

Well Name: COTTON DRAW UNIT	Well Location: T25S / R31E / SEC 1 / LOT 2 / 32.165709 / -103.731244	County or Parish/State: EDDY / NM
Well Number: 637H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0503	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001555021	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2816662

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 11/05/2024	Time Sundry Submitted: 10:35
Date proposed operation will begin: 10/11/2024	

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to change to a slim hole casing design, BHL, name, TVD, pool code and spacing on the subject well. Devon also requests a break test and offline cementing variance. New leases have been added since approved APD and notification has been given. Please see attached revised C102, Drill plan, directional plan, spec sheets, break test and offline cementing variance. Permitted BHL: SESW, 20 FSL, 2090 FWL, 12-25S-31E Proposed BHL: NENW, 20 FNL, 1950 FWL, 25-24S-31E Permitted Well name: COTTON DRAW UNIT 637H Proposed Well name: COTTON DRAW 25-36 FED STATE COM 536H Permitted TVD/MD: 12049/22154 - Purple Sage/Wolfcamp Proposed TVD/MD: 9177/19410 - Paduca/Bone Spring

NOI Attachments

Procedure Description

- WA018390636_COTTON_DRAW_25_36_FED_STATE_COM_536H_WL_R1_SIGNED_20241105103512.pdf
- Offline_Cementing___Variance_Request_20241105103512.pdf
- break_test_variance_BOP_1_15_24_20241105103507.pdf
- 7.625_29.7lb_P110_HP_Talon_SFC_20241105103505.pdf
- 5.5_20lb_P110HP_TALON_RD_20241105103505.pdf
- COTTON_DRAW_25_36_FED_STATE_COM_536H_Directional_Plan_10_02_24_20241105103506.pdf
- COTTON_DRAW_25_36_FED_STATE_COM_536H_Slim_Hole_20241105103504.pdf

Received by OCD: 11/18/2024 11:17:39 AM

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Well Name: COTTON DRAW UNIT	Well Location: T25S / R31E / SEC 1 / LOT 2 / 32.165709 / -103.731244	County or Parish/State: EDDY / NM
Well Number: 637H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0503	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001555021	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

9.625_40lb_J55_SeAH_20241105103506.pdf

Conditions of Approval

Specialist Review

Sundry_ID_2816662_20241114081216.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: CHELSEY GREEN

Signed on: NOV 11, 2024 04:39 PM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Compliance Professional

Street Address: 333 WEST SHERIDAN AVENUE

City: OKLAHOMA CITYState: OK

Phone: (405) 228-8595

Email address: CHELSEY.GREEN@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: 11/14/2024

Signature: Long Vo

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
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.		5. Lease Serial No.
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool or Exploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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

Additional Information

Location of Well

0. SHL: LOT 2 / 331 FNL / 2564 FEL / TWSP: 25S / RANGE: 31E / SECTION: 1 / LAT: 32.165709 / LONG: -103.731244 (TVD: 8346 feet, MD: 8412 feet)

PPP: LOT 3 / 100 FNL / 2090 FWL / TWSP: 25S / RANGE: 31E / SECTION: 1 / LAT: 32.16634 / LONG: -103.733332 (TVD: 11650 feet, MD: 11740 feet)

BHL: SESW / 20 FSL / 2090 FWL / TWSP: 25S / RANGE: 31E / SECTION: 12 / LAT: 32.137631 / LONG: -103.733354 (TVD: 12049 feet, MD: 22154 feet)

CONFIDENTIAL

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July, 2024	
			Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
				<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled		

WELL LOCATION INFORMATION

API Number 30-015-55021	Pool Code 96641	Pool Name PADUCA; BONE SPRING
Property Code	Property Name COTTON DRAW 25-36 FED STATE COM	Well Number 536H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Ground Level Elevation 3470.0'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	25-S	31-E	2	331' N	2564' E	32.165709	103.731244	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	25	24-S	31-E		20' N	1950' W	32.195548	103.733742	EDDY

Dedicated Acres 319.36	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers			Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	36	24S	31E	2	53 S	1950 W	32.1667	103.7339	EDDY


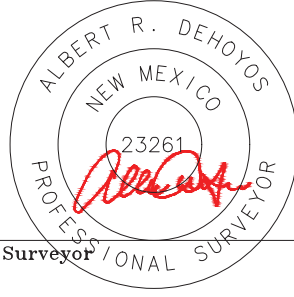
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	36	24-S	31-E	2	100' S	1950' W	32.166905	103.733783	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	25	24-S	31-E		100' N	1950' W	32.195328	103.733742	EDDY

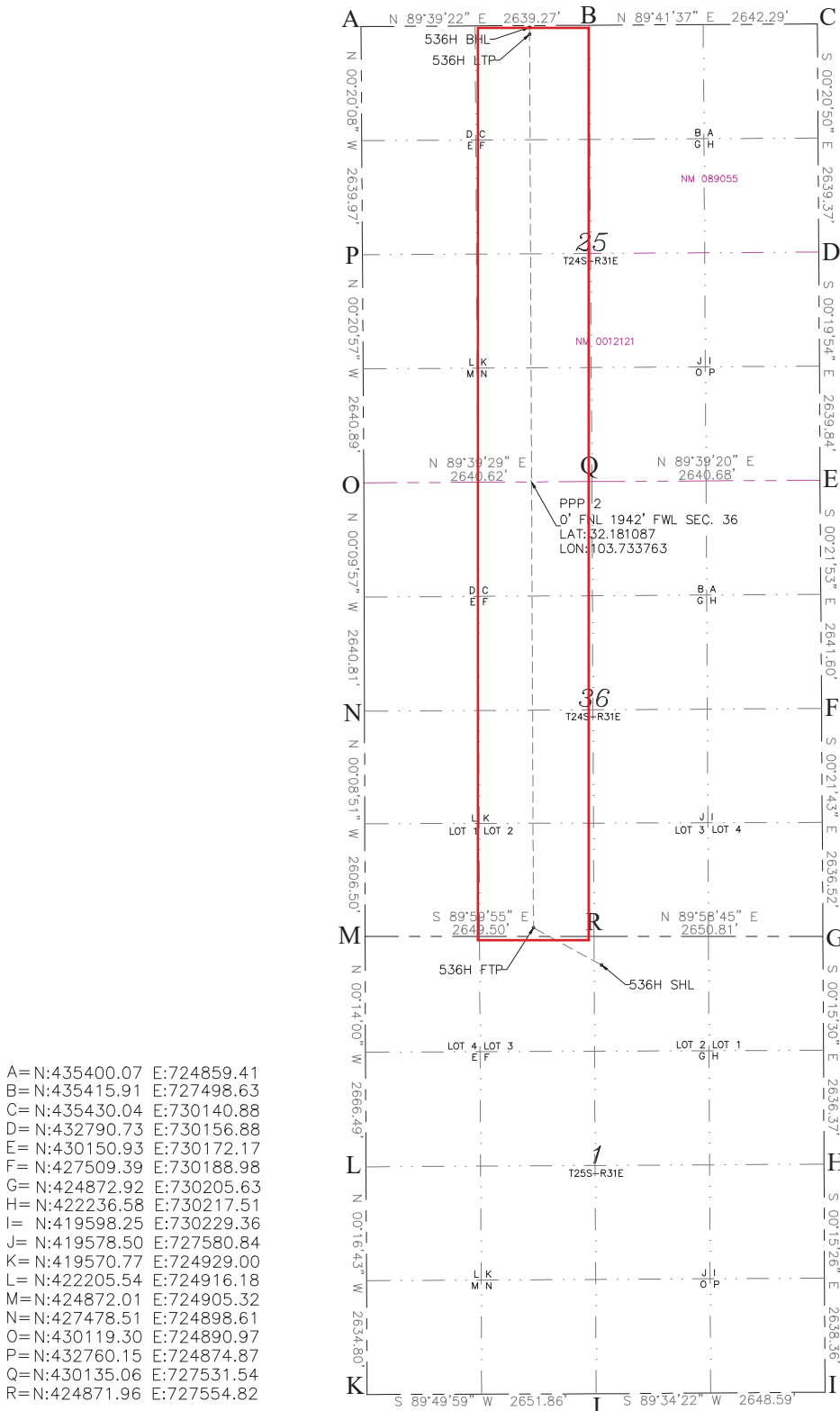
Spacing Unit Type XHorizontal Vertical		Ground Floor Elevation:
--	--	-------------------------

OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.		SURVEYOR CERTIFICATIONS I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under supervision, and that the same is true and correct to the best of my belief.	
Signature  Date 10/01/2024		Signature and Seal of Professional Surveyor 	
Printed Name Chelsey Green Email Address chelsey.green@dvn.com		Certificate Number 23261	Date of Survey 07/2024

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



Offline Cementing

Variance Request

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.

Section 2 - Blowout Preventer Testing Procedure

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. This test will include the Top Pipe Rams, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and Shell of the 10M BOPE to 5M for 10 minutes. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections and no deeper than the Bone Springs Formation where 5M BOP tests are required. The initial BOP test will follow 43 CFR 3172, and subsequent tests following a skid will only test connections that are broken. The annular preventer will be tested to 100% working pressure. This variance will meet or exceed 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, before the expiration of the allotted 14-days for 5M intermediate batch drilling or when the drilling rig is fully mobilized to a new well pad, whichever is sooner. We will utilize a 200' TVD tolerance between intermediate shoes as the cutoff for a full BOP test. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. Break test will be a 14 day interval and not a 30 day full BOPE test interval. If in the event break testing is not utilized, then a full BOPE test would be conducted.

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

Cactus
Wellhead

2-9-17
E Bell

80.7 °F

15:49



50

Date 02-09-17

Tested By E.BELL

Transducer bay2

Transducer Serial 181504

Calibration Date 9/6/15

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

TRANSDUCER CALIBRATION DUE 03/13/2017



Start



Stop



Zero



Config



Save



Print

EXIT



U. S. Steel Tubular Products

7.625" 29.70lb/ft (0.375" Wall) P110 HP USS-TALON SFC™

5/15/2024 6:31:14 PM



MECHANICAL PROPERTIES	Pipe	USS-TALON SFC™		[6]
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON SFC™		--
Outside Diameter	7.625	7.900	in.	--
Wall Thickness	0.375	--	in.	--
Inside Diameter	6.875	6.815	in.	--
Standard Drift	6.750	6.750	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	29.70	--	lb/ft	--
Plain End Weight	29.06	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON SFC™		--
Critical Area	8.541	7.331	sq. in.	--
Joint Efficiency	--	85.8	%	[2]
PERFORMANCE	Pipe	USS-TALON SFC™		--
Minimum Collapse Pressure	7,260	7,260	psi	--
Minimum Internal Yield Pressure	10,750	10,750	psi	--
Minimum Pipe Body Yield Strength	1,068,000	--	lb	--
Joint Strength	--	916,000	lb	--
Compression Rating	--	916,000	lb	--
Reference Length	--	20,560	ft	[5]
Maximum Uniaxial Bend Rating	--	64.4	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON SFC™		--
Make-Up Loss	--	5.08	in.	--
Minimum Make-Up Torque	--	30,000	ft-lb	[4]
Maximum Make-Up Torque	--	33,000	ft-lb	[4]
Maximum Operating Torque	--	80,500	ft-lb	[4]

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bend rating shown is structural only.
4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
6. Coupling must meet minimum mechanical properties of the pipe.

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
Spring, Texas 77380

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



U. S. Steel Tubular Products

5.500" 20.00lb/ft (0.361" Wall) P110 HP USS-TALON HTQ™ RD

2/21/2024 7:48:59 AM

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		--
Outside Diameter	5.500	5.900	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON HTQ™ RD		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		--
Minimum Collapse Pressure	13,150	13,150	psi	--
Minimum Internal Yield Pressure	14,360	14,360	psi	--
Minimum Pipe Body Yield Strength	729,000	--	lb	--
Joint Strength	--	729,000	lb	--
Compression Rating	--	729,000	lb	--
Reference Length	--	24,300	ft	[5]
Maximum Uniaxial Bend Rating	--	104.2	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		--
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	18,400	ft-lb	[4]
Maximum Make-Up Torque	--	21,400	ft-lb	[4]
Maximum Operating Torque	--	44,400	ft-lb	[4]

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bend rating shown is structural only.
4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
6. Coupling must meet minimum mechanical properties of the pipe.

Legal Notice

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Well: COTTON DRAW 25-36 FED STATE COM 536H

County: Lea

Wellbore: Permit Plan

Design: Permit Plan #1

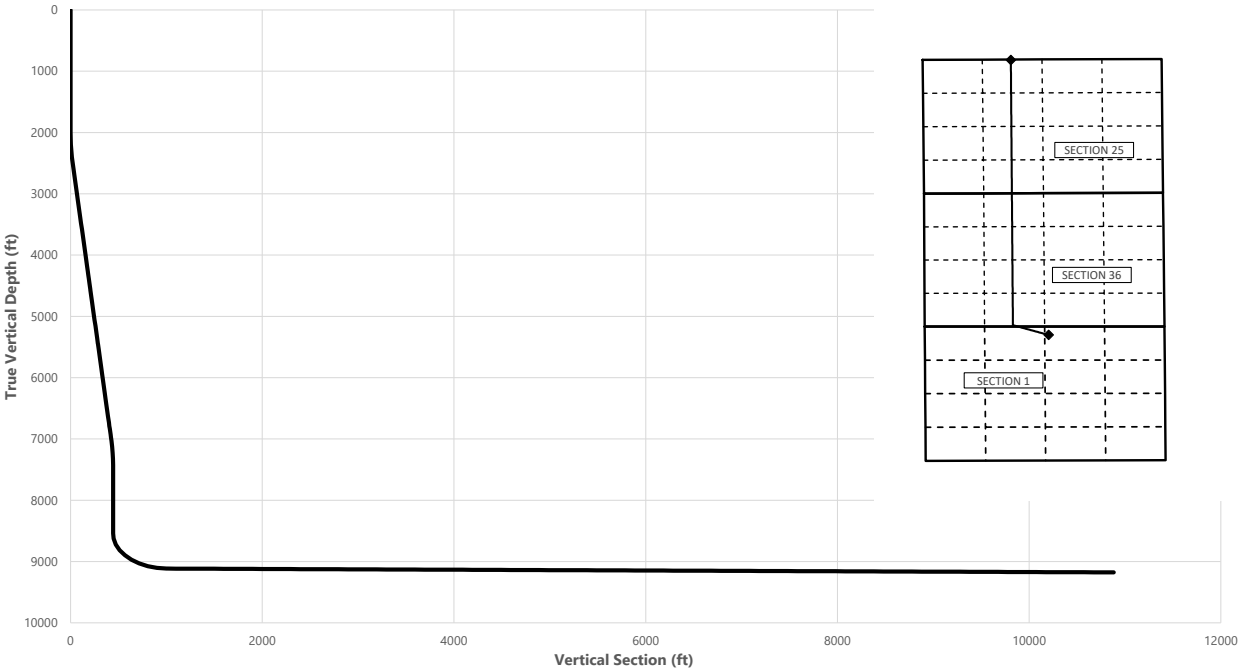
Geodetic System: US State Plane 1983

Datum: North American Datum 1927

Ellipsoid: Clarke 1866

Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
2000.00	0.00	296.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	296.00	2497.47	19.08	-39.12	22.02	2.00	Hold Tangent
7046.09	10.00	296.00	6974.49	365.14	-748.64	421.40	0.00	Drop to Vertical
7546.09	0.00	296.00	7471.95	384.22	-787.76	443.42	2.00	Hold Vertical
8616.19	0.00	359.75	8542.05	384.22	-787.76	443.42	0.00	KOP
9512.60	89.64	359.75	9115.00	953.58	-790.25	1011.30	10.00	Landing Point
19410.12	89.64	359.75	9177.00	10850.81	-833.43	10882.77	0.00	BHL



Key Depths	MD	TVD
	(ft)	(ft)
Rustler	660.00	660.00
Salt	1105.00	1105.00
Base of Salt	4340.50	4310.00
Lamar	4416.65	4385.00
Delaware	4594.35	4560.00
Cherry Canyon	5487.93	5440.00
Brushy Canyon	6858.75	6790.00
1st Bone Spring Lime / Point of Pene	8434.13	8360.00
exit	19330.12	9176.51

SHL
KOP
Point of Penetration
Exit
BHL

MD	TVD	Lat	Long	Section Footages
(ft)	(ft)	(°)	(°)	
0.00	0.00	32.1656	-103.7313	331' FNL, 2564' FEL of Sec 1 in T24S, R31E
8616.19	8542.05	32.1667	-103.7339	53' FSL, 1950' FWL of Sec 36 in T24S, R31E
8434.13	8360.00	32.1669	-103.7338	100' FSL, 1950' FWL of Sec 36 in T24S, R31E
19330.12	9176.51	32.1953	-103.7337	100' FNL , 1950' FWL of Sec 25 in T24S, R31E
19410.12	9177.00	32.1955	-103.7338	20' FNL, 1950' FWL of Sec 25 in T24S, R31E

	Y	X	MD
KOP	424925	726855	8616.19

COTTON DRAW 25-36 FED STATE COM 536H



Well: COTTON DRAW 25-36 FED STATE COM 536H

County: Lea

Wellbore: Permit Plan

Design: Permit Plan #1

Geodetic System: US State Plane 1983

Datum: North American Datum 1927

Ellipsoid: Clarke 1866

Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	296.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	296.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	296.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	296.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	296.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	296.00	600.00	0.00	0.00	0.00	0.00	
660.00	0.00	296.00	660.00	0.00	0.00	0.00	0.00	Rustler
700.00	0.00	296.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	296.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	296.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	296.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	296.00	1100.00	0.00	0.00	0.00	0.00	
1105.00	0.00	296.00	1105.00	0.00	0.00	0.00	0.00	Salt
1200.00	0.00	296.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	296.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	296.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	296.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	296.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	296.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	296.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	296.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	296.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	296.00	2099.98	0.77	-1.57	0.88	2.00	
2200.00	4.00	296.00	2199.84	3.06	-6.27	3.53	2.00	
2300.00	6.00	296.00	2299.45	6.88	-14.11	7.94	2.00	
2400.00	8.00	296.00	2398.70	12.22	-25.06	14.10	2.00	
2500.00	10.00	296.00	2497.47	19.08	-39.12	22.02	2.00	Hold Tangent
2600.00	10.00	296.00	2595.95	26.69	-54.73	30.80	0.00	
2700.00	10.00	296.00	2694.43	34.30	-70.33	39.59	0.00	
2800.00	10.00	296.00	2792.91	41.92	-85.94	48.37	0.00	
2900.00	10.00	296.00	2891.39	49.53	-101.55	57.16	0.00	
3000.00	10.00	296.00	2989.87	57.14	-117.15	65.94	0.00	
3100.00	10.00	296.00	3088.35	64.75	-132.76	74.73	0.00	
3200.00	10.00	296.00	3186.83	72.36	-148.37	83.51	0.00	
3300.00	10.00	296.00	3285.31	79.98	-163.98	92.30	0.00	
3400.00	10.00	296.00	3383.79	87.59	-179.58	101.08	0.00	
3500.00	10.00	296.00	3482.27	95.20	-195.19	109.87	0.00	
3600.00	10.00	296.00	3580.75	102.81	-210.80	118.65	0.00	
3700.00	10.00	296.00	3679.23	110.42	-226.41	127.44	0.00	
3800.00	10.00	296.00	3777.72	118.04	-242.01	136.22	0.00	
3900.00	10.00	296.00	3876.20	125.65	-257.62	145.01	0.00	
4000.00	10.00	296.00	3974.68	133.26	-273.23	153.79	0.00	
4100.00	10.00	296.00	4073.16	140.87	-288.84	162.58	0.00	
4200.00	10.00	296.00	4171.64	148.49	-304.44	171.37	0.00	
4300.00	10.00	296.00	4270.12	156.10	-320.05	180.15	0.00	
4340.50	10.00	296.00	4310.00	159.18	-326.37	183.71	0.00	Base of Salt
4400.00	10.00	296.00	4368.60	163.71	-335.66	188.94	0.00	
4416.65	10.00	296.00	4385.00	164.98	-338.26	190.40	0.00	Lamar
4500.00	10.00	296.00	4467.08	171.32	-351.27	197.72	0.00	
4594.35	10.00	296.00	4560.00	178.50	-365.99	206.01	0.00	Delaware
4600.00	10.00	296.00	4565.56	178.93	-366.87	206.51	0.00	
4700.00	10.00	296.00	4664.04	186.55	-382.48	215.29	0.00	
4800.00	10.00	296.00	4762.52	194.16	-398.09	224.08	0.00	
4900.00	10.00	296.00	4861.00	201.77	-413.70	232.86	0.00	
5000.00	10.00	296.00	4959.48	209.38	-429.30	241.65	0.00	
5100.00	10.00	296.00	5057.97	217.00	-444.91	250.43	0.00	
5200.00	10.00	296.00	5156.45	224.61	-460.52	259.22	0.00	
5300.00	10.00	296.00	5254.93	232.22	-476.13	268.00	0.00	
5400.00	10.00	296.00	5353.41	239.83	-491.73	276.79	0.00	
5487.93	10.00	296.00	5440.00	246.52	-505.46	284.51	0.00	Cherry Canyon
5500.00	10.00	296.00	5451.89	247.44	-507.34	285.57	0.00	
5600.00	10.00	296.00	5550.37	255.06	-522.95	294.36	0.00	
5700.00	10.00	296.00	5648.85	262.67	-538.56	303.14	0.00	
5800.00	10.00	296.00	5747.33	270.28	-554.16	311.93	0.00	
5900.00	10.00	296.00	5845.81	277.89	-569.77	320.71	0.00	
6000.00	10.00	296.00	5944.29	285.50	-585.38	329.50	0.00	
6100.00	10.00	296.00	6042.77	293.12	-600.98	338.28	0.00	
6200.00	10.00	296.00	6141.25	300.73	-616.59	347.07	0.00	
6300.00	10.00	296.00	6239.73	308.34	-632.20	355.85	0.00	

COTTON DRAW 25-36 FED STATE COM 536H



Well: COTTON DRAW 25-36 FED STATE COM 536H
County: Lea
Wellbore: Permit Plan
Design: Permit Plan #1

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

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
6400.00	10.00	296.00	6338.22	315.95	-647.81	364.64	0.00	
6500.00	10.00	296.00	6436.70	323.57	-663.41	373.42	0.00	
6600.00	10.00	296.00	6535.18	331.18	-679.02	382.21	0.00	
6700.00	10.00	296.00	6633.66	338.79	-694.63	390.99	0.00	
6800.00	10.00	296.00	6732.14	346.40	-710.24	399.78	0.00	
6858.75	10.00	296.00	6790.00	350.87	-719.41	404.94	0.00	Brushy Canyon
6900.00	10.00	296.00	6830.62	354.01	-725.84	408.56	0.00	
7000.00	10.00	296.00	6929.10	361.63	-741.45	417.35	0.00	
7046.09	10.00	296.00	6974.49	365.14	-748.64	421.40	0.00	Drop to Vertical
7100.00	8.92	296.00	7027.67	369.02	-756.61	425.88	2.00	
7200.00	6.92	296.00	7126.71	375.06	-769.00	432.85	2.00	
7300.00	4.92	296.00	7226.17	379.59	-778.27	438.07	2.00	
7400.00	2.92	296.00	7325.93	382.58	-784.41	441.53	2.00	
7500.00	0.92	296.00	7425.87	384.05	-787.43	443.23	2.00	
7546.09	0.00	296.00	7471.95	384.22	-787.76	443.42	2.00	Hold Vertical
7600.00	0.00	359.75	7525.87	384.22	-787.76	443.42	0.00	
7700.00	0.00	359.75	7625.87	384.22	-787.76	443.42	0.00	
7800.00	0.00	359.75	7725.87	384.22	-787.76	443.42	0.00	
7900.00	0.00	359.75	7825.87	384.22	-787.76	443.42	0.00	
8000.00	0.00	359.75	7925.87	384.22	-787.76	443.42	0.00	
8100.00	0.00	359.75	8025.87	384.22	-787.76	443.42	0.00	
8200.00	0.00	359.75	8125.87	384.22	-787.76	443.42	0.00	
8300.00	0.00	359.75	8225.87	384.22	-787.76	443.42	0.00	
8400.00	0.00	359.75	8325.87	384.22	-787.76	443.42	0.00	
8434.13	0.00	359.75	8360.00	384.22	-787.76	443.42	0.00	1st Bone Spring Lime / Point of Penetration
8500.00	0.00	359.75	8425.87	384.22	-787.76	443.42	0.00	
8600.00	0.00	359.75	8525.87	384.22	-787.76	443.42	0.00	
8616.19	0.00	359.75	8542.05	384.22	-787.76	443.42	0.00	KOP
8700.00	8.38	359.75	8625.57	390.34	-787.79	449.52	10.00	
8800.00	18.38	359.75	8722.73	413.45	-787.89	472.57	10.00	
8900.00	28.38	359.75	8814.40	453.08	-788.06	512.11	10.00	
9000.00	38.38	359.75	8897.80	508.03	-788.30	566.91	10.00	
9100.00	48.38	359.75	8970.39	576.63	-788.60	635.33	10.00	
9200.00	58.38	359.75	9029.96	656.79	-788.95	715.28	10.00	
9300.00	68.38	359.75	9074.71	746.08	-789.34	804.34	10.00	
9400.00	78.38	359.75	9103.27	841.78	-789.76	899.79	10.00	
9500.00	88.38	359.75	9114.78	940.98	-790.19	998.74	10.00	
9512.60	89.64	359.75	9115.00	953.58	-790.25	1011.30	10.00	Landing Point
9600.00	89.64	359.75	9115.55	1040.98	-790.63	1098.47	0.00	
9700.00	89.64	359.75	9116.17	1140.98	-791.06	1198.21	0.00	
9800.00	89.64	359.75	9116.80	1240.97	-791.50	1297.95	0.00	
9900.00	89.64	359.75	9117.43	1340.97	-791.94	1397.68	0.00	
10000.00	89.64	359.75	9118.05	1440.97	-792.37	1497.42	0.00	
10100.00	89.64	359.75	9118.68	1540.96	-792.81	1597.16	0.00	
10200.00	89.64	359.75	9119.31	1640.96	-793.25	1696.89	0.00	
10300.00	89.64	359.75	9119.93	1740.96	-793.69	1796.63	0.00	
10400.00	89.64	359.75	9120.56	1840.96	-794.12	1896.37	0.00	
10500.00	89.64	359.75	9121.19	1940.95	-794.56	1996.10	0.00	
10600.00	89.64	359.75	9121.81	2040.95	-795.00	2095.84	0.00	
10700.00	89.64	359.75	9122.44	2140.95	-795.43	2195.58	0.00	
10800.00	89.64	359.75	9123.07	2240.94	-795.87	2295.31	0.00	
10900.00	89.64	359.75	9123.69	2340.94	-796.31	2395.05	0.00	
11000.00	89.64	359.75	9124.32	2440.94	-796.74	2494.79	0.00	
11100.00	89.64	359.75	9124.95	2540.94	-797.18	2594.52	0.00	
11200.00	89.64	359.75	9125.57	2640.93	-797.62	2694.26	0.00	
11300.00	89.64	359.75	9126.20	2740.93	-798.05	2794.00	0.00	
11400.00	89.64	359.75	9126.83	2840.93	-798.49	2893.73	0.00	
11500.00	89.64	359.75	9127.45	2940.92	-798.93	2993.47	0.00	
11600.00	89.64	359.75	9128.08	3040.92	-799.36	3093.21	0.00	
11700.00	89.64	359.75	9128.71	3140.92	-799.80	3192.95	0.00	
11800.00	89.64	359.75	9129.33	3240.92	-800.24	3292.68	0.00	
11900.00	89.64	359.75	9129.96	3340.91	-800.68	3392.42	0.00	
12000.00	89.64	359.75	9130.58	3440.91	-801.11	3492.16	0.00	
12100.00	89.64	359.75	9131.21	3540.91	-801.55	3591.89	0.00	
12200.00	89.64	359.75	9131.84	3640.90	-801.99	3691.63	0.00	
12300.00	89.64	359.75	9132.46	3740.90	-802.42	3791.37	0.00	
12400.00	89.64	359.75	9133.09	3840.90	-802.86	3891.10	0.00	
12500.00	89.64	359.75	9133.72	3940.89	-803.30	3990.84	0.00	
12600.00	89.64	359.75	9134.34	4040.89	-803.73	4090.58	0.00	
12700.00	89.64	359.75	9134.97	4140.89	-804.17	4190.31	0.00	

COTTON DRAW 25-36 FED STATE COM 536H



Well: COTTON DRAW 25-36 FED STATE COM 536H
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Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
12800.00	89.64	359.75	9135.60	4240.89	-804.61	4290.05	0.00	
12900.00	89.64	359.75	9136.22	4340.88	-805.04	4389.79	0.00	
13000.00	89.64	359.75	9136.85	4440.88	-805.48	4489.52	0.00	
13100.00	89.64	359.75	9137.48	4540.88	-805.92	4589.26	0.00	
13200.00	89.64	359.75	9138.10	4640.87	-806.35	4689.00	0.00	
13300.00	89.64	359.75	9138.73	4740.87	-806.79	4788.74	0.00	
13400.00	89.64	359.75	9139.36	4840.87	-807.23	4888.47	0.00	
13500.00	89.64	359.75	9139.98	4940.87	-807.66	4988.21	0.00	
13600.00	89.64	359.75	9140.61	5040.86	-808.10	5087.95	0.00	
13700.00	89.64	359.75	9141.24	5140.86	-808.54	5187.68	0.00	
13800.00	89.64	359.75	9141.86	5240.86	-808.98	5287.42	0.00	
13900.00	89.64	359.75	9142.49	5340.85	-809.41	5387.16	0.00	
14000.00	89.64	359.75	9143.12	5440.85	-809.85	5486.89	0.00	
14100.00	89.64	359.75	9143.74	5540.85	-810.29	5586.63	0.00	
14200.00	89.64	359.75	9144.37	5640.85	-810.72	5686.37	0.00	
14300.00	89.64	359.75	9145.00	5740.84	-811.16	5786.10	0.00	
14400.00	89.64	359.75	9145.62	5840.84	-811.60	5885.84	0.00	
14500.00	89.64	359.75	9146.25	5940.84	-812.03	5985.58	0.00	
14600.00	89.64	359.75	9146.88	6040.83	-812.47	6085.31	0.00	
14700.00	89.64	359.75	9147.50	6140.83	-812.91	6185.05	0.00	
14800.00	89.64	359.75	9148.13	6240.83	-813.34	6284.79	0.00	
14900.00	89.64	359.75	9148.75	6340.82	-813.78	6384.53	0.00	
15000.00	89.64	359.75	9149.38	6440.82	-814.22	6484.26	0.00	
15100.00	89.64	359.75	9150.01	6540.82	-814.65	6584.00	0.00	
15200.00	89.64	359.75	9150.63	6640.82	-815.09	6683.74	0.00	
15300.00	89.64	359.75	9151.26	6740.81	-815.53	6783.47	0.00	
15400.00	89.64	359.75	9151.89	6840.81	-815.97	6883.21	0.00	
15500.00	89.64	359.75	9152.51	6940.81	-816.40	6982.95	0.00	
15600.00	89.64	359.75	9153.14	7040.80	-816.84	7082.68	0.00	
15700.00	89.64	359.75	9153.77	7140.80	-817.28	7182.42	0.00	
15800.00	89.64	359.75	9154.39	7240.80	-817.71	7282.16	0.00	
15900.00	89.64	359.75	9155.02	7340.80	-818.15	7381.89	0.00	
16000.00	89.64	359.75	9155.65	7440.79	-818.59	7481.63	0.00	
16100.00	89.64	359.75	9156.27	7540.79	-819.02	7581.37	0.00	
16200.00	89.64	359.75	9156.90	7640.79	-819.46	7681.10	0.00	
16300.00	89.64	359.75	9157.53	7740.78	-819.90	7780.84	0.00	
16400.00	89.64	359.75	9158.15	7840.78	-820.33	7880.58	0.00	
16500.00	89.64	359.75	9158.78	7940.78	-820.77	7980.31	0.00	
16600.00	89.64	359.75	9159.41	8040.78	-821.21	8080.05	0.00	
16700.00	89.64	359.75	9160.03	8140.77	-821.64	8179.79	0.00	
16800.00	89.64	359.75	9160.66	8240.77	-822.08	8279.53	0.00	
16900.00	89.64	359.75	9161.29	8340.77	-822.52	8379.26	0.00	
17000.00	89.64	359.75	9161.91	8440.76	-822.95	8479.00	0.00	
17100.00	89.64	359.75	9162.54	8540.76	-823.39	8578.74	0.00	
17200.00	89.64	359.75	9163.17	8640.76	-823.83	8678.47	0.00	
17300.00	89.64	359.75	9163.79	8740.75	-824.27	8778.21	0.00	
17400.00	89.64	359.75	9164.42	8840.75	-824.70	8877.95	0.00	
17500.00	89.64	359.75	9165.05	8940.75	-825.14	8977.68	0.00	
17600.00	89.64	359.75	9165.67	9040.75	-825.58	9077.42	0.00	
17700.00	89.64	359.75	9166.30	9140.74	-826.01	9177.16	0.00	
17800.00	89.64	359.75	9166.92	9240.74	-826.45	9276.89	0.00	
17900.00	89.64	359.75	9167.55	9340.74	-826.89	9376.63	0.00	
18000.00	89.64	359.75	9168.18	9440.73	-827.32	9476.37	0.00	
18100.00	89.64	359.75	9168.80	9540.73	-827.76	9576.10	0.00	
18200.00	89.64	359.75	9169.43	9640.73	-828.20	9675.84	0.00	
18300.00	89.64	359.75	9170.06	9740.73	-828.63	9775.58	0.00	
18400.00	89.64	359.75	9170.68	9840.72	-829.07	9875.32	0.00	
18500.00	89.64	359.75	9171.31	9940.72	-829.51	9975.05	0.00	
18600.00	89.64	359.75	9171.94	10040.72	-829.94	10074.79	0.00	
18700.00	89.64	359.75	9172.56	10140.71	-830.38	10174.53	0.00	
18800.00	89.64	359.75	9173.19	10240.71	-830.82	10274.26	0.00	
18900.00	89.64	359.75	9173.82	10340.71	-831.25	10374.00	0.00	
19000.00	89.64	359.75	9174.44	10440.71	-831.69	10473.74	0.00	
19100.00	89.64	359.75	9175.07	10540.70	-832.13	10573.47	0.00	
19200.00	89.64	359.75	9175.70	10640.70	-832.57	10673.21	0.00	
19300.00	89.64	359.75	9176.32	10740.70	-833.00	10772.95	0.00	
19330.12	89.64	359.75	9176.51	10770.81	-833.13	10802.98	0.00	exit
19400.00	89.64	359.75	9176.95	10840.69	-833.44	10872.68	0.00	
19410.12	89.64	359.75	9177.00	10850.81	-833.43	10882.77	0.00	BHL

COTTON DRAW 25-36 FED STATE COM 536H

1. Geologic Formations

TVD of target	9177	Pilot hole depth	N/A
MD at TD:	19410	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	660		
Salt	1105		
Base of Salt	4310		
Lamar	4385		
Delaware	4560		
Cherry Canyon	5440		
Brushy Canyon	6790		
1st Bone Spring Lime	8360		

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

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2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
13 1/2	9 5/8	40	J-55	BTC	0	685	0	685
8 3/4	7 5/8	29.7	P110HP	TALON SFC	0	8516	0	8516
6 3/4	5 1/2	20	P110HP	TALON RD	0	19410	0	9177

•All casing strings will be tested in accordance with 43 CFR 3172.

3. Cementing Program (Primary Design)

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures

Casing	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	367	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	383	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	158	6858	13.2	1.44	Tail: Class H / C + additives
Production	62	6616	9	3.27	Lead: Class H / C + additives
	689	8616	13.2	1.44	Tail: Class H / C + additives

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

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

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4. Pressure Control Equipment (Three String Design)

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

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5. Mud Program (Three String Design)

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

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

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	5010
Abnormal temperature	No

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

Hydrogen Sulfide (H ₂ S) monitors will be installed prior to drilling out the surface shoe. If H ₂ S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.	
N	H ₂ S is present
Y	H ₂ S plan attached.

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8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).
- 3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. At that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
 Other, describe



9.625" 40# .395" J-55

Dimensions (Nominal)

Outside Diameter	9.625	in.
Wall	0.395	in.
Inside Diameter	8.835	in.
Drift	8.750	in.
Weight, T&C	40.000	lbs./ft.
Weight, PE	38.970	lbs./ft.

Performance Properties

Collapse, PE	2570	psi
Internal Yield Pressure at Minimum Yield		
PE	3950	psi
LTC	3950	psi
BTC	3950	psi
Yield Strength, Pipe Body	630	1000 lbs.
Joint Strength		
STC	452	1000 lbs.
LTC	520	1000 lbs.
BTC	714	1000 lbs.

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

Well Name: COTTON DRAW UNIT	Well Location: T25S / R31E / SEC 1 / LOT 2 / 32.165709 / -103.731244	County or Parish/State: EDDY / NM
Well Number: 637H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0503	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001555021	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2816662

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 11/05/2024	Time Sundry Submitted: 10:35
Date proposed operation will begin: 10/11/2024	

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully requests to change to a slim hole casing design, BHL, name, TVD, pool code and spacing on the subject well. Devon also requests a break test and offline cementing variance. New leases have been added since approved APD and notification has been given. Please see attached revised C102, Drill plan, directional plan, spec sheets, break test and offline cementing variance. Permitted BHL: SESW, 20 FSL, 2090 FWL, 12-25S-31E Proposed BHL: NENW, 20 FNL, 1950 FWL, 25-24S-31E Permitted Well name: COTTON DRAW UNIT 637H Proposed Well name: COTTON DRAW 25-36 FED STATE COM 536H Permitted TVD/MD: 12049/22154 - Purple Sage/Wolfcamp Proposed TVD/MD: 9177/19410 - Paduca/Bone Spring

NOI Attachments

Procedure Description

- WA018390636_COTTON_DRAW_25_36_FED_STATE_COM_536H_WL_R1_SIGNED_20241105103512.pdf
- Offline_Cementing___Variance_Request_20241105103512.pdf
- break_test_variance_BOP_1_15_24_20241105103507.pdf
- 7.625_29.7lb_P110_HP_Talon_SFC_20241105103505.pdf
- 5.5_20lb_P110HP_TALON_RD_20241105103505.pdf
- COTTON_DRAW_25_36_FED_STATE_COM_536H_Directional_Plan_10_02_24_20241105103506.pdf
- COTTON_DRAW_25_36_FED_STATE_COM_536H_Slim_Hole_20241105103504.pdf

Well Name: COTTON DRAW UNIT	Well Location: T25S / R31E / SEC 1 / LOT 2 / 32.165709 / -103.731244	County or Parish/State: EDDY / NM
Well Number: 637H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0503	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001555021	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

9.625_40lb_J55_SeAH_20241105103506.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: CHELSEY GREEN
Signed on: NOV 11, 2024 04:39 PM
Name: DEVON ENERGY PRODUCTION COMPANY LP
Title: Regulatory Compliance Professional
Street Address: 333 WEST SHERIDAN AVENUE
City: OKLAHOMA CITY State: OK
Phone: (405) 228-8595
Email address: CHELSEY.GREEN@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 ▼
LOCATION:	Section 1, T.25 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico ▼

WELL NAME & NO.:	Cotton Draw 25-36 Fed State Com 536H
ATS/API ID:	30-015-55021
APD ID:	10400081461
Sundry ID:	2816662

COA

H2S	Yes ▼		
Potash	Secretary ▼	None ▼	
Cave/Karst Potential	Low ▼		
Cave/Karst Potential	<input type="checkbox"/> Critical		
Variance	<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Other
Wellhead	Conventional and Multibowl ▼		
Other	<input type="checkbox"/> 4 String <input type="checkbox"/> 5 String	Capitan Reef None ▼	<input type="checkbox"/> WIPP
Other	Pilot Hole None ▼	<input type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze None ▼	Echo-Meter Int 1 ▼	Primary Cement Squeeze None ▼
Special Requirements	<input type="checkbox"/> Water Disposal/Injection	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry	Waste Prevention None ▼	
Special Requirements Variance	<input checked="" type="checkbox"/> Break Testing	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Casing Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** 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 **725 feet** (a minimum of **70 feet (Eddy 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.
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.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Option 2:

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

- a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 6790'**.

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 387 sxs Class C)**
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed to pump down 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. Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

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

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

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

- Cement should tie-back **500 feet** into the previous casing and may be lower than USGS Marker Bed No. 126. Operator must run a CBL from TD of the production casing to surface to verify top of cement. Submit results to the BLM.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

C. PRESSURE CONTROL

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

Option 1:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi. Annular which shall be tested to 3500 (70% Working Pressure) psi.**
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **7-5/8** inch intermediate casing shoe shall be **5000 (5M) psi.**

Option 2:

Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **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 **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.

BOPE Break Testing Variance (Approved)

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-361-2822 Eddy County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at **21-day** intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR part 3170 Subpart 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

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 **Eddy County: 575-361-2822**.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

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

BLM_NM_CFO_DrillingNotifications@BLM.GOV

(575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **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.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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 8 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) 11/14/2024

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
SUNDRY NOTICES AND REPORTS ON WELLS <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No.
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool or Exploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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

Additional Information

Location of Well

0. SHL: LOT 2 / 331 FNL / 2564 FEL / TWSP: 25S / RANGE: 31E / SECTION: 1 / LAT: 32.165709 / LONG: -103.731244 (TVD: 8346 feet, MD: 8412 feet)

PPP: LOT 3 / 100 FNL / 2090 FWL / TWSP: 25S / RANGE: 31E / SECTION: 1 / LAT: 32.16634 / LONG: -103.733332 (TVD: 11650 feet, MD: 11740 feet)

BHL: SESW / 20 FSL / 2090 FWL / TWSP: 25S / RANGE: 31E / SECTION: 12 / LAT: 32.137631 / LONG: -103.733354 (TVD: 12049 feet, MD: 22154 feet)

CONFIDENTIAL

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION		Revised July, 2024	
			Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
				<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled		

WELL LOCATION INFORMATION

API Number 30-015-55021	Pool Code 96641	Pool Name PADUCA; BONE SPRING
Property Code	Property Name COTTON DRAW 25-36 FED STATE COM	Well Number 536H
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Ground Level Elevation 3470.0'
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	25-S	31-E	2	331' N	2564' E	32.165709	103.731244	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	25	24-S	31-E		20' N	1950' W	32.195548	103.733742	EDDY

Dedicated Acres 319.36	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers			Well setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	36	24S	31E	2	53 S	1950 W	32.1667	103.7339	EDDY


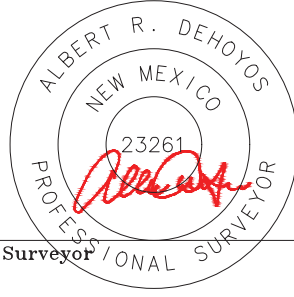
First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	36	24-S	31-E	2	100' S	1950' W	32.166905	103.733783	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	25	24-S	31-E		100' N	1950' W	32.195328	103.733742	EDDY

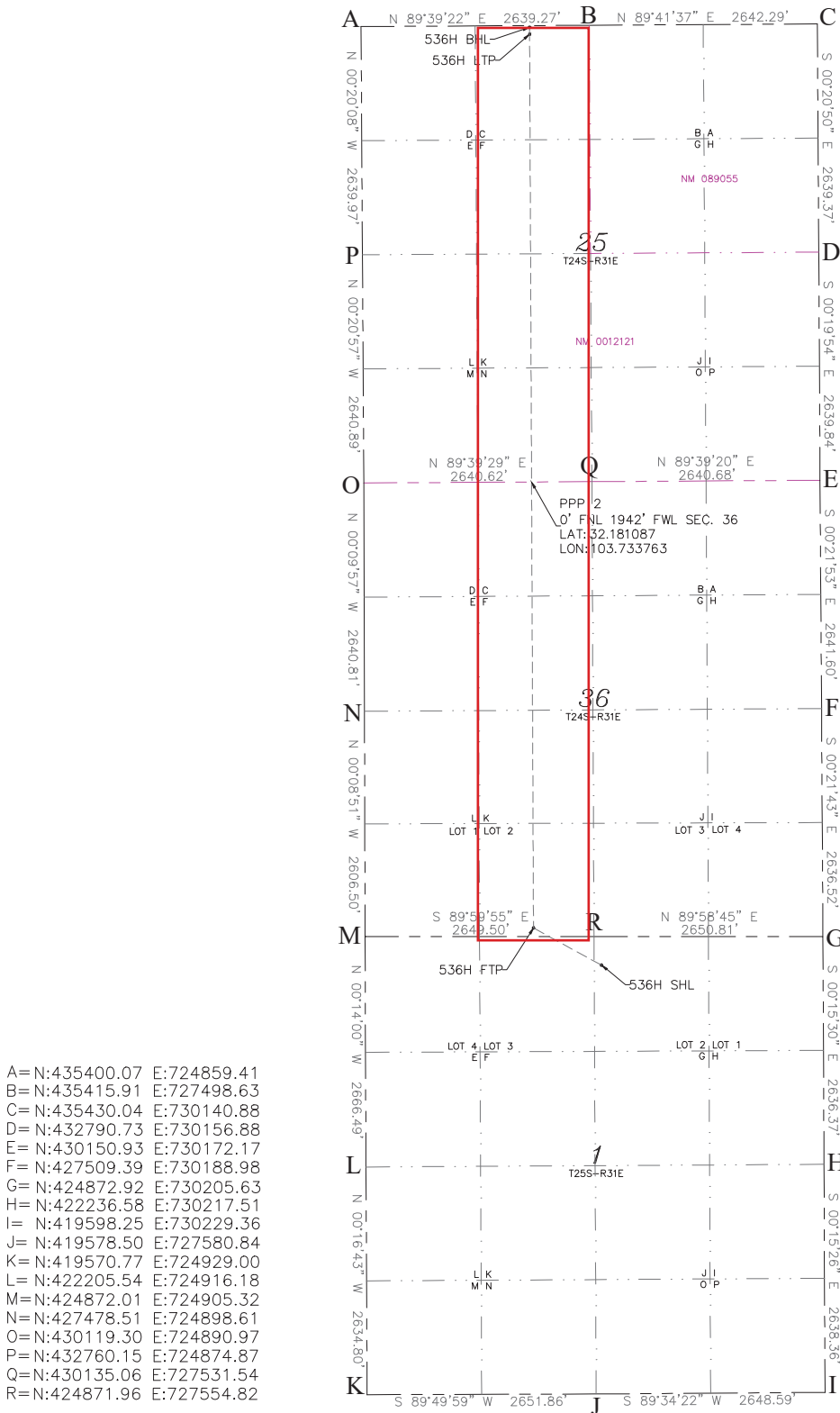
Spacing Unit Type XHorizontal Vertical		Ground Floor Elevation:
--	--	-------------------------

OPERATOR CERTIFICATIONS I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.		SURVEYOR CERTIFICATIONS I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under supervision, and that the same is true and correct to the best of my belief.	
Signature 	Date 10/01/2024		
Printed Name Chelsey Green			
Email Address chelsey.green@dvn.com		Certificate Number 23261	Date of Survey 07/2024

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



Offline Cementing

Variance Request

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.

Section 2 - Blowout Preventer Testing Procedure

Variance Request

Devon Energy requests to only test BOP connection breaks after drilling out of surface casing and while skidding between wells which conforms to API Standard 53 and industry standards. This test will include the Top Pipe Rams, HCR, Kill Line Check Valve, QDC (quick disconnect to wellhead) and Shell of the 10M BOPE to 5M for 10 minutes. If a break to the flex hose that runs to the choke manifold is required due to repositioning from a skid, the HCR will remain open during the shell test to include that additional break. The variance only pertains to intermediate hole-sections and no deeper than the Bone Springs Formation where 5M BOP tests are required. The initial BOP test will follow 43 CFR 3172, and subsequent tests following a skid will only test connections that are broken. The annular preventer will be tested to 100% working pressure. This variance will meet or exceed 43 CFR 3172 per the following: Devon Energy will perform a full BOP test per 43 CFR 3172 before drilling out of the intermediate casing string(s) and starting the production hole, before starting any hole section that requires a 10M test, before the expiration of the allotted 14-days for 5M intermediate batch drilling or when the drilling rig is fully mobilized to a new well pad, whichever is sooner. We will utilize a 200' TVD tolerance between intermediate shoes as the cutoff for a full BOP test. The BLM will be contacted 4hrs prior to a BOPE test. The BLM will be notified if and when a well control event is encountered. Break test will be a 14 day interval and not a 30 day full BOPE test interval. If in the event break testing is not utilized, then a full BOPE test would be conducted.

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

Cactus
Wellhead

2-9-17
E Bell

80.7 °F

15:49



50

Date 02-09-17

Tested By E.BELL

Transducer bay2

Transducer Serial 181504

Calibration Date 9/6/15

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



Start



Stop



Zero



Config



Save



Print

EXIT



U. S. Steel Tubular Products

7.625" 29.70lb/ft (0.375" Wall) P110 HP USS-TALON SFC™

5/15/2024 6:31:14 PM



MECHANICAL PROPERTIES	Pipe	USS-TALON SFC™		[6]
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON SFC™		--
Outside Diameter	7.625	7.900	in.	--
Wall Thickness	0.375	--	in.	--
Inside Diameter	6.875	6.815	in.	--
Standard Drift	6.750	6.750	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	29.70	--	lb/ft	--
Plain End Weight	29.06	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON SFC™		--
Critical Area	8.541	7.331	sq. in.	--
Joint Efficiency	--	85.8	%	[2]
PERFORMANCE	Pipe	USS-TALON SFC™		--
Minimum Collapse Pressure	7,260	7,260	psi	--
Minimum Internal Yield Pressure	10,750	10,750	psi	--
Minimum Pipe Body Yield Strength	1,068,000	--	lb	--
Joint Strength	--	916,000	lb	--
Compression Rating	--	916,000	lb	--
Reference Length	--	20,560	ft	[5]
Maximum Uniaxial Bend Rating	--	64.4	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON SFC™		--
Make-Up Loss	--	5.08	in.	--
Minimum Make-Up Torque	--	30,000	ft-lb	[4]
Maximum Make-Up Torque	--	33,000	ft-lb	[4]
Maximum Operating Torque	--	80,500	ft-lb	[4]

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bend rating shown is structural only.
4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
6. Coupling must meet minimum mechanical properties of the pipe.

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
Spring, Texas 77380

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



U. S. Steel Tubular Products

5.500" 20.00lb/ft (0.361" Wall) P110 HP USS-TALON HTQ™ RD

2/21/2024 7:48:59 AM

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		--
Outside Diameter	5.500	5.900	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON HTQ™ RD		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		--
Minimum Collapse Pressure	13,150	13,150	psi	--
Minimum Internal Yield Pressure	14,360	14,360	psi	--
Minimum Pipe Body Yield Strength	729,000	--	lb	--
Joint Strength	--	729,000	lb	--
Compression Rating	--	729,000	lb	--
Reference Length	--	24,300	ft	[5]
Maximum Uniaxial Bend Rating	--	104.2	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		--
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	18,400	ft-lb	[4]
Maximum Make-Up Torque	--	21,400	ft-lb	[4]
Maximum Operating Torque	--	44,400	ft-lb	[4]

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bend rating shown is structural only.
4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
6. Coupling must meet minimum mechanical properties of the pipe.

Legal Notice

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Well: COTTON DRAW 25-36 FED STATE COM 536H

County: Lea

Wellbore: Permit Plan

Design: Permit Plan #1

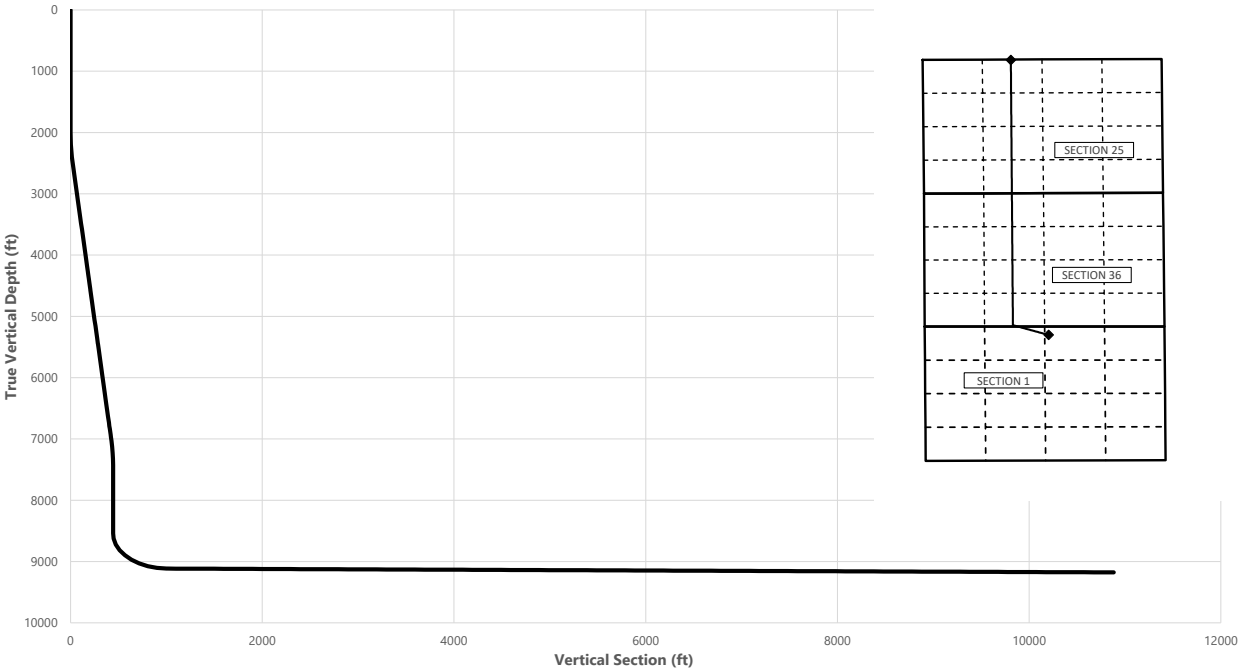
Geodetic System: US State Plane 1983

Datum: North American Datum 1927

Ellipsoid: Clarke 1866

Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
2000.00	0.00	296.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	296.00	2497.47	19.08	-39.12	22.02	2.00	Hold Tangent
7046.09	10.00	296.00	6974.49	365.14	-748.64	421.40	0.00	Drop to Vertical
7546.09	0.00	296.00	7471.95	384.22	-787.76	443.42	2.00	Hold Vertical
8616.19	0.00	359.75	8542.05	384.22	-787.76	443.42	0.00	KOP
9512.60	89.64	359.75	9115.00	953.58	-790.25	1011.30	10.00	Landing Point
19410.12	89.64	359.75	9177.00	10850.81	-833.43	10882.77	0.00	BHL



Key Depths	MD	TVD
	(ft)	(ft)
Rustler	660.00	660.00
Salt	1105.00	1105.00
Base of Salt	4340.50	4310.00
Lamar	4416.65	4385.00
Delaware	4594.35	4560.00
Cherry Canyon	5487.93	5440.00
Brushy Canyon	6858.75	6790.00
1st Bone Spring Lime / Point of Pene	8434.13	8360.00
exit	19330.12	9176.51

SHL
KOP
Point of Penetration
Exit
BHL

MD	TVD	Lat	Long	Section Footages
(ft)	(ft)	(°)	(°)	
0.00	0.00	32.1656	-103.7313	331' FNL, 2564' FEL of Sec 1 in T24S, R31E
8616.19	8542.05	32.1667	-103.7339	53' FSL, 1950' FWL of Sec 36 in T24S, R31E
8434.13	8360.00	32.1669	-103.7338	100' FSL, 1950' FWL of Sec 36 in T24S, R31E
19330.12	9176.51	32.1953	-103.7337	100' FNL , 1950' FWL of Sec 25 in T24S, R31E
19410.12	9177.00	32.1955	-103.7338	20' FNL, 1950' FWL of Sec 25 in T24S, R31E

	Y	X	MD
KOP	424925	726855	8616.19

COTTON DRAW 25-36 FED STATE COM 536H



Well: COTTON DRAW 25-36 FED STATE COM 536H
County: Lea
Wellbore: Permit Plan
Design: Permit Plan #1

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

MD (ft)	INC (")	AZI (")	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	296.00	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	296.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	296.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	296.00	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	296.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	296.00	600.00	0.00	0.00	0.00	0.00	
660.00	0.00	296.00	660.00	0.00	0.00	0.00	0.00	Rustler
700.00	0.00	296.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	296.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	296.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	296.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	296.00	1100.00	0.00	0.00	0.00	0.00	
1105.00	0.00	296.00	1105.00	0.00	0.00	0.00	0.00	Salt
1200.00	0.00	296.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	296.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	296.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	296.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	296.00	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	296.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	296.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	296.00	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	296.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	296.00	2099.98	0.77	-1.57	0.88	2.00	
2200.00	4.00	296.00	2199.84	3.06	-6.27	3.53	2.00	
2300.00	6.00	296.00	2299.45	6.88	-14.11	7.94	2.00	
2400.00	8.00	296.00	2398.70	12.22	-25.06	14.10	2.00	
2500.00	10.00	296.00	2497.47	19.08	-39.12	22.02	2.00	Hold Tangent
2600.00	10.00	296.00	2595.95	26.69	-54.73	30.80	0.00	
2700.00	10.00	296.00	2694.43	34.30	-70.33	39.59	0.00	
2800.00	10.00	296.00	2792.91	41.92	-85.94	48.37	0.00	
2900.00	10.00	296.00	2891.39	49.53	-101.55	57.16	0.00	
3000.00	10.00	296.00	2989.87	57.14	-117.15	65.94	0.00	
3100.00	10.00	296.00	3088.35	64.75	-132.76	74.73	0.00	
3200.00	10.00	296.00	3186.83	72.36	-148.37	83.51	0.00	
3300.00	10.00	296.00	3285.31	79.98	-163.98	92.30	0.00	
3400.00	10.00	296.00	3383.79	87.59	-179.58	101.08	0.00	
3500.00	10.00	296.00	3482.27	95.20	-195.19	109.87	0.00	
3600.00	10.00	296.00	3580.75	102.81	-210.80	118.65	0.00	
3700.00	10.00	296.00	3679.23	110.42	-226.41	127.44	0.00	
3800.00	10.00	296.00	3777.72	118.04	-242.01	136.22	0.00	
3900.00	10.00	296.00	3876.20	125.65	-257.62	145.01	0.00	
4000.00	10.00	296.00	3974.68	133.26	-273.23	153.79	0.00	
4100.00	10.00	296.00	4073.16	140.87	-288.84	162.58	0.00	
4200.00	10.00	296.00	4171.64	148.49	-304.44	171.37	0.00	
4300.00	10.00	296.00	4270.12	156.10	-320.05	180.15	0.00	
4340.50	10.00	296.00	4310.00	159.18	-326.37	183.71	0.00	Base of Salt
4400.00	10.00	296.00	4368.60	163.71	-335.66	188.94	0.00	
4416.65	10.00	296.00	4385.00	164.98	-338.26	190.40	0.00	Lamar
4500.00	10.00	296.00	4467.08	171.32	-351.27	197.72	0.00	
4594.35	10.00	296.00	4560.00	178.50	-365.99	206.01	0.00	Delaware
4600.00	10.00	296.00	4565.56	178.93	-366.87	206.51	0.00	
4700.00	10.00	296.00	4664.04	186.55	-382.48	215.29	0.00	
4800.00	10.00	296.00	4762.52	194.16	-398.09	224.08	0.00	
4900.00	10.00	296.00	4861.00	201.77	-413.70	232.86	0.00	
5000.00	10.00	296.00	4959.48	209.38	-429.30	241.65	0.00	
5100.00	10.00	296.00	5057.97	217.00	-444.91	250.43	0.00	
5200.00	10.00	296.00	5156.45	224.61	-460.52	259.22	0.00	
5300.00	10.00	296.00	5254.93	232.22	-476.13	268.00	0.00	
5400.00	10.00	296.00	5353.41	239.83	-491.73	276.79	0.00	
5487.93	10.00	296.00	5440.00	246.52	-505.46	284.51	0.00	Cherry Canyon
5500.00	10.00	296.00	5451.89	247.44	-507.34	285.57	0.00	
5600.00	10.00	296.00	5550.37	255.06	-522.95	294.36	0.00	
5700.00	10.00	296.00	5648.85	262.67	-538.56	303.14	0.00	
5800.00	10.00	296.00	5747.33	270.28	-554.16	311.93	0.00	
5900.00	10.00	296.00	5845.81	277.89	-569.77	320.71	0.00	
6000.00	10.00	296.00	5944.29	285.50	-585.38	329.50	0.00	
6100.00	10.00	296.00	6042.77	293.12	-600.98	338.28	0.00	
6200.00	10.00	296.00	6141.25	300.73	-616.59	347.07	0.00	
6300.00	10.00	296.00	6239.73	308.34	-632.20	355.85	0.00	

COTTON DRAW 25-36 FED STATE COM 536H



Well: COTTON DRAW 25-36 FED STATE COM 536H
County: Lea
Wellbore: Permit Plan
Design: Permit Plan #1

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

MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment
6400.00	10.00	296.00	6338.22	315.95	-647.81	364.64	0.00	
6500.00	10.00	296.00	6436.70	323.57	-663.41	373.42	0.00	
6600.00	10.00	296.00	6535.18	331.18	-679.02	382.21	0.00	
6700.00	10.00	296.00	6633.66	338.79	-694.63	390.99	0.00	
6800.00	10.00	296.00	6732.14	346.40	-710.24	399.78	0.00	
6858.75	10.00	296.00	6790.00	350.87	-719.41	404.94	0.00	Brushy Canyon
6900.00	10.00	296.00	6830.62	354.01	-725.84	408.56	0.00	
7000.00	10.00	296.00	6929.10	361.63	-741.45	417.35	0.00	
7046.09	10.00	296.00	6974.49	365.14	-748.64	421.40	0.00	Drop to Vertical
7100.00	8.92	296.00	7027.67	369.02	-756.61	425.88	2.00	
7200.00	6.92	296.00	7126.71	375.06	-769.00	432.85	2.00	
7300.00	4.92	296.00	7226.17	379.59	-778.27	438.07	2.00	
7400.00	2.92	296.00	7325.93	382.58	-784.41	441.53	2.00	
7500.00	0.92	296.00	7425.87	384.05	-787.43	443.23	2.00	
7546.09	0.00	296.00	7471.95	384.22	-787.76	443.42	2.00	Hold Vertical
7600.00	0.00	359.75	7525.87	384.22	-787.76	443.42	0.00	
7700.00	0.00	359.75	7625.87	384.22	-787.76	443.42	0.00	
7800.00	0.00	359.75	7725.87	384.22	-787.76	443.42	0.00	
7900.00	0.00	359.75	7825.87	384.22	-787.76	443.42	0.00	
8000.00	0.00	359.75	7925.87	384.22	-787.76	443.42	0.00	
8100.00	0.00	359.75	8025.87	384.22	-787.76	443.42	0.00	
8200.00	0.00	359.75	8125.87	384.22	-787.76	443.42	0.00	
8300.00	0.00	359.75	8225.87	384.22	-787.76	443.42	0.00	
8400.00	0.00	359.75	8325.87	384.22	-787.76	443.42	0.00	
8434.13	0.00	359.75	8360.00	384.22	-787.76	443.42	0.00	1st Bone Spring Lime / Point of Penetration
8500.00	0.00	359.75	8425.87	384.22	-787.76	443.42	0.00	
8600.00	0.00	359.75	8525.87	384.22	-787.76	443.42	0.00	
8616.19	0.00	359.75	8542.05	384.22	-787.76	443.42	0.00	KOP
8700.00	8.38	359.75	8625.57	390.34	-787.79	449.52	10.00	
8800.00	18.38	359.75	8722.73	413.45	-787.89	472.57	10.00	
8900.00	28.38	359.75	8814.40	453.08	-788.06	512.11	10.00	
9000.00	38.38	359.75	8897.80	508.03	-788.30	566.91	10.00	
9100.00	48.38	359.75	8970.39	576.63	-788.60	635.33	10.00	
9200.00	58.38	359.75	9029.96	656.79	-788.95	715.28	10.00	
9300.00	68.38	359.75	9074.71	746.08	-789.34	804.34	10.00	
9400.00	78.38	359.75	9103.27	841.78	-789.76	899.79	10.00	
9500.00	88.38	359.75	9114.78	940.98	-790.19	998.74	10.00	
9512.60	89.64	359.75	9115.00	953.58	-790.25	1011.30	10.00	Landing Point
9600.00	89.64	359.75	9115.55	1040.98	-790.63	1098.47	0.00	
9700.00	89.64	359.75	9116.17	1140.98	-791.06	1198.21	0.00	
9800.00	89.64	359.75	9116.80	1240.97	-791.50	1297.95	0.00	
9900.00	89.64	359.75	9117.43	1340.97	-791.94	1397.68	0.00	
10000.00	89.64	359.75	9118.05	1440.97	-792.37	1497.42	0.00	
10100.00	89.64	359.75	9118.68	1540.96	-792.81	1597.16	0.00	
10200.00	89.64	359.75	9119.31	1640.96	-793.25	1696.89	0.00	
10300.00	89.64	359.75	9119.93	1740.96	-793.69	1796.63	0.00	
10400.00	89.64	359.75	9120.56	1840.96	-794.12	1896.37	0.00	
10500.00	89.64	359.75	9121.19	1940.95	-794.56	1996.10	0.00	
10600.00	89.64	359.75	9121.81	2040.95	-795.00	2095.84	0.00	
10700.00	89.64	359.75	9122.44	2140.95	-795.43	2195.58	0.00	
10800.00	89.64	359.75	9123.07	2240.94	-795.87	2295.31	0.00	
10900.00	89.64	359.75	9123.69	2340.94	-796.31	2395.05	0.00	
11000.00	89.64	359.75	9124.32	2440.94	-796.74	2494.79	0.00	
11100.00	89.64	359.75	9124.95	2540.94	-797.18	2594.52	0.00	
11200.00	89.64	359.75	9125.57	2640.93	-797.62	2694.26	0.00	
11300.00	89.64	359.75	9126.20	2740.93	-798.05	2794.00	0.00	
11400.00	89.64	359.75	9126.83	2840.93	-798.49	2893.73	0.00	
11500.00	89.64	359.75	9127.45	2940.92	-798.93	2993.47	0.00	
11600.00	89.64	359.75	9128.08	3040.92	-799.36	3093.21	0.00	
11700.00	89.64	359.75	9128.71	3140.92	-799.80	3192.95	0.00	
11800.00	89.64	359.75	9129.33	3240.92	-800.24	3292.68	0.00	
11900.00	89.64	359.75	9129.96	3340.91	-800.68	3392.42	0.00	
12000.00	89.64	359.75	9130.58	3440.91	-801.11	3492.16	0.00	
12100.00	89.64	359.75	9131.21	3540.91	-801.55	3591.89	0.00	
12200.00	89.64	359.75	9131.84	3640.90	-801.99	3691.63	0.00	
12300.00	89.64	359.75	9132.46	3740.90	-802.42	3791.37	0.00	
12400.00	89.64	359.75	9133.09	3840.90	-802.86	3891.10	0.00	
12500.00	89.64	359.75	9133.72	3940.89	-803.30	3990.84	0.00	
12600.00	89.64	359.75	9134.34	4040.89	-803.73	4090.58	0.00	
12700.00	89.64	359.75	9134.97	4140.89	-804.17	4190.31	0.00	

COTTON DRAW 25-36 FED STATE COM 536H



Well: COTTON DRAW 25-36 FED STATE COM 536H
County: Lea
Wellbore: Permit Plan
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Geodetic System: US State Plane 1983
Datum: North American Datum 1927
Ellipsoid: Clarke 1866
Zone: 3001 - NM East (NAD83)

MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
12800.00	89.64	359.75	9135.60	4240.89	-804.61	4290.05	0.00	
12900.00	89.64	359.75	9136.22	4340.88	-805.04	4389.79	0.00	
13000.00	89.64	359.75	9136.85	4440.88	-805.48	4489.52	0.00	
13100.00	89.64	359.75	9137.48	4540.88	-805.92	4589.26	0.00	
13200.00	89.64	359.75	9138.10	4640.87	-806.35	4689.00	0.00	
13300.00	89.64	359.75	9138.73	4740.87	-806.79	4788.74	0.00	
13400.00	89.64	359.75	9139.36	4840.87	-807.23	4888.47	0.00	
13500.00	89.64	359.75	9139.98	4940.87	-807.66	4988.21	0.00	
13600.00	89.64	359.75	9140.61	5040.86	-808.10	5087.95	0.00	
13700.00	89.64	359.75	9141.24	5140.86	-808.54	5187.68	0.00	
13800.00	89.64	359.75	9141.86	5240.86	-808.98	5287.42	0.00	
13900.00	89.64	359.75	9142.49	5340.85	-809.41	5387.16	0.00	
14000.00	89.64	359.75	9143.12	5440.85	-809.85	5486.89	0.00	
14100.00	89.64	359.75	9143.74	5540.85	-810.29	5586.63	0.00	
14200.00	89.64	359.75	9144.37	5640.85	-810.72	5686.37	0.00	
14300.00	89.64	359.75	9145.00	5740.84	-811.16	5786.10	0.00	
14400.00	89.64	359.75	9145.62	5840.84	-811.60	5885.84	0.00	
14500.00	89.64	359.75	9146.25	5940.84	-812.03	5985.58	0.00	
14600.00	89.64	359.75	9146.88	6040.83	-812.47	6085.31	0.00	
14700.00	89.64	359.75	9147.50	6140.83	-812.91	6185.05	0.00	
14800.00	89.64	359.75	9148.13	6240.83	-813.34	6284.79	0.00	
14900.00	89.64	359.75	9148.75	6340.82	-813.78	6384.53	0.00	
15000.00	89.64	359.75	9149.38	6440.82	-814.22	6484.26	0.00	
15100.00	89.64	359.75	9150.01	6540.82	-814.65	6584.00	0.00	
15200.00	89.64	359.75	9150.63	6640.82	-815.09	6683.74	0.00	
15300.00	89.64	359.75	9151.26	6740.81	-815.53	6783.47	0.00	
15400.00	89.64	359.75	9151.89	6840.81	-815.97	6883.21	0.00	
15500.00	89.64	359.75	9152.51	6940.81	-816.40	6982.95	0.00	
15600.00	89.64	359.75	9153.14	7040.80	-816.84	7082.68	0.00	
15700.00	89.64	359.75	9153.77	7140.80	-817.28	7182.42	0.00	
15800.00	89.64	359.75	9154.39	7240.80	-817.71	7282.16	0.00	
15900.00	89.64	359.75	9155.02	7340.80	-818.15	7381.89	0.00	
16000.00	89.64	359.75	9155.65	7440.79	-818.59	7481.63	0.00	
16100.00	89.64	359.75	9156.27	7540.79	-819.02	7581.37	0.00	
16200.00	89.64	359.75	9156.90	7640.79	-819.46	7681.10	0.00	
16300.00	89.64	359.75	9157.53	7740.78	-819.90	7780.84	0.00	
16400.00	89.64	359.75	9158.15	7840.78	-820.33	7880.58	0.00	
16500.00	89.64	359.75	9158.78	7940.78	-820.77	7980.31	0.00	
16600.00	89.64	359.75	9159.41	8040.78	-821.21	8080.05	0.00	
16700.00	89.64	359.75	9160.03	8140.77	-821.64	8179.79	0.00	
16800.00	89.64	359.75	9160.66	8240.77	-822.08	8279.53	0.00	
16900.00	89.64	359.75	9161.29	8340.77	-822.52	8379.26	0.00	
17000.00	89.64	359.75	9161.91	8440.76	-822.95	8479.00	0.00	
17100.00	89.64	359.75	9162.54	8540.76	-823.39	8578.74	0.00	
17200.00	89.64	359.75	9163.17	8640.76	-823.83	8678.47	0.00	
17300.00	89.64	359.75	9163.79	8740.75	-824.27	8778.21	0.00	
17400.00	89.64	359.75	9164.42	8840.75	-824.70	8877.95	0.00	
17500.00	89.64	359.75	9165.05	8940.75	-825.14	8977.68	0.00	
17600.00	89.64	359.75	9165.67	9040.75	-825.58	9077.42	0.00	
17700.00	89.64	359.75	9166.30	9140.74	-826.01	9177.16	0.00	
17800.00	89.64	359.75	9166.92	9240.74	-826.45	9276.89	0.00	
17900.00	89.64	359.75	9167.55	9340.74	-826.89	9376.63	0.00	
18000.00	89.64	359.75	9168.18	9440.73	-827.32	9476.37	0.00	
18100.00	89.64	359.75	9168.80	9540.73	-827.76	9576.10	0.00	
18200.00	89.64	359.75	9169.43	9640.73	-828.20	9675.84	0.00	
18300.00	89.64	359.75	9170.06	9740.73	-828.63	9775.58	0.00	
18400.00	89.64	359.75	9170.68	9840.72	-829.07	9875.32	0.00	
18500.00	89.64	359.75	9171.31	9940.72	-829.51	9975.05	0.00	
18600.00	89.64	359.75	9171.94	10040.72	-829.94	10074.79	0.00	
18700.00	89.64	359.75	9172.56	10140.71	-830.38	10174.53	0.00	
18800.00	89.64	359.75	9173.19	10240.71	-830.82	10274.26	0.00	
18900.00	89.64	359.75	9173.82	10340.71	-831.25	10374.00	0.00	
19000.00	89.64	359.75	9174.44	10440.71	-831.69	10473.74	0.00	
19100.00	89.64	359.75	9175.07	10540.70	-832.13	10573.47	0.00	
19200.00	89.64	359.75	9175.70	10640.70	-832.57	10673.21	0.00	
19300.00	89.64	359.75	9176.32	10740.70	-833.00	10772.95	0.00	
19330.12	89.64	359.75	9176.51	10770.81	-833.13	10802.98	0.00	exit
19400.00	89.64	359.75	9176.95	10840.69	-833.44	10872.68	0.00	
19410.12	89.64	359.75	9177.00	10850.81	-833.43	10882.77	0.00	BHL

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1. Geologic Formations

TVD of target	9177	Pilot hole depth	N/A
MD at TD:	19410	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	660		
Salt	1105		
Base of Salt	4310		
Lamar	4385		
Delaware	4560		
Cherry Canyon	5440		
Brushy Canyon	6790		
1st Bone Spring Lime	8360		

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

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2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
13 1/2	9 5/8	40	J-55	BTC	0	685	0	685
8 3/4	7 5/8	29.7	P110HP	TALON SFC	0	8516	0	8516
6 3/4	5 1/2	20	P110HP	TALON RD	0	19410	0	9177

•All casing strings will be tested in accordance with 43 CFR 3172.

3. Cementing Program (Primary Design)

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. The final cement top will be verified by Echo-meter. Devon will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program. Devon will report to the BLM the volume of fluid (limited to 1 bbls) used to flush intermediate casing valves following backside cementing procedures

Casing	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	367	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	383	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	158	6858	13.2	1.44	Tail: Class H / C + additives
Production	62	6616	9	3.27	Lead: Class H / C + additives
	689	8616	13.2	1.44	Tail: Class H / C + additives

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

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

4. Pressure Control Equipment (Three String Design)

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

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5. Mud Program (Three String Design)

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

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

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

6. Logging and Testing Procedures

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

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

7. Drilling Conditions

Condition	Specify what type and where?
BH pressure at deepest TVD	5010
Abnormal temperature	No

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

Hydrogen Sulfide (H ₂ S) monitors will be installed prior to drilling out the surface shoe. If H ₂ S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR 3176. If Hydrogen Sulfide is encountered measured values and formations will be provided to the BLM.	
N	H ₂ S is present
Y	H ₂ S plan attached.

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8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

- 1 Spudder rig will move in and batch drill surface hole.
 - a. Rig will utilize fresh water based mud to drill surface hole to TD. Solids control will be handled entirely on a closed loop basis.,
- 2 After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (43 CFR 3172, all COAs and NMOCD regulations).
- 3 The wellhead will be installed and tested once the surface casing is cut off and the WOC time has been reached.
- 4 A blind flange with the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with a pressure gauge installed on the wellhead.
- 5 Spudder rig operations is expected to take 4-5 days per well on a multi-well pa.
- 6 The NMOCD will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 7 Drilling operations will be performed with drilling rig. At that time an approved BOP stack will be nipped up and tested on the wellhead before drilling operations commences on each well.
 - a. The NMOCD will be contacted / notified 24 hours before the drilling rig moves back on to the pad with the pre-set surface casing.

Attachments

X Directional Plan
 Other, describe



9.625" 40# .395" J-55

Dimensions (Nominal)

Outside Diameter	9.625	in.
Wall	0.395	in.
Inside Diameter	8.835	in.
Drift	8.750	in.
Weight, T&C	40.000	lbs./ft.
Weight, PE	38.970	lbs./ft.

Performance Properties

Collapse, PE	2570	psi
Internal Yield Pressure at Minimum Yield		
PE	3950	psi
LTC	3950	psi
BTC	3950	psi
Yield Strength, Pipe Body	630	1000 lbs.
Joint Strength		
STC	452	1000 lbs.
LTC	520	1000 lbs.
BTC	714	1000 lbs.

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

1-25-31-2 Sundry ID 2816662

Cotton Draw 25-36 Fed State Com 536H

9 5/8		surface csg in a		13 1/2		inch hole.		Design Factors				Surface			
Segment	#/ft	Grade		Coupling		Body		Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	40.00	j 55		btc		21.72		7.58	0.85	725	12	1.43	14.32	29,000	
"B"				btc						0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500								Tail Cmt	does not	circ to sfc.	Totals:	725		29,000	
Comparison of Proposed to Minimum Required Cement Volumes															
Hole	Annular	1 Stage		1 Stage		Min		1 Stage		Drilling		Calc		Req'd	Min Dist
Size	Volume	Cmt Sx		CuFt Cmt		Cu Ft		% Excess		Mud Wt		MASP		BOPE	Hole-Cplg
13 1/2	0.4887	367		528		354		49		9.00		2772		5M	1.44
Burst Frac Gradient(s) for Segment(s) A, B = , b All > 0.70, OK.															
Site plot (page racks S or F) as per D.D. 131 D 4.1 not found															

7 5/8		casing inside the		9 5/8		Design Factors			Int 1			
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70		p 110	talon sfc	3.62	1.56	2.15	8,516	2	3.60	2.62	252,925
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:								Totals:	8,516			252,925
The cement volume(s) are intended to achieve a top of 0 ft from surface or a 725 overlap.												
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
8 3/4	0.1005	158	228	862	-74	10.50	2987	5M				0.43
D V Tool(s):			6790				sum of sx	Σ CuFt				Σ%excess
t by stage % :		31	28				541	1108				29
Class 'C' tail cmt yld > 1.35												

Tail cmt		casing inside the		7 5/8		Design Factors				Prod 1					
Segment	#/ft	Grade		Coupling		Joint		Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	20.00	p 110		talon rd		3.97		2.63	2.87	19,410	3	4.81	4.40	388,200	
"B"										0	0				
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,019										Totals:	19,410	388,200			
The cement volume(s) are intended to achieve a top of 8016 ft from surface or a 500 overlap.															
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg						
6 3/4	0.0835	751	1195	954	25	10.50			0.43						
Class 'C' tail cmt yld > 1.35															

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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

CONDITIONS

Action 404306

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 404306
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/22/2024
ward.rikala	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	11/22/2024
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	11/22/2024