reference Length		11,898	8,665	7,529	ft
MAKE-UP DATA	Pipe	втс	LTC	STC	
Make-Up Loss		4.81	4.75	3.38	in.
Minimum Make-Up Torque			3,900	3,390	ft-lbs
Maximum Make-Up Torque			6,500	5,650	ft-lbs

## **Legal Notice**

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

> U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S connections@uss.com Spring, Texas 77380

1-877-893-9461 www.usstubular.com



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

Sundry Print Reports
05/09/2024

Well Name: BOLL WEEVIL 27-34 FED Well Location: T26S / R34E / SEC 27 / County or Parish/State: LEA /

COM NWNE / 32.021 / -103.4552

Well Number: 5H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM100569 Unit or CA Name: Unit or CA Number:

**US Well Number:** 3002547952 **Operator:** DEVON ENERGY

PRODUCTION COMPANY LP

LONG VO LONG VO Date: 2024.05.09 12:57:21 -05'00'

## **Notice of Intent**

**Sundry ID: 2787591** 

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/30/2024 Time Sundry Submitted: 10:34

Date proposed operation will begin: 07/01/2024

**Procedure Description:** Engineering Only - Devon Energy Production Company L.P. respectfully requests the following changes to the approved APD: Casing program change to slim hole design: Surface, Intermediate, and Production Casing size changes. Cement volume changes to accommodate casing change. Offline cement variance request. Please see attached revised drilling & directional plans and supporting documentation.

## **NOI Attachments**

## **Procedure Description**

 $7\_625\_29\_7lb\_P110HSCY\_MOFXL\_20240430102730.pdf$ 

5.5\_20lb\_P110EC\_VAM\_SPRINT\_TC\_SC\_20240430102730.pdf

BOLL\_WEEVIL\_27\_34\_FED\_COM\_5H\_Slim\_Hole\_20240430102409.pdf

BOLL\_WEEVIL\_27\_34\_FED\_COM\_5H\_Directional\_Plan\_11\_16\_23\_20240430102202.pdf

9.625\_40lb\_J\_55\_20240430102201.pdf

well Name: BOLL WEEVIL 27-34 FED Well

COM

**Well Location:** T26S / R34E / SEC 27 / NWNE / 32.021 / -103.4552

County or Parish/State: Page 21 of

NM

Well Number: 5H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM100569

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number:** 3002547952

Operator: 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: APR 30, 2024 10:29 AM

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

## **Field**

**Representative Name:** 

**Street Address:** 

City:

State:

Zip:

Phone:

Email address:

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: Devon Energy Production Company LP

LEASE NO.: NMNM100569

LOCATION: Section 27, T.26 S., R.34 E., NMPM COUNTY: Lea County, New Mexico

WELL NAME & NO.: | Boll Weevil 27-34 Fed Com 5H

 SURFACE HOLE FOOTAGE:
 225'/N & 1814'/E

 BOTTOM HOLE FOOTAGE
 20'/S & 2600'/E

 ATS/API ID:
 3002547952

 APD ID:
 10400047149

Sundry ID: 2787591

COA

H2S	Yes ▼		
Potash	None <u>•</u>		
Cave/Karst	Low ▼		
Potential			
Cave/Karst	Critical		
Potential			
Variance	O None	© Flex Hose	Other
Wellhead	Conventional and Multibov	vI 🔻	
Other	4 String	Capitan Reef	□ WIPP
		None ▼	
		IVOITE	
Other	Pilot Hole	Open Annulus	
	None 🔻	-	
Cementing	Contingency Squeeze	Echo-Meter	Primary Cement
	None	Int 1	Squeeze
			None -
Special	Water	<b>▼</b> COM	☐ Unit
Requirements	Disposal/Injection		
Special	Batch Sundry		
Requirements			
Special	Break Testing	✓ Offline	Casing
Requirements		Cementing	Clearance
Variance			

#### A. HYDROGEN SULFIDE

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 9-5/8 inch surface casing shall be set at approximately 1055 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite and above the salt when present, and below usable fresh water) and cemented to the surface. The surface hole shall be 13 1/2 inch in diameter.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8** hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

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

• Cement to surface. If cement does not circulate see B.1.a, c-d above. Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

#### **Option 2:**

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

- a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon at 7980' (703 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 650 sxs Class C)
     Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC.

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

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

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

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

## C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2.

## **Option 1:**

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 7-5/8 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 9-5/8 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 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 43 CFR 3172.6(b)(9) must be followed.

## D. SPECIAL REQUIREMENT (S)

## **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR part 3170 Subpart 3171

- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

## **Offline Cementing**

Operator has been (**Approved**) to pump the proposed cement program offline in the **Intermediate(s) interval**.

Offline cementing should commence within 24 hours of landing the casing for the interval.

Notify the BLM 4hrs prior to cementing offline at Lea County: 575-689-5981.

## **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)

✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per **43** CFR part **3170** Subpart **3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report when present.
- A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) 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.

Long Vo (LVO) 5/9/2024

Form 3160-5 (June 2019)

## UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

DEI	AUCTIVIDIAL OF THE III	LILIOIC								
BUREAU OF LAND MANAGEMENT					5. Lease Serial No. NMNM100569					
Do not use this t	SUNDRY NOTICES AND REPORTS ON WELLS  Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.  SUBMIT IN TRIPLICATE - Other instructions on page 2						6. If Indian, Allottee or Tribe Name			
SUBMIT IN T	TRIPLICATE - Other instruc	tions on page 2			7. If Unit of CA/Agre	ement,	Name and/or No.			
1. Type of Well	_				8 Well Name and No					
Oil Well Gas W	_				O ADI W II N	BOLL	WEEVIL 27-34 FED COM/5H			
2. Name of Operator DEVON ENERG					9. API Well No. 3002					
3a. Address 333 WEST SHERIDAN CITY, OK 73102	b. Phone No. <i>(incl</i> 405) 235-3611	ude area code)		10. Field and Pool or WC-025 G-08 S26	-	Atory Area  WOLFCAMP, SOUTHWEST				
4. Location of Well (Footage, Sec., T.,R SEC 27/T26S/R34E/NMP				11. Country or Parish LEA/NM	, State					
12. CHE	CK THE APPROPRIATE BOX	X(ES) TO INDICA	TE NATURE O	F NOTI	CE, REPORT OR OT	HER D.	ATA			
TYPE OF SUBMISSION			ТҮРЕ	OF AC	ΓΙΟΝ					
Notice of Intent	Acidize	Deepen		Prod	uction (Start/Resume)		Water Shut-Off			
	Alter Casing	= '	Fracturing	=	amation		Well Integrity			
Subsequent Report	Casing Repair	New Cons	=	_	mplete		Other			
Final Abandonment Notice	Change Plans Convert to Injection	Plug and A	_	= ^	oorarily Abandon r Disposal					
Engineering Only - Devon Ene Casing program change to slir accommodate casing change. Please see attached revised d	n hole design: Surface, Inte Offline cement variance red	rmediate, and Propuest.	oduction Casin							
14. I hereby certify that the foregoing is REBECCA DEAL / Ph: (303) 299-1	,	,,	Regulatory A	Analyst						
	400	Titl	e							
Signature (Electronic Submission	on)	Dat	e		04/30/2	024				
	THE SPACE	FOR FEDER	AL OR STA	TE OF	ICE USE					
Approved by										
			Title			Date				
Conditions of approval, if any, are attackertify that the applicant holds legal or ewhich would entitle the applicant to con-	equitable title to those rights in		Office CARL	SBAD						

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.

(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

(Form 3160-5, page 2)

## **Additional Information**

#### **Location of Well**

0. SHL: NWNE / 225 FNL / 1814 FEL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.021 / LONG: -103.4552 ( TVD: 0 feet, MD: 0 feet ) PPP: NWNE / 100 FNL / 2600 FEL / TWSP: 26S / RANGE: 34E / SECTION: 27 / LAT: 32.0214 / LONG: -103.4576 ( TVD: 12620 feet, MD: 12751 feet ) BHL: SWSE / 20 FSL / 2600 FEL / TWSP: 26S / RANGE: 34E / SECTION: 34 / LAT: 32.0002 / LONG: -103.4577 ( TVD: 12750 feet, MD: 20284 feet )



etal One Corp.	MO-FXL			MO-FXL 7			
Metal <mark>O</mark> ne	*1 Pine Body: BMP P110HSC	*1 Pipe Body: BMP P110HSCY MinYS125ksi			P110HSCY MinYS125ksi		
Metal One	Min95%WT		Min95%WT				
	Connection Data	Sheet	Date	20-Se			
			Date	20 00	p 20		
	Geometry	<u>Imperia</u>	<u>ıl</u>	<u>S.I.</u>			
	Pipe Body						
	Grade *	P110HSCY	-	P110HSCY			
	Pipe OD ( D )	7 5/8	in	193.68	mm		
MO-FXL	Weight	29.70	lb/ft	44.25	kg/m		
	Actual weight	29.04		43.26	kg/m		
	Wall Thickness (t)	0.375	in	9.53	mm		
	Pipe ID ( d )	6.875	in	174.63	mm		
	Pipe body cross section	8.541	in <sup>2</sup>	5,510	mm <sup>2</sup>		
	Drift Dia.	6.750	in	171.45	mm		
	Connection						
<b>1</b>	Box OD ( W )	7.625	in	193.68	mm		
	PIN ID	6.875	in	174.63	mm		
	Make up Loss	4.219	in	107.16	mm		
Box	Box Critical Area	5.714	in <sup>2</sup>				
area				3686	mm <sup>2</sup>		
3 1 2.2	Joint load efficiency	70	%	70	%		
5 7	T1 1 T						
	Thread Taper Number of Threads	1		2" per ft ) TPI			
Make p	Number of Threads  Performance						
Make p D	Number of Threads  Performance  Performance Properties f	or Pipe Body	5	TPI	kN		
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Pin critical	Performance  Performance Properties f S.M.Y.S. *1  M.I.Y.P. *1  Collapse Strength *1  Note S.M.Y.S.= Specifi M.I.Y.P. = Minimi * BMP P110HSCY: MinYS125ks Performance Data Sheet: 7.625 Performance Properties  Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft)  Recommended Torque	For Pipe Body 1,068 11,680 7,200 ied Minimum YIE um Internal Yield i, Min95%WT, Col " 29.7lb/ft P110H for Connectio 747 kips 747 kips 9,340 psi	kips psi psi ELD Stre d Pressullapse Stre SCY Rev3 ( 70% ( 70% ( 80% 100% (	4,749 80.55 49.66 Ingth of Pipe body ength 7,200psi 3, dated 9/19/202 of S.M.Y.S.) of S.M.Y.S.) of Collapse St	MPa MPa dy		
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Make p D Pin critical	Performance Performance Properties f S.M.Y.S. *1 M.I.Y.P. *1 Collapse Strength *1 Note S.M.Y.S.= Specific M.I.Y.P. = Minimum * BMP P110HSCY: MinYS125ks Performance Data Sheet: 7.625 Performance Properties Tensile Yield load Min. Compression Yield Internal Pressure External Pressure Max. DLS ( deg. /100ft)  Recommended Torque Min. Opti.	for Pipe Body 1,068 11,680 7,200 ied Minimum YIE um Internal Yield i, Min95%WT, Col " 29.7lb/ft P110Hs for Connectio 747 kips 9,340 psi	kips psi psi ELD Stre d Pressur lapse Stre SCY Rev3 n ( 70% ( 70% ( 80% 100% c   3	4,749 80.55 49.66 Ingth of Pipe body ength 7,200psi 3, dated 9/19/202  of S.M.Y.S.) of S.M.Y.S.) of S.M.Y.S. 0  21,000 23,300	MPa MPa ddy  3 rength  N-m N-m		

#### enal Notice

The use of this information is at the reader/user's risk and no warranty is implied or expressed by Metal One Corporation or its parents, subsidiaries or affiliates (herein collectively referred to as "Metal One") with respect to the use of information contained herein. The information provided on this Connection Data Sheet is for informational purposes only, and was prepared by reference to engineering information that is specific to the subject products, without regard to safety-related factors, all of which are the sole responsibility of the operators and users of the subject connectors. Metal One assumes no responsibility for any errors with respect to this information.

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The products described in this Connection Data Sheet are not recommended for use in deep water offshore applications. For more information, please refer to <a href="http://www.mtlo.co.jp/mo-con/">http://www.mtlo.co.jp/mo-con/</a> images/top/WebsiteTerms Active 20333287 1.pdf the contents of which are incorporated by reference into this Connection Data Sheet.

Issued on: 24 Oct. 2022 by Logan Van Gorp



**Connection Data Sheet** 

OD	Weight (lb/ft)	Wall Th.	Grade	API Drift:	Connection
5 1/2 in.	Nominal: 20.00 Plain End: 19.83	0.361 in.	P110 EC	4.653 in.	VAM® SPRINT-TC SC

PIPE PROPERTIES		
Nominal OD	5.500	in.
Nominal ID	4.778	in.
Nominal Cross Section Area	5.828	sqin.
Grade Type	Hig	gh Yield
Min. Yield Strength	125	ksi
Max. Yield Strength	140	ksi
Min. Ultimate Tensile Strength	135	ksi

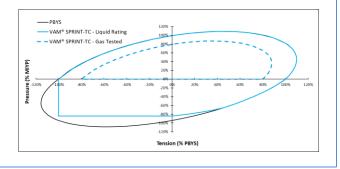
CONNECTION PROPERTIES		
Connection Type		T&C
Connection OD (nom):	5.900	in.
Connection ID (nom):	4.829	in.
Make-Up Loss	3.972	in.
Coupling Length	8.753	in.
Critical Cross Section	5.828	sqin.
Tension Efficiency	100.0	% of pipe
Compression Efficiency	100.0	% of pipe
Internal Pressure Efficiency	100.0	% of pipe
External Pressure Efficiency	100.0	% of pipe

CONNECTION PERFORMANCES	S	
Tensile Yield Strength	729	klb
Compression Resistance	729	klb
Internal Yield Pressure	14,360	psi
Collapse Resistance	12,080	psi
Max. Structural Bending	104	°/100ft
Max. Bending with ISO/API Sealability	30	°/100ft
Max. Load on Coupling Face	290	klb

TORQUE VALUES		
Min. Make-up torque	23,000	ft.lb
Opt. Make-up torque	24,000	ft.lb
Max. Make-up torque	25,000	ft.lb
Max. Torque with Sealability (MTS)	39,200	ft.lb
Min. Locked Flank Torque	1,200	ft.lb
Max. Locked Flank Torque	16,800	ft.lb

Thread compound must be applied as a thin even layer

VAM® SPRINT-TC is a threaded and coupled connection innovatively designed for extreme shale applications. Its high tension rating and ultra high torque capacity make it ideal to run a fill string length as production casing in shale wells with extended horizontal sections.



#### Do you need help on this product? - Remember no one knows VAM® like VAM®

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



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

## BOLL WEEVIL 27-34 FED COM 5H

## 1. Geologic Formations

TVD of target	12750	Pilot hole depth	N/A
MD at TD:	20284	Deepest expected fresh water	

### Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	860	Zone:	
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		
		·	

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

2. Casing Program (Primary Design)

		Wt				Interval	Casing Interval	
Hole Size	Csg. Size	(PPF)	Grade	Conn	From (MD)	To (MD)	From (TVD)	To (TVD)
13 1/2	9 5/8	40	J-55	ВТС	0	1055	0	1055
8 3/4	7 5/8	29.7	P110HSCY	MOFXL	0	12000	0	12000
6 3/4	5 1/2	20	P110	Sprint-TC SC	0	20284	0	12750

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

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt.	Slurry Description	
Surface	497	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	312	Surf	9	3.27	Lead: Class C Cement + additives
IIIt I	385	7980	13.2	1.44	Tail: Class H / C + additives
Int 1 Intermediate	650	Surf	13.2	1.44	Squeeze Lead: Class C Cement + additives
	312	Surf	9	3.27	Lead: Class C Cement + additives
Squeeze	385	7980	13.2	1.44	Tail: Class H / C + additives
Production	62	10245	9	3.27	Lead: Class H /C + additives
	513	12245	13.2	1.44	Tail: Class H / C + additives

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

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

Devon Energy requests to offline cement on intermediate strings that are set in formations shallower than the Wolfcamp. Prior to commencing offline cementing operations, the well will be monitored for any abnormal pressures and confirmed to be static. A dual manifold system (equipped with chokes) for the returns will also be utilized as a redundancy. All equipment used for offline cementing will have a minimum 5M rating to match intermediate sections' 5M BOPE requirements

4. Pressure Control Equipment (Three String Design)

BOP installed and tested before drilling which hole?	Size?	Min. Required WP	T	ype	✓	Tested to:			
			Anı	nular	X	50% of rated working pressure			
Int 1	13-5/8" 5M	Blind	l Ram	X					
IIIt I		Pipe	Ram		5M				
		Doub	le Ram	X	3101				
			Other*						
			Annul	ar (5M)	X	100% of rated working pressure			
Production	13-5/8" 10M	10M	Blind Ram		X	10M			
Production		TOM	Pipe Ram						
							Doub	le Ram	X
			Other*						
			Annul	ar (5M)					
			Blind	d Ram					
			Pipe	Ram		1			
			Doub	le Ram		]			
			Other*						
N A variance is requested for	the use of	a diverter or	n the surface	casing. See	attached for	schematic.			
Y A variance is requested to									

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

Additional	logs planned	Interval	
	Resistivity	Int. shoe to KOP	
	Density	Int. shoe to KOP	
X	CBL	Production casing	
X	Mud log	Intermediate shoe to TD	
	PEX		

7. Drilling Conditions

.v z ming communications	
Condition	Specfiy what type and where?
BH pressure at deepest TVD	6962
Abnormal temperature	No

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

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

N	H2S is present
Y	H2S plan attached.

### 8. Other facets of operation

Is this a walking operation? Potentially

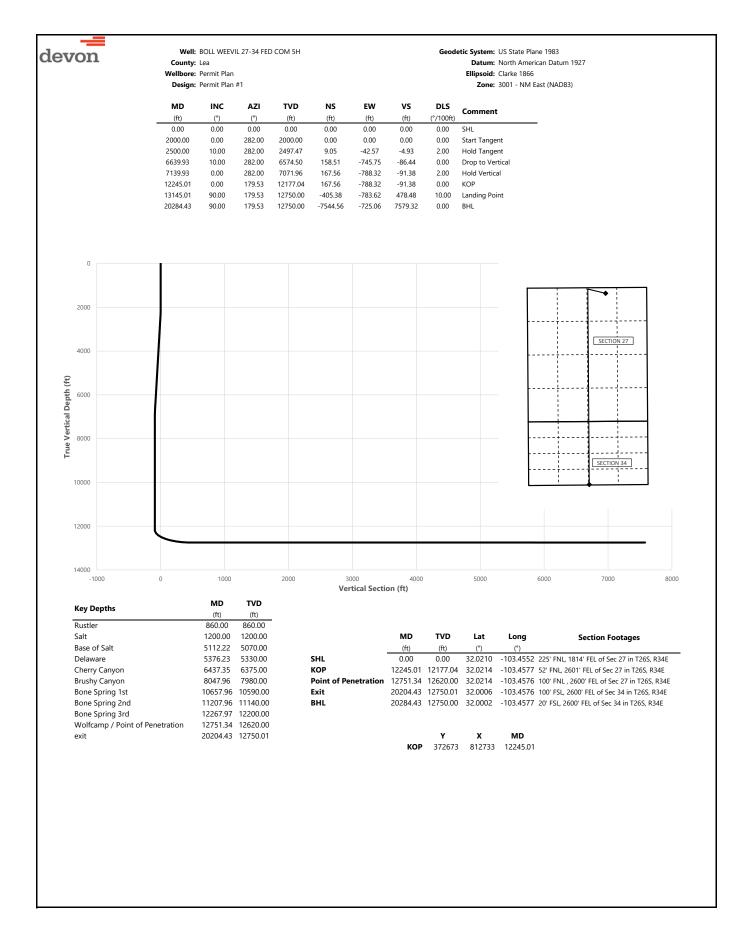
- 1 If operator elects, drilling rig will batch drill the surface holes and run/cement surface casing; walking the rig to next wells on the pad.
- 2 The drilling rig will then batch drill the intermediate sections and run/cement intermediate casing; the wellbore will be isolated with a blind flange and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

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

Will be pre-setting casing? Potentially

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

Attachi	ments
X	Directional Plan
	Other, describe



Well: BOLL WEEVIL 27-34 FED COM 5H Geodetic System: US State Plane 1983 devon County: Lea Datum: North American Datum 1927 Wellbore: Permit Plan Ellipsoid: Clarke 1866 Design: Permit Plan #1 Zone: 3001 - NM East (NAD83) MD TVD vs INC AZI NS EW DLS Comment (°/100ft) (ft) (ft) (°) (°) (ft) (ft) (ft) SHL 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 100.00 0.00 282.00 100.00 0.00 0.00 0.00 0.00 200.00 0.00 282.00 200.00 0.00 0.00 0.00 0.00 300.00 0.00 282.00 300.00 0.00 0.00 0.00 0.00 400.00 0.00 282.00 400.00 0.00 0.00 0.00 0.00 500.00 0.00 282.00 500.00 0.00 0.00 0.00 0.00 600.00 0.00 282.00 600.00 0.00 0.00 0.00 0.00 700.00 0.00 282.00 700.00 0.00 0.00 0.00 0.00 800.00 0.00 282.00 800.00 0.00 0.00 0.00 0.00 860.00 0.00 282.00 860.00 0.00 0.00 0.00 0.00 Rustler 900.00 282.00 900.00 0.00 0.00 0.00 0.00 0.00 1000.00 0.00 282.00 1000.00 0.00 0.00 0.00 0.00 1100.00 0.00 282.00 1100.00 0.00 0.00 0.00 0.00 1200.00 0.00 282.00 1200.00 0.00 0.00 0.00 Salt. 1300.00 0.00 282.00 1300.00 0.00 0.00 0.00 0.00 1400.00 0.00 282.00 1400.00 0.00 0.00 0.00 0.00 1500.00 282.00 1500.00 0.00 0.00 0.00 0.00 0.00 1600.00 0.00 1600.00 0.00 282.00 0.00 0.00 0.00 1700.00 0.00 282.00 1700.00 0.00 0.00 0.00 0.00 1800.00 0.00 282.00 1800.00 0.00 0.00 0.00 0.00 1900.00 0.00 282.00 1900.00 0.00 0.00 0.00 0.00 2000.00 0.00 282.00 2000.00 0.00 0.00 0.00 0.00 Start Tangent 2100 00 2.00 282 00 2099 98 0.36 -171 -0.20 2.00 2200.00 4.00 282.00 2199.84 1.45 -6.83 -0.79 2.00 2300.00 6.00 282.00 2299.45 3.26 -15.35 -1.78 2.00 2400.00 8.00 282.00 2398.70 5.80 -27.27 -3.16 2.00 2500.00 10.00 282.00 2497 47 9.05 -42 57 -493 2.00 Hold Tangent 2600.00 282.00 2595.95 -59.56 -6.90 0.00 10.00 12.66 2700.00 10.00 282.00 2694.43 16.27 -76.54 -8.87 0.00 2800.00 10.00 282.00 2792.91 19.88 -93.53 -10.84 0.00 2900.00 10.00 282.00 2891.39 23.49 -110.51 -12.81 0.00 3000.00 10.00 27.10 -127.50 -14.78 0.00 282.00 2989.87 3100.00 3088.35 30.71 -144.48 10.00 282.00 -16.75 0.00 3200.00 10.00 282.00 3186.83 34.32 -161.47-18.720.00 3300.00 10.00 282.00 3285.31 37 93 -178.45 -20.69 0.00 3400.00 10.00 282.00 3383.79 41.54 -195.44 -22.65 0.00 3500.00 10.00 282.00 3482.27 45.15 -212.43 -24.62 0.00 3600.00 10.00 282.00 3580.75 48.76 -229.41 -26.59 0.00 3700.00 10.00 282.00 3679.23 52.37 -246.40 -28.56 3800.00 282.00 -263.38 -30.53 0.00 10.00 3777.72 55.98 3876.20 3900.00 10.00 282.00 59.59 -280.37-32.500.00 4000.00 10.00 282.00 3974.68 63.20 -297.35 -34.47 0.00 4100.00 10.00 282.00 4073.16 66.81 -314.34 -36.44 0.00 4171.64 -38.40 4200.00 10.00 282.00 70.42 -331.32 0.00 4300.00 10.00 282.00 4270.12 74.03 -348.31 -40.370.00 4400.00 10.00 282.00 4368.60 77.64 -365.29 -42.34 0.00 4500.00 10.00 282.00 4467.08 81.25 -382.28 -44.31 0.00 4600.00 282.00 4565.56 -399.26 10.00 84.86 -46.28 0.00 4700.00 10.00 282.00 4664.04 88.47 -416.25 -48.25 0.00 4800.00 10.00 282.00 4762.52 92.09 -433.23 -50.22 0.00 4900.00 10.00 282.00 4861.00 95.70 -450.22 -52.19 0.00 5000.00 10.00 282.00 4959.48 99.31 -467.21 -54.16 0.00 5100.00 10.00 282.00 5057.97 102.92 -484.19 -56.12 0.00 5112.22 10.00 5070.00 103.36 -486.27 -56.36 0.00 Base of Salt 282.00 5200.00 -501.18 10.00 282.00 5156.45 106.53 -58.09 0.00 5300.00 10.00 282 00 5254 93 110 14 -518 16 -60.06 0.00 5376.23 10.00 282.00 5330.00 112.89 -531.11 -61.56 0.00 Delaware 5400.00 10.00 282.00 5353.41 113.75 -535.15 -62.03 0.00 5500.00 5451.89 0.00 10.00 282.00 117.36 -552.13 -64.005600.00 10.00 282.00 5550.37 120.97 -569.12 -65.97 0.00 5700.00 5648.85 124.58 -586.10 10.00 282.00 -67.94 0.00 5800.00 10.00 282.00 5747.33 128.19 -603.09 -69.91 0.00 5900.00 5845 81 -71 87 10.00 282 00 131.80 -620.07 0.00 0.00 6000.00 10.00 282.00 5944.29 135.41 -637.06 -73.84 6100.00 10.00 282.00 6042.77 139.02 -654.04 -75.81 0.00 6200.00 6141.25 142.63 -671.03 -77.78 10.00 282.00 0.00 6300.00 10.00 282 00 623973 146 24 -688 02 -79 75 0.00 6400.00 10.00 282.00 6338.22 149.85 -705.00 -81.72 0.00 6437.35 10.00 282.00 6375.00 151.20 -711.34 -82.45 0.00 Cherry Canyon

6500.00

10.00

282.00

6436.70

153.46

-721.99

-83.69

0.00



Well: BOLL WEEVIL 27-34 FED COM 5H

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)

	Design:	Permit Plan	n #1				<b>Zone:</b> 3001 - NM East (NAD83)				
MD	INC	AZI	TVD	NS	EW	vs	DLS				
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	Comment			
6600.00	10.00	282.00	6535.18	157.07	-738.97	-85.66	0.00				
6639.93	10.00	282.00	6574.50	158.51	-745.75	-86.44	0.00	Drop to Vertical			
6700.00 6800.00	8.80	282.00 282.00	6633.76 6732.83	160.55 163.38	-755.35 -768.62	-87.56 -89.10	2.00 2.00				
6900.00	6.80 4.80	282.00	6832.32	165.48	-778.50	-90.24	2.00				
7000.00	2.80	282.00	6932.09	166.85	-784.98	-90.99	2.00				
7100.00	0.80	282.00	7032.04	167.51	-788.05	-91.35	2.00				
7139.93	0.00	282.00	7071.96	167.56	-788.32	-91.38	2.00	Hold Vertical			
7200.00	0.00	179.53	7132.04	167.56	-788.32	-91.38	0.00				
7300.00 7400.00	0.00	179.53 179.53	7232.04 7332.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00				
7500.00	0.00	179.53	7432.04	167.56	-788.32	-91.38	0.00				
7600.00	0.00	179.53	7532.04	167.56	-788.32	-91.38	0.00				
7700.00	0.00	179.53	7632.04	167.56	-788.32	-91.38	0.00				
7800.00	0.00	179.53	7732.04	167.56	-788.32	-91.38	0.00				
7900.00	0.00	179.53	7832.04	167.56	-788.32	-91.38	0.00				
8000.00 8047.96	0.00	179.53 179.53	7932.04 7980.00	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00	Brushy Canyon			
8100.00	0.00	179.53	8032.04	167.56	-788.32	-91.38	0.00	blushy Canyon			
8200.00	0.00	179.53	8132.04	167.56	-788.32	-91.38	0.00				
8300.00	0.00	179.53	8232.04	167.56	-788.32	-91.38	0.00				
8400.00	0.00	179.53	8332.04	167.56	-788.32	-91.38	0.00				
8500.00 8600.00	0.00	179.53	8432.04 8532.04	167.56	-788.32	-91.38 01.38	0.00				
8700.00	0.00	179.53 179.53	8632.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00				
8800.00	0.00	179.53	8732.04	167.56	-788.32	-91.38	0.00				
8900.00	0.00	179.53	8832.04	167.56	-788.32	-91.38	0.00				
9000.00	0.00	179.53	8932.04	167.56	-788.32	-91.38	0.00				
9100.00	0.00	179.53	9032.04	167.56	-788.32	-91.38	0.00				
9200.00 9300.00	0.00	179.53 179.53	9132.04 9232.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00				
9400.00	0.00	179.53	9332.04	167.56	-788.32	-91.38	0.00				
9500.00	0.00	179.53	9432.04	167.56	-788.32	-91.38	0.00				
9600.00	0.00	179.53	9532.04	167.56	-788.32	-91.38	0.00				
9700.00	0.00	179.53	9632.04	167.56	-788.32	-91.38	0.00				
9800.00	0.00	179.53	9732.04	167.56	-788.32	-91.38	0.00				
9900.00 10000.00	0.00	179.53 179.53	9832.04 9932.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00				
10100.00	0.00	179.53	10032.04	167.56	-788.32	-91.38	0.00				
10200.00	0.00	179.53	10132.04	167.56	-788.32	-91.38	0.00				
10300.00	0.00	179.53	10232.04	167.56	-788.32	-91.38	0.00				
10400.00	0.00	179.53	10332.04	167.56	-788.32	-91.38	0.00				
10500.00	0.00	179.53	10432.04	167.56	-788.32	-91.38	0.00				
10600.00 10657.96	0.00	179.53 179.53	10532.04 10590.00	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00	Bone Spring 1st			
10700.00	0.00	179.53	10632.04	167.56	-788.32	-91.38	0.00	bone spring 1st			
10800.00	0.00	179.53	10732.04	167.56	-788.32	-91.38	0.00				
10900.00	0.00	179.53	10832.04	167.56	-788.32	-91.38	0.00				
11000.00	0.00	179.53	10932.04	167.56	-788.32	-91.38	0.00				
11100.00 11200.00	0.00	179.53 179.53	11032.04 11132.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00				
11200.00	0.00	179.53	11132.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00	Bone Spring 2nd			
11300.00	0.00	179.53	11232.04	167.56	-788.32	-91.38	0.00	<sub>F</sub> - y <del></del>			
11400.00	0.00	179.53	11332.04	167.56	-788.32	-91.38	0.00				
11500.00	0.00	179.53	11432.04	167.56	-788.32	-91.38	0.00				
11600.00 11700.00	0.00	179.53	11532.04	167.56	-788.32	-91.38 01.38	0.00				
11800.00	0.00	179.53 179.53	11632.04 11732.04	167.56 167.56	-788.32 -788.32	-91.38 -91.38	0.00				
11900.00	0.00	179.53	11/32.04	167.56	-788.32	-91.38	0.00				
12000.00	0.00	179.53	11932.04	167.56	-788.32	-91.38	0.00				
12100.00	0.00	179.53	12032.04	167.56	-788.32	-91.38	0.00				
12200.00	0.00	179.53	12132.04	167.56	-788.32	-91.38	0.00				
12245.01	0.00	179.53	12177.04	167.56	-788.32	-91.38	0.00	KOP			
12267.97 12300.00	2.30 5.50	179.53 179.53	12200.00 12231.95	167.10 164.93	-788.32 -788.30	-90.92 -88.76	10.00 10.00	Bone Spring 3rd			
12400.00	15.50	179.53	12330.15	146.73	-788.15	-70.66	10.00				
12500.00	25.50	179.53	12423.70	111.75	-787.87	-35.87	10.00				
12600.00	35.50	179.53	12509.76	61.07	-787.45	14.54	10.00				
12700.00	45.50	179.53	12585.70	-3.79	-786.92	79.06	10.00	W K			
12751.34	50.63	179.53	12620.00	-41.97	-786.60	117.03	10.00	Wolfcamp / Point of Penetration			



Well: BOLL WEEVIL 27-34 FED COM 5H

County: Lea Wellbore: Permit Plan Geodetic System: US State Plane 1983 Datum: North American Datum 1927

Ellipsoid: Clarke 1866

	Design:	Permit Plan	n #1			Zone: 3001 - NM East (NAD83)				
MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	<b>DLS</b> (°/100ft)	Comment		
12800.00	55.50	179.53	12649.23	-80.85	-786.29	155.70	10.00			
12900.00	65.50	179.53	12698.41	-167.78	-785.57	242.16	10.00			
13000.00	75.50	179.53	12731.75	-261.92	-784.80	335.79	10.00			
13100.00	85.50	179.53	12748.23	-360.42	-783.99	433.76	10.00			
13145.01	90.00	179.53	12750.00	-405.38	-783.62	478.48	10.00	Landing Point		
13200.00	90.00	179.53	12750.00	-460.37	-783.17	533.18	0.00			
13300.00 13400.00	90.00 90.00	179.53 179.53	12750.00 12750.00	-560.36 -660.36	-782.35 -781.53	632.64 732.10	0.00			
13500.00	90.00	179.53	12750.00	-760.36	-780.71	831.56	0.00			
13600.00	90.00	179.53	12750.00	-860.35	-779.89	931.02	0.00			
13700.00	90.00	179.53	12750.00	-960.35	-779.07	1030.48	0.00			
13800.00	90.00	179.53	12750.00	-1060.35	-778.25	1129.93	0.00			
13900.00	90.00	179.53	12750.00	-1160.34	-777.43	1229.39	0.00			
14000.00	90.00	179.53	12750.00	-1260.34	-776.61	1328.85	0.00			
14100.00	90.00	179.53	12750.00	-1360.34	-775.79	1428.31	0.00			
14200.00 14300.00	90.00	179.53 179.53	12750.00 12750.00	-1460.33 -1560.33	-774.97	1527.77 1627.23	0.00			
14400.00	90.00 90.00	179.53	12750.00	-1660.33	-774.15 -773.33	1726.69	0.00			
14500.00	90.00	179.53	12750.00	-1760.32	-772.51	1826.15	0.00			
14600.00	90.00	179.53	12750.00	-1860.32	-771.69	1925.61	0.00			
14700.00	90.00	179.53	12750.00	-1960.32	-770.86	2025.07	0.00			
14800.00	90.00	179.53	12750.00	-2060.31	-770.04	2124.53	0.00			
14900.00	90.00	179.53	12750.00	-2160.31	-769.22	2223.99	0.00			
15000.00	90.00	179.53	12750.00	-2260.31	-768.40	2323.45	0.00			
15100.00	90.00	179.53	12750.00	-2360.30	-767.58	2422.91	0.00			
15200.00 15300.00	90.00 90.00	179.53 179.53	12750.00 12750.00	-2460.30 -2560.30	-766.76 -765.94	2522.37 2621.83	0.00			
15400.00	90.00	179.53	12750.00	-2660.29	-765.12	2721.29	0.00			
15500.00	90.00	179.53	12750.00	-2760.29	-764.30	2820.75	0.00			
15600.00	90.00	179.53	12750.00	-2860.29	-763.48	2920.21	0.00			
15700.00	90.00	179.53	12750.00	-2960.28	-762.66	3019.67	0.00			
15800.00	90.00	179.53	12750.00	-3060.28	-761.84	3119.13	0.00			
15900.00	90.00	179.53	12750.00	-3160.28	-761.02	3218.58	0.00			
16000.00	90.00	179.53	12750.00	-3260.27	-760.20	3318.04	0.00			
16100.00 16200.00	90.00 90.00	179.53 179.53	12750.00 12750.00	-3360.27 -3460.27	-759.38 -758.56	3417.50 3516.96	0.00			
16300.00	90.00	179.53	12750.00	-3560.26	-750.56 -757.74	3616.42	0.00			
16400.00	90.00	179.53	12750.00	-3660.26	-756.91	3715.88	0.00			
16500.00	90.00	179.53	12750.00	-3760.26	-756.09	3815.34	0.00			
16600.00	90.00	179.53	12750.00	-3860.25	-755.27	3914.80	0.00			
16700.00	90.00	179.53	12750.00	-3960.25	-754.45	4014.26	0.00			
16800.00	90.00	179.53	12750.00	-4060.25	-753.63	4113.72	0.00			
16900.00	90.00	179.53	12750.00	-4160.24	-752.81	4213.18	0.00			
17000.00	90.00	179.53	12750.01 12750.01	-4260.24	-751.99	4312.64	0.00			
17100.00 17200.00	90.00 90.00	179.53 179.53	12750.01	-4360.24 -4460.23	-751.17 -750.35	4412.10 4511.56	0.00			
17200.00	90.00	179.53	12750.01	-4460.23	-730.33 -749.53	4611.02	0.00			
17400.00	90.00	179.53		-4660.23	-748.71	4710.48	0.00			
17500.00	90.00	179.53	12750.01	-4760.22	-747.89	4809.94	0.00			
17600.00	90.00	179.53	12750.01	-4860.22	-747.07	4909.40	0.00			
17700.00	90.00	179.53	12750.01	-4960.22	-746.25	5008.86	0.00			
17800.00	90.00	179.53	12750.01	-5060.21	-745.43	5108.32	0.00			
17900.00 18000.00	90.00	179.53	12750.01	-5160.21	-744.61	5207.77	0.00			
18100.00	90.00 90.00	179.53 179.53	12750.01 12750.01	-5260.21 -5360.20	-743.79 -742.97	5307.23 5406.69	0.00			
18200.00	90.00	179.53	12750.01	-5460.20	-742.97 -742.14	5506.15	0.00			
18300.00	90.00	179.53	12750.01	-5560.20	-741.32	5605.61	0.00			
18400.00	90.00	179.53	12750.01	-5660.19	-740.50	5705.07	0.00			
18500.00	90.00	179.53	12750.01	-5760.19	-739.68	5804.53	0.00			
18600.00	90.00	179.53	12750.01	-5860.19	-738.86	5903.99	0.00			
18700.00	90.00	179.53	12750.01	-5960.18	-738.04	6003.45	0.00			
18800.00	90.00	179.53	12750.01	-6060.18	-737.22	6102.91	0.00			
18900.00	90.00	179.53	12750.01	-6160.18	-736.40	6202.37	0.00			
19000.00 19100.00	90.00 90.00	179.53 179.53	12750.01 12750.01	-6260.17 -6360.17	-735.58 -734.76	6301.83 6401.29	0.00			
19200.00	90.00	179.53	12750.01	-6360.17 -6460.17	-734.76 -733.94	6500.75	0.00			
19300.00	90.00	179.53	12750.01	-6560.16	-733.12	6600.21	0.00			
19400.00	90.00	179.53	12750.01	-6660.16	-732.30	6699.67	0.00			
19500.00	90.00	179.53	12750.01	-6760.16	-731.48	6799.13	0.00			
19600.00	90.00	179.53	12750.01	-6860.15	-730.66	6898.59	0.00			



Well: BOLL WEEVIL 27-34 FED COM 5H

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)	Comment
19700.00	90.00	179.53	12750.01	-6960.15	-729.84	6998.05	0.00	
19800.00	90.00	179.53	12750.01	-7060.15	-729.02	7097.51	0.00	
19900.00	90.00	179.53	12750.01	-7160.14	-728.20	7196.97	0.00	
20000.00	90.00	179.53	12750.01	-7260.14	-727.37	7296.42	0.00	
20100.00	90.00	179.53	12750.01	-7360.14	-726.55	7395.88	0.00	
20200.00	90.00	179.53	12750.01	-7460.13	-725.73	7495.34	0.00	
20204.43	90.00	179.53	12750.01	-7464.56	-725.70	7499.75	0.00	exit
20284.43	90.00	179.53	12750.00	-7544.56	-725.06	7579.32	0.00	BHL

(ft)

(°)

(°)

(ft)

Well: BOLL WEEVIL 27-34 FED COM 5H Geodetic System: US State Plane 1983 County: Lea Datum: North American Datum 1927 Wellbore: Permit Plan Ellipsoid: Clarke 1866 **Zone:** 3001 - NM East (NAD83)

(ft)

Comment

(°/100ft)

Design: Permit Plan #1 INC TVD MD AZI NS EW ٧S DLS

(ft)

(ft)



# **U. S. Steel Tubular Products** 9.625" 40.00lbs/ft (0.395" Wall) J55

1/24/2019 2:45:24 PM

MECHANICAL PROPERTIES	Pipe	втс	LTC	STC	
Minimum Yield Strength	55,000				psi
Maximum Yield Strength	80,000				psi
Minimum Tensile Strength	75,000				psi
DIMENSIONS	Pipe	втс	LTC	STC	
Outside Diameter	9.625	10.625	10.625	10.625	in.
Wall Thickness	0.395				in.
Inside Diameter	8.835	8.835	8.835	8.835	in.
Standard Drift	8.679	8.679	8.679	8.679	in.
Alternate Drift	8.750	8.750	8.750	8.750	in.
Nominal Linear Weight, T&C	40.00				lbs/ft
Plain End Weight	38.97				lbs/ft
PERFORMANCE	Pipe	втс	LTC	STC	
Minimum Collapse Pressure	2,570	2,570	2,570	2,570	psi
Minimum Internal Yield Pressure	3,950	3,950	3,950	3,950	psi
Minimum Pipe Body Yield Strength	630				1,000 lbs
Joint Strength		714	520	452	1,000 lbs
Reference Length		11,898	8,665	7,529	ft
MAKE-UP DATA	Pipe	втс	LTC	STC	
Make-Up Loss		4.81	4.75	3.38	in.
Minimum Make-Up Torque			3,900	3,390	ft-lbs
Maximum Make-Up Torque			6,500	5,650	ft-lbs

### **Legal Notice**

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> U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S connections@uss.com Spring, Texas 77380

1-877-893-9461 www.usstubular.com

### Boll Weevil 27-34 Fed Com 5H

9 5/8	sur	face csg in a	13 1/2	inch hole.		Design I	actors			Surface		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weig
"A"	40.00		i 55	btc	14.93	5.21	0.6	1,055	8	1.01	9.84	42,2
"B"			,	btc				0				O
_	w/8 4#	/g mud, 30min Sfc Csg Test	nsig: 1 500	Tail Cmt	does not	circ to sfc.	Totals:	1,055				42,2
omparison o		linimum Required Cer						.,				,-
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Rea'd				Min D
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
13 1/2	0.4887	497	716	516	39	9.00	3905	5M				1.4
urst Frac Gra	dient(s) for Segme	ent(s) A, B = , b All > 0	D.70, OK.									
7 5/8		ng inside the	9 5/8			<u>Design l</u>				Int 1	_	
Segment	#/ft	Grade	440	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weig
"A"	29.70		p 110	mo-fxl	1.84	1.08	1.09	12,000	1	1.83	1.81	,
"B"								0				0
	w/8.4#	/g mud, 30min Sfc Csg Test					Totals:	12,000				356,4
			olume(s) are intend	ed to achieve a top of	0	ft from su	rface or a	1055				overlap
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min D
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
8 3/4	0.1005	697	1575	1214	30	10.50	4150	5M				0.5
D V Tool(s):			7980				sum of sx	Σ CuFt				Σ%exc
, ,	nt yld > 1.20	290	15				1347	2511				107
Class 'H' tail cn	· 					Deline		2511		Dural 4		107
Tail cmt 5 1/2	casi	ng inside the	7 5/8			Design Fa	ctors			Prod 1		
Tail cmt 5 1/2 Segment	casiı #/ft		7 5/8	Coupling	Body	Collapse	ctors Burst	Length	B@s	а-В	a-C	Weig
Tail cmt 5 1/2 Segment "A"	casi	ng inside the		Coupling vam sprint-tc sc	<b>Body</b> 2.51	_	ctors	<b>Length</b> 20,284	<b>B@s</b> 2		<b>a-C</b> 2.91	Weig 405,6
Tail cmt 5 1/2 Segment "A" "B"	casiı #/ft	ng inside the	7 5/8		-	Collapse	ctors Burst	Length 20,284		а-В		Weig 405,6
Tail cmt 5 1/2 Segment "A" "B" "C"	casiı #/ft	ng inside the	7 5/8		-	Collapse	ctors Burst	Length 20,284 0		а-В		Weig 405,6 0
Tail cmt 5 1/2 Segment "A" "B"	casiı #/ft	ng inside the	7 5/8		-	Collapse	ctors Burst 2.06	Length 20,284 0 0		а-В		Weig 405,6 0 0
Tail cmt 5 1/2 Segment "A" "B" "C"	casin #/ft 20.00	ng inside the Grade /g mud, 30min Sfc Csg Tes	<b>7 5/8</b> p 110 t psig: 2,805	vam sprint-tc sc	2.51	Collapse 1.74	Ctors Burst 2.06	Length 20,284 0 0 0 20,284		а-В	2.91	Weig 405,6 0 0 0 405,6
Tail cmt 5 1/2 Segment "A" "B" "C"	casin #/ft 20.00	ng inside the Grade /g mud, 30min Sfc Csg Tes	<b>7 5/8</b> p 110 t psig: 2,805		-	Collapse	Ctors Burst 2.06	Length 20,284 0 0		а-В	2.91	Weig 405,6 0 0 0 405,6
Tail cmt 5 1/2 Segment "A" "B" "C"	casin #/ft 20.00	ng inside the Grade /g mud, 30min Sfc Csg Tes	<b>7 5/8</b> p 110 t psig: 2,805	vam sprint-tc sc	2.51	Collapse 1.74	Ctors Burst 2.06	Length 20,284 0 0 0 20,284		а-В	2.91	Weig 405,6 0
Tail cmt 5 1/2 Segment "A" "B" "C" "D"	casin #/ft 20.00	ng inside the Grade /g mud, 30min Sfc Csg Tes The cement v	7 5/8 p 110 t psig: 2,805 volume(s) are intend	vam sprint-tc sc	2.51	Collapse 1.74	Etors Burst 2.06 Totals:	Length 20,284 0 0 0 20,284 200		а-В	2.91	Weig 405,6 0 0 405,6 overlap Min D
Tail cmt 5 1/2 Segment "A" "C" "D"	casin #/ft 20.00 w/8.4#	ng inside the Grade /g mud, 30min Sfc Csg Tes The cement 1 Stage	7 5/8 p 110 t psig: 2,805 volume(s) are intend 1 Stage	vam sprint-tc sc	2.51 11800 1 Stage	Collapse 1.74 ft from su Drilling	Ctors Burst 2.06  Totals: rface or a Calc	Length 20,284 0 0 0 20,284 200 Req'd		а-В	2.91	Weig 405,6 0 0 405,6 overlap
5 1/2 Segment "A" "B" "C" "D"	casin #/ft 20.00 w/8.4# Annular Volume 0.0835	ng inside the Grade /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx	7 5/8 p 110 t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt	vam sprint-tc sc ed to achieve a top of Min Cu Ft	2.51 11800 1 Stage % Excess	ft from su Drilling Mud Wt	Ctors Burst 2.06  Totals: rface or a Calc	Length 20,284 0 0 0 20,284 200 Req'd		а-В	2.91	Weig 405,6 0 0 405,6 overlap Min D Hole-C
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835	ng inside the Grade /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx	7 5/8 p 110 t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt	vam sprint-tc sc ed to achieve a top of Min Cu Ft	2.51 11800 1 Stage % Excess	ft from su Drilling Mud Wt	Ctors Burst 2.06  Totals: rface or a Calc	Length 20,284 0 0 0 20,284 200 Req'd		а-В	2.91	Weig 405,6 0 0 405,6 overlap Min D Hole-C
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835	ng inside the Grade /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx	7 5/8 p 110 t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt	vam sprint-tc sc ed to achieve a top of Min Cu Ft	2.51 11800 1 Stage % Excess	ft from su Drilling Mud Wt	Totals: rface or a Calc MASP	Length 20,284 0 0 0 20,284 200 Req'd	2	а-В	2.91	Weig 405,6 0 0 405,6 overlap Min D Hole-C
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835	ng inside the Grade /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx	p 110  t psig: 2,805  rolume(s) are intend 1 Stage CuFt Cmt 941	vam sprint-tc sc ed to achieve a top of Min Cu Ft	2.51 11800 1 Stage % Excess	ft from su Drilling Mud Wt 10.50	Totals: rface or a Calc MASP	Length 20,284 0 0 0 20,284 200 Req'd	2	<b>a-B</b> 3.46	2.91	Weig 405,6 0 0 0 405,6 overlap Min D Hole-C
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4#, Annular Volume 0.0835 at yld > 1.35	ng inside the Grade  /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx 575	p 110  t psig: 2,805  rolume(s) are intend 1 Stage CuFt Cmt 941	ed to achieve a top of Min Cu Ft 710	2.51 11800 1 Stage % Excess 33	ft from su Drilling Mud Wt 10.50	Totals: rface or a Calc MASP	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing>	Weig 405,6 0 0 0 405,6 overlap Min D Hole-C
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 class 'C' tail cm	casin #/ft 20.00 w/8.4#, Annular Volume 0.0835 at yld > 1.35	ng inside the Grade  /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx 575	p 110  t psig: 2,805  rolume(s) are intend 1 Stage CuFt Cmt 941	ed to achieve a top of Min Cu Ft 710  Coupling	2.51 11800 1 Stage % Excess 33	ft from su Drilling Mud Wt 10.50	Totals: rface or a Calc MASP	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing>	Weig 405,6 0 0 0 405,6 overlap Min E Hole-C 0.4
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835 nt yld > 1.35	ng inside the Grade  /g mud, 30min Sfc Csg Tes The cement of 1 Stage Cmt Sx 575  Grade	p 110  t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt 941	ed to achieve a top of Min Cu Ft 710  Coupling 0.00	2.51 11800 1 Stage % Excess 33	ft from su Drilling Mud Wt 10.50	Totals: rface or a Calc MASP	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing>	Weig 405,6 0 0 405,6 overlap Min E Hole-C 0.4
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835 nt yld > 1.35	ng inside the Grade  /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx 575  Grade	7 5/8 p 110  t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt 941  5 1/2	ed to achieve a top of Min Cu Ft 710  Coupling 0.00 0.00	2.51  11800 1 Stage % Excess 33  #N/A	ft from su Drilling Mud Wt 10.50	Totals: Totals: rface or a Calc MASP  Factors Burst  Totals:	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing> a-C	Weig 405,6 0 0 405,6 overlap Min D Hole-C 0.4
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835 nt yld > 1.35	ng inside the Grade  /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx 575  Grade  /g mud, 30min Sfc Csg Tes Cmt vol ca	7 5/8 p 110  t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt 941  5 1/2	ed to achieve a top of Min Cu Ft 710  Coupling 0.00 0.00 nis csg, TOC intended	2.51  11800 1 Stage % Excess 33  #N/A	ft from su Drilling Mud Wt 10.50  Design Collapse	Totals: rface or a Calc MASP  Totals: Totals: rface or a Calc Totals: Totals: Totals:	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing> a-C	Weig 405,6 0 0 0 405,6 0 0 0 0 0 Weig 0 0 0 0 0 0 0 0 0 0 0 0 0
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 3/4 Class 'C' tail cm	casin #/ft 20.00  w/8.4#  Annular Volume 0.0835 nt yld > 1.35  #/ft  w/8.4#  Annular	ng inside the Grade  //g mud, 30min Sfc Csg Tes The cement of 1 Stage Cmt Sx 575  Grade  //g mud, 30min Sfc Csg Tes Cmt vol ca 1 Stage	7 5/8 p 110  t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt 941  5 1/2  t psig: alc below includes the stage of the s	vam sprint-tc sc  ed to achieve a top of Min Cu Ft 710  Coupling 0.00 0.00  nis csg, TOC intended Min	2.51  11800 1 Stage % Excess 33  #N/A  #N/A	ft from su Drilling Mud Wt 10.50  Design I Collapse	Totals: rface or a Calc MASP  Totals: rface or a Calc MASP  Totals: rface or a Calc	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing> a-C	Weig 405,6 0 0 0 0 405,6 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Tail cmt 5 1/2 Segment "A" "B" "C" "D"  Hole Size 6 32/4 lass 'C' tail cm	casin #/ft 20.00 w/8.4# Annular Volume 0.0835 nt yld > 1.35	ng inside the Grade  /g mud, 30min Sfc Csg Tes The cement v 1 Stage Cmt Sx 575  Grade  /g mud, 30min Sfc Csg Tes Cmt vol ca	7 5/8 p 110  t psig: 2,805 volume(s) are intend 1 Stage CuFt Cmt 941  5 1/2	ed to achieve a top of Min Cu Ft 710  Coupling 0.00 0.00 nis csg, TOC intended	2.51  11800 1 Stage % Excess 33  #N/A	ft from su Drilling Mud Wt 10.50  Design Collapse	Totals: rface or a Calc MASP  Totals: Totals: rface or a Calc Totals: Totals: Totals:	Length 20,284 0 0 0 20,284 200 Req'd BOPE	2	a-B 3.46	2.91 ing> a-C	Wei 405, 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Carlsbad Field Office 5/9/2024

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

CONDITIONS

Action 343356

### **CONDITIONS**

Operator:	OGRID:
DEVON ENERGY PRODUCTION COMPANY, LP	6137
333 West Sheridan Ave.	Action Number:
Oklahoma City, OK 73102	343356
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	ALL PREVIOUS COA'S APPLY.	6/15/2024