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

Sundry Print Report

01/16/2025

Well Name: COTTON DRAW UNIT	Well Location: T24S / R31E / SEC 25 / NWNW / 32.1950522 / -103.7362644	County or Parish/State: EDDY / NM
Well Number: 618H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM012121	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001549137	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2831732

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 01/14/2025

Time Sundry Submitted: 03:02

Date proposed operation will begin: 01/14/2025

Procedure Description: Devon Energy Production Co., L.P. (Devon) respectfully request to skid over and re-drill the approved subject wellbore in a different SHL. due to fish stuck in the hole. The new SHL will be 200 FNL, 1020 FWL, SEC 25-24S-31E. The new well name will be Cotton Draw Unit 618H and have a separate API. We request the original well associated with API 30-015-49137 to have a well name change to Cotton Draw Unit 618Y. Please see the attached new plat, drill plan, and directional.

NOI Attachments

Procedure Description

3160_3_20250115111130.pdf

COTTON_DRAW_25_C102S_618H_SIGNED_20250114150221.pdf

5.5_20lb_P110EC_DWC_C_IS_PLUS_20250114145758.pdf

8.625_32lb_P110EC_SPRINT_FJ_VST_20250114145745.pdf

10.75_45.5lb_J55_BTC_20250114145719.pdf

Cotton_Draw_Unit_618H_Directional_Plan_01_13_25_20250114145556.pdf

Cotton_Draw_Unit_618H_20250114145542.pdf

Well Name: COTTON DRAW UNIT	Well Location: T24S / R31E / SEC 25 / NWNW / 32.1950522 / -103.7362644	County or Parish/State: EDDY / NM
Well Number: 618H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM012121	Unit or CA Name: COTTON DRAW UNIT	Unit or CA Number: NMNM70928X
US Well Number: 3001549137	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Operator

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

Operator Electronic Signature: AMY BROWN

Signed on: JAN 15, 2025 11:11 AM

Name: DEVON ENERGY PRODUCTION COMPANY LP

Title: Regulatory Professional

Street Address: 333 WEST SHERIDAN AVENUE

City: OKLAHOMA CITY State: OK

Phone: (405) 552-6137

Email address: AMY.BROWN@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: 01/15/2025

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ 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			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ 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 recomplete 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 OFICE 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NWNW / 200 FNL / 1170 FWL / TWSP: 24S / RANGE: 31E / SECTION: 25 / LAT: 32.1950522 / LONG: -103.7362644 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 100 FNL / 2300 FWL / TWSP: 24S / RANGE: 31E / SECTION: 25 / LAT: 32.1953286 / LONG: -103.7326123 (TVD: 11760 feet, MD: 11880 feet)

BHL: SENW / 2620 FNL / 2300 FWL / TWSP: 24S / RANGE: 31E / SECTION: 36 / LAT: 32.1738868 / LONG: -103.7326286 (TVD: 11951 feet, MD: 19705 feet)

Form 3160-3
(March 2012)

FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM012121

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
COTTON DRAW UNIT/ NMNM 070928X

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
COTTON DRAW UNIT 618H

2. Name of Operator
Devon Energy Production Company, L.P.

9. API Well No.
30-015-55998

3a. Address
333 West Sheridan Avenue
Oklahoma City, OK 73102-5010

3b. Phone No. *(include area code)*

10. Field and Pool, or Exploratory
PURPLE SAGE/WOLFCAMP

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NWNW / 200 FNL / 1020 FWL / LAT 32.195052 / LONG -103.736748
At proposed prod. zone LOT 1 / 20 FSL / 1150 FWL / LAT 32.166698 / LONG -103.73[illegible]

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 25/T24S/R31E/NMP

14. Distance in miles and direction from nearest town or post office*

12. County or Parish
EDDY

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
See attached map

16. No. of acres in lease

17. Spacing Unit dedicated to this well
480.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
See attached map

19. Proposed Depth

20. BLM/BIA Bond No. on file
CO-1104; NMB-000801

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

22. Approximate date work will start*
01/25/2025

23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature
Amy A. Brown

Name *(Printed/Typed)*
Amy A. Brown

Date
01/15/2025

Title
Regulatory Compliance Professional

Approved by *(Signature)*

Name *(Printed/Typed)*

Date

Title

Office

Application approval 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.
Conditions of approval, if any, are attached.

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.

(Continued on page 2)

*(Instructions on page 2)

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☒ Initial Submittal ☐ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
30-015-55998	98220	PURPLE SAGE; WOLFCAMP (GAS)	
Property Code	Property Name		Well Number
300635	COTTON DRAW UNIT		618H
OGRID No.	Operator Name		Ground Level Elevation
6137	DEVON ENERGY PRODUCTION COMPANY, L.P.		3546.7'
Surface Owner: ☐State ☐Fee ☐Tribal ☒Federal		Mineral Owner: ☐State ☐Fee ☐Tribal ☒Federal	

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	25	24-S	31-E		200' N	1020' W	32.195052	103.736748	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	36	24-S	31-E	1	20' S	1150' W	32.166698	103.736369	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
319.11				
Order Numbers NSL PENDING			Well setbacks are under Common Ownership: ☐Yes ☐No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	25	24-S	31-E		50' N	1150' W	32.195327	103.736328	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	25	24-S	31-E		100' N	1150' W	32.195327	103.736328	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	36	24-S	31-E	1	100' S	1150' W	32.166918	103.736368	EDDY

	Spacing Unit Type Horizontal 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.

Amy A. Brown 01/14/2025

Signature Date

Amy A. Brown

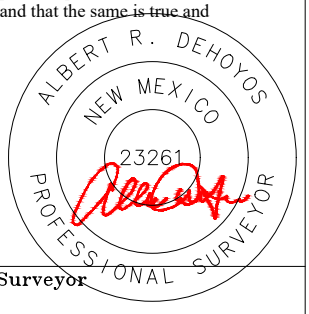
Printed Name

amy.brown@dvn.com

Email Address

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 and Seal of Professional Surveyor

Certificate Number	Date of Survey
23261	01/2025

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.

SURFACE SITE LOCATION
GEODETIC COORDINATES NAD 83
NMSP EAST SURFACE LOCATION
200' FNL 1020' FWL SECTION 25
EL: 3546.7'
N:435206.19/E:725880.56
LAT:32.195052/LON:103.736748

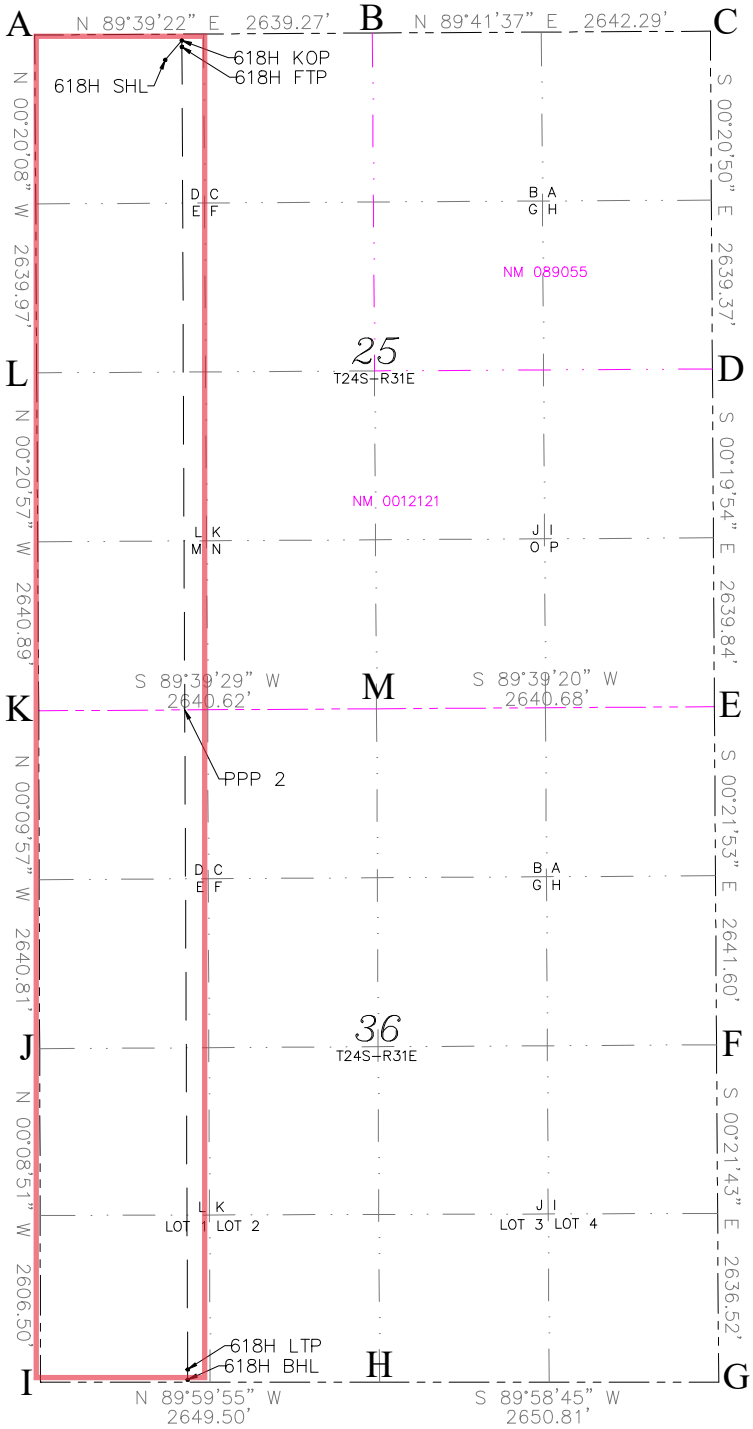
KICK OFF POINT
50' FNL 1150' FWL SECTION 25
N:435306.97/E:726009.97
LAT:32.195327/LON:103.736328

FIRST TAKE POINT
100' FNL 1150' FWL SECTION 25
N:435306.97/E:726009.97
LAT:32.195327/LON:103.736328

LAST TAKE POINT
100' FSL 1150' FWL SECTION 36
N:424971.99/E:726055.07
LAT:32.166918/LON:103.736368

BOTTOM HOLE LOCATION
20' FSL 1150' FWL SECTION 36
N:424891.99/E:726055.27
LAT:32.166698/LON:103.736369

PPP 2
0' FNL 1142' FWL SECTION 36
N:430125.16/E:725872.58
LAT:32.181085/LON:103.736865



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B= N:435415.91 E:727498.63
C= N:435430.04 E:730140.88
D= N:432790.73 E:730156.88
E= N:430150.93 E:730172.17
F= N:427509.39 E:730188.98
G= N:424872.92 E:730205.63
H= N:424871.96 E:727554.82
I= N:424872.01 E:724905.32
J= N:427478.51 E:724898.61
K= N:430119.30 E:724890.97
L= N:432760.15 E:724874.87
M= N:430135.06 E:727531.54

DWC/C-IS PLUS

Connection Data Sheet

OD (in.)	WEIGHT (lbs./ft.)	WALL (in.)	GRADE	DRIFT (in.)	RBW%	CONNECTION
5.500	Nominal: 20.00 Plain End: 19.83	0.361	VST P110 EC	4.653	87.5	DWC/C-IS PLUS

PIPE PROPERTIES

Nominal OD	5.500	in.
Nominal ID	4.778	in.
Nominal Area	5.828	sq.in.
Grade Type	API 5CT; Vallourec Sourced Material Only	
Min. Yield Strength	125	ksi
Max. Yield Strength	140	ksi
Min. Tensile Strength	135	ksi
Yield Strength	729	klb
Ultimate Strength	787	klb
Min. Internal Yield	14,360	psi
High Collapse	12,090	psi

CONNECTION PROPERTIES

Connection Type	Semi-Premium T&C	
Connection OD (nom)	6.300	in.
Connection ID (nom)	4.778	in.
Make-Up Loss	4.125	in.
Coupling Length	9.250	in.
Critical Cross Section	5.828	sq.in.
Tension Efficiency	100.0%	of pipe
Compression Efficiency	100.0%	of pipe
Internal Pressure Efficiency	100.0%	of pipe
External Pressure Efficiency	100.0%	of pipe

CONNECTION PERFORMANCES

Yield Strength	729	klb
Parting Load	787	klb
Compression Rating	729	klb
Min. Internal Yield	14,360	psi
High Collapse	12,090	psi
Maximum Uniaxial Bend Rating	104.2	°/100 ft
Ref String Length w 1.4 Design Factor	26,040	ft

FIELD TORQUE VALUES

Min. Make-up Torque	16,600	ft.lbs
Opti. Make-up Torque	17,850	ft.lbs
Max. Make-up Torque	19,100	ft.lbs
Min. Shoulder Torque	1,660	ft.lbs
Max. Shoulder Torque	13,280	ft.lbs
Max. Delta Turn	0.200	Turns
†Max Operational Torque	24,300	ft.lbs
†Maximum Torsional Value (MTV)	26,730	ft.lbs

†Maximum Operational Torque and Maximum Torsional Value Only Valid with Vallourec P110EC Material

For detailed information on performance properties, refer to DWC Connection Data Notes on following page(s).

05/23/2023 4:11 PM

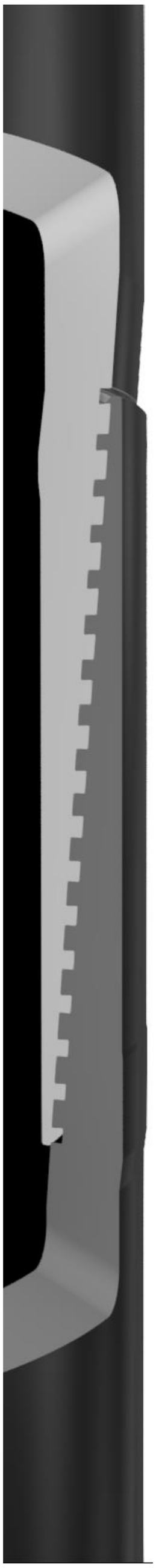
VAM USA

VAM USA
2107 CityWest Boulevard Suite 1300
Houston, TX 77042
Phone: 713-479-3200
Fax: 713-479-3234
VAM USA Sales E-mail: VAMUSAsales@vam-usa.com
Tech Support E-mail: tech.support@vam-usa.com

DWC Connection Data Notes:

1. DWC connections are available with a seal ring (SR) option.
2. All standard DWC/C connections are interchangeable for a given pipe OD. DWC connections are interchangeable with DWC/C-SR connections of the same OD and wall.
3. Connection performance properties are based on nominal pipe body and connection dimensions.
4. DWC connection internal and external pressure resistance is calculated using the API rating for buttress connections. API Internal pressure resistance is calculated from formulas 31, 32, and 35 in the API Bulletin 5C3.
5. DWC joint strength is the minimum pipe body yield strength multiplied by the connection critical area.
6. API joint strength is for reference only. It is calculated from formulas 42 and 43 in the API Bulletin 5C3.
7. Bending efficiency is equal to the compression efficiency.
8. The torque values listed are recommended. The actual torque required may be affected by field conditions such as temperature, thread compound, speed of make-up, weather conditions, etc.
9. Connection yield torque is not to be exceeded.
10. Reference string length is calculated by dividing the joint strength by both the nominal weight in air and a design factor (DF) of 1.4. These values are offered for reference only and do not include load factors such as bending, buoyancy, temperature, load dynamics, etc.
11. DWC connections will accommodate API standard drift diameters.
12. DWC/C family of connections are compatible with API Buttress BTC connections. Please contact tech.support@vam-usa.com for details on connection ratings and make-up.

05/23/2023 4:11 PM



Issued on: 16 Dec. 2020 by Logan Van Gorp

VAM® SPRINT-FJ

Connection Data Sheet

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

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

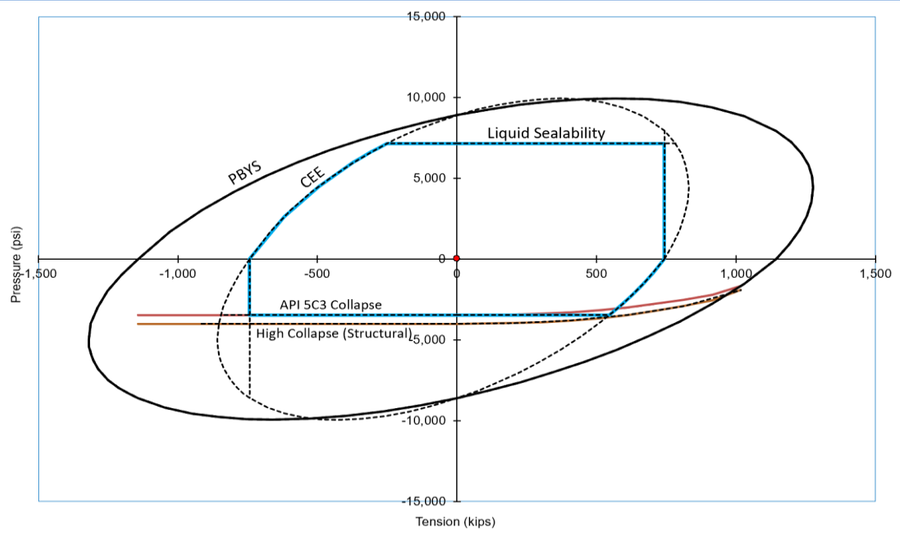
CONNECTION PROPERTIES		
Connection Type	Semi-Premium Integral Flush	
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	6.038	sqin.
Tension Efficiency	65.0	% of pipe
Compression Efficiency	65.0	% of pipe
Internal Pressure Efficiency	80.0	% of pipe
External Pressure Efficiency	100	% of pipe

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

* 87.5% RBW

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

VAM® SPRINT-FJ is a semi-premium flush connection designed for shale applications, where maximum clearance and high tension capacity are required for intermediate casing strings.



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

canada@vamfieldservice.com
usa@vamfieldservice.com
mexico@vamfieldservice.com
brazil@vamfieldservice.com

uk@vamfieldservice.com
dubai@vamfieldservice.com
nigeria@vamfieldservice.com
angola@vamfieldservice.com

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

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

VAM USA

SeAH

10-3/4" 45.50# 0.400" J-55

Dimensions (Nominal)

Outside Diameter	**10.750**	**in.**
Wall	**0.400**	**in.**
Inside Diameter	**9.950**	**in.**
Drift	**9.875**	**in.**
Weight, T&C	**45.500**	**lbs/ft**
Weight, PE	**44.260**	**lbs/ft**

Performance Properties

Collapse		**2090**	**psi**
Internal Yield Pressure at Minimum Yield			
	PE	**3580**	**psi**
	STC	**3580**	**psi**
	BTC	**3580**	**psi**
Yield Strength, Pipe Body		**715**	**1000 lbs**
Joint Strength			
	STC	**493**	**1000 lbs**
	BTC	**796**	**1000 lbs**
	BTC Special Clearance (11.25" OD Cplg)	**506**	**1000 lbs**

Well: Cotton Draw Unit 618H
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Geodetic System: US State Plane 1983
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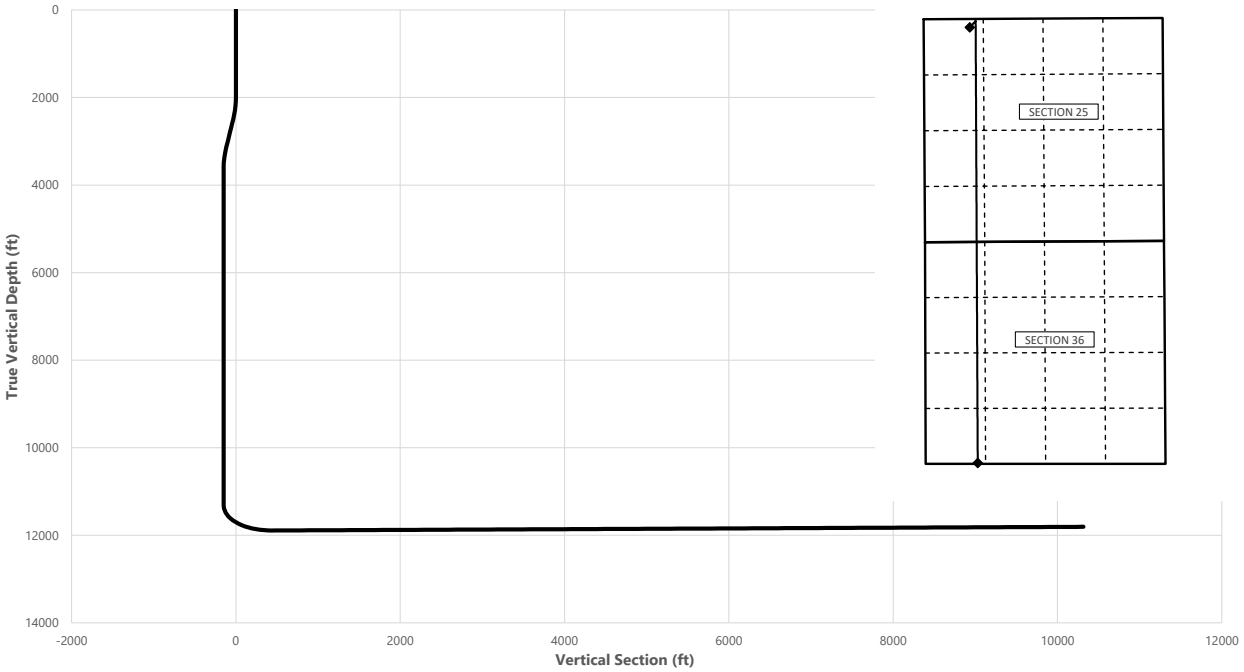
Ellipsoid: Clarke 1866
Zone: 3001 - NM East (NAD83)

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
2000.00	0.00	40.50	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2500.00	10.00	40.50	2497.47	33.09	28.27	-32.61	2.00	Hold Tangent
3144.15	10.00	40.50	3131.83	118.15	100.91	-116.42	0.00	Drop to Vertical
3644.15	0.00	40.50	3629.30	151.25	129.18	-149.03	2.00	Hold Vertical
11332.92	0.00	179.75	11318.06	151.25	129.18	-149.03	0.00	KOP
12237.79	90.49	179.75	11891.00	-426.57	131.70	428.74	10.00	Landing Point
22125.76	90.49	179.75	11807.00	-10314.10	174.84	10315.58	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	660.00	660.00
Salt	1105.00	1105.00
Base of Salt	4324.86	4310.00
Lamar	4399.86	4385.00
Delaware	4574.86	4560.00
Cherry Canyon	5454.86	5440.00
Brushy Canyon	6804.86	6790.00
1st Bone Spring Lime	8374.86	8360.00
Bone Spring 1st	9434.86	9420.00
Bone Spring 2nd	9989.86	9975.00
3rd Bone Spring Lime	10504.86	10490.00
Bone Spring 3rd	11264.86	11250.00
Wolfcamp / Point of Penetration	11837.65	11760.00
EXIT	22045.76	11807.69

	MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
SHL	0.00	0.00	32.1950	-103.7368	200' FNL, 1020' FWL of Sec 25 in T24S, R31E
KOP	11332.92	11318.06	32.1954	-103.7364	50' FNL, 1150' FWL of Sec 25 in T24S, R31E
Point of Penetration	11837.65	11760.00	32.1953	-103.7363	100' FNL, 1150' FWL of Sec 25 in T24S, R31E
Exit	22045.76	11807.69	32.1669	-103.7364	100' FSL, 1150' FWL of Sec 36 in T24S, R31E
BHL	22125.76	11807.00	32.1666	-103.7365	20' FSL, 1150' FWL of Sec 36 in T24S, R31E

	Y	X	MD
KOP	435357	726010	11332.92

devon

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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	40.50	100.00	0.00	0.00	0.00	0.00	
200.00	0.00	40.50	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	40.50	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	40.50	400.00	0.00	0.00	0.00	0.00	
500.00	0.00	40.50	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	40.50	600.00	0.00	0.00	0.00	0.00	
660.00	0.00	40.50	660.00	0.00	0.00	0.00	0.00	Rustler
700.00	0.00	40.50	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	40.50	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	40.50	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	40.50	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	40.50	1100.00	0.00	0.00	0.00	0.00	
1105.00	0.00	40.50	1105.00	0.00	0.00	0.00	0.00	Salt
1200.00	0.00	40.50	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	40.50	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	40.50	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	40.50	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	40.50	1600.00	0.00	0.00	0.00	0.00	
1700.00	0.00	40.50	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	40.50	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	40.50	1900.00	0.00	0.00	0.00	0.00	
2000.00	0.00	40.50	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	40.50	2099.98	1.33	1.13	-1.31	2.00	
2200.00	4.00	40.50	2199.84	5.31	4.53	-5.23	2.00	
2300.00	6.00	40.50	2299.45	11.93	10.19	-11.76	2.00	
2400.00	8.00	40.50	2398.70	21.20	18.11	-20.89	2.00	
2500.00	10.00	40.50	2497.47	33.09	28.27	-32.61	2.00	Hold Tangent
2600.00	10.00	40.50	2595.95	46.30	39.54	-45.62	0.00	
2700.00	10.00	40.50	2694.43	59.50	50.82	-58.63	0.00	
2800.00	10.00	40.50	2792.91	72.71	62.10	-71.64	0.00	
2900.00	10.00	40.50	2891.39	85.91	73.38	-84.66	0.00	
3000.00	10.00	40.50	2989.87	99.12	84.65	-97.67	0.00	
3100.00	10.00	40.50	3088.35	112.32	95.93	-110.68	0.00	
3144.15	10.00	40.50	3131.83	118.15	100.91	-116.42	0.00	Drop to Vertical
3200.00	8.88	40.50	3186.92	125.12	106.86	-123.29	2.00	
3300.00	6.88	40.50	3285.97	135.55	115.77	-133.56	2.00	
3400.00	4.88	40.50	3385.44	143.34	122.42	-141.24	2.00	
3500.00	2.88	40.50	3485.21	148.49	126.82	-146.32	2.00	
3600.00	0.88	40.50	3585.15	150.99	128.95	-148.78	2.00	
3644.15	0.00	40.50	3629.30	151.25	129.18	-149.03	2.00	Hold Vertical
3700.00	0.00	179.75	3685.14	151.25	129.18	-149.03	0.00	
3800.00	0.00	179.75	3785.14	151.25	129.18	-149.03	0.00	
3900.00	0.00	179.75	3885.14	151.25	129.18	-149.03	0.00	
4000.00	0.00	179.75	3985.14	151.25	129.18	-149.03	0.00	
4100.00	0.00	179.75	4085.14	151.25	129.18	-149.03	0.00	
4200.00	0.00	179.75	4185.14	151.25	129.18	-149.03	0.00	
4300.00	0.00	179.75	4285.14	151.25	129.18	-149.03	0.00	
4324.86	0.00	179.75	4310.00	151.25	129.18	-149.03	0.00	Base of Salt
4399.86	0.00	179.75	4385.00	151.25	129.18	-149.03	0.00	Lamar
4400.00	0.00	179.75	4385.14	151.25	129.18	-149.03	0.00	
4500.00	0.00	179.75	4485.14	151.25	129.18	-149.03	0.00	
4574.86	0.00	179.75	4560.00	151.25	129.18	-149.03	0.00	Delaware
4600.00	0.00	179.75	4585.14	151.25	129.18	-149.03	0.00	
4700.00	0.00	179.75	4685.14	151.25	129.18	-149.03	0.00	
4800.00	0.00	179.75	4785.14	151.25	129.18	-149.03	0.00	
4900.00	0.00	179.75	4885.14	151.25	129.18	-149.03	0.00	
5000.00	0.00	179.75	4985.14	151.25	129.18	-149.03	0.00	
5100.00	0.00	179.75	5085.14	151.25	129.18	-149.03	0.00	
5200.00	0.00	179.75	5185.14	151.25	129.18	-149.03	0.00	
5300.00	0.00	179.75	5285.14	151.25	129.18	-149.03	0.00	
5400.00	0.00	179.75	5385.14	151.25	129.18	-149.03	0.00	
5454.86	0.00	179.75	5440.00	151.25	129.18	-149.03	0.00	Cherry Canyon
5500.00	0.00	179.75	5485.14	151.25	129.18	-149.03	0.00	
5600.00	0.00	179.75	5585.14	151.25	129.18	-149.03	0.00	
5700.00	0.00	179.75	5685.14	151.25	129.18	-149.03	0.00	
5800.00	0.00	179.75	5785.14	151.25	129.18	-149.03	0.00	
5900.00	0.00	179.75	5885.14	151.25	129.18	-149.03	0.00	
6000.00	0.00	179.75	5985.14	151.25	129.18	-149.03	0.00	
6100.00	0.00	179.75	6085.14	151.25	129.18	-149.03	0.00	

devon

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6200.00	0.00	179.75	6185.14	151.25	129.18	-149.03	0.00	
6300.00	0.00	179.75	6285.14	151.25	129.18	-149.03	0.00	
6400.00	0.00	179.75	6385.14	151.25	129.18	-149.03	0.00	
6500.00	0.00	179.75	6485.14	151.25	129.18	-149.03	0.00	
6600.00	0.00	179.75	6585.14	151.25	129.18	-149.03	0.00	
6700.00	0.00	179.75	6685.14	151.25	129.18	-149.03	0.00	
6800.00	0.00	179.75	6785.14	151.25	129.18	-149.03	0.00	
6804.86	0.00	179.75	6790.00	151.25	129.18	-149.03	0.00	Brushy Canyon
6900.00	0.00	179.75	6885.14	151.25	129.18	-149.03	0.00	
7000.00	0.00	179.75	6985.14	151.25	129.18	-149.03	0.00	
7100.00	0.00	179.75	7085.14	151.25	129.18	-149.03	0.00	
7200.00	0.00	179.75	7185.14	151.25	129.18	-149.03	0.00	
7300.00	0.00	179.75	7285.14	151.25	129.18	-149.03	0.00	
7400.00	0.00	179.75	7385.14	151.25	129.18	-149.03	0.00	
7500.00	0.00	179.75	7485.14	151.25	129.18	-149.03	0.00	
7600.00	0.00	179.75	7585.14	151.25	129.18	-149.03	0.00	
7700.00	0.00	179.75	7685.14	151.25	129.18	-149.03	0.00	
7800.00	0.00	179.75	7785.14	151.25	129.18	-149.03	0.00	
7900.00	0.00	179.75	7885.14	151.25	129.18	-149.03	0.00	
8000.00	0.00	179.75	7985.14	151.25	129.18	-149.03	0.00	
8100.00	0.00	179.75	8085.14	151.25	129.18	-149.03	0.00	
8200.00	0.00	179.75	8185.14	151.25	129.18	-149.03	0.00	
8300.00	0.00	179.75	8285.14	151.25	129.18	-149.03	0.00	
8374.86	0.00	179.75	8360.00	151.25	129.18	-149.03	0.00	1st Bone Spring Lime
8400.00	0.00	179.75	8385.14	151.25	129.18	-149.03	0.00	
8500.00	0.00	179.75	8485.14	151.25	129.18	-149.03	0.00	
8600.00	0.00	179.75	8585.14	151.25	129.18	-149.03	0.00	
8700.00	0.00	179.75	8685.14	151.25	129.18	-149.03	0.00	
8800.00	0.00	179.75	8785.14	151.25	129.18	-149.03	0.00	
8900.00	0.00	179.75	8885.14	151.25	129.18	-149.03	0.00	
9000.00	0.00	179.75	8985.14	151.25	129.18	-149.03	0.00	
9100.00	0.00	179.75	9085.14	151.25	129.18	-149.03	0.00	
9200.00	0.00	179.75	9185.14	151.25	129.18	-149.03	0.00	
9300.00	0.00	179.75	9285.14	151.25	129.18	-149.03	0.00	
9400.00	0.00	179.75	9385.14	151.25	129.18	-149.03	0.00	
9434.86	0.00	179.75	9420.00	151.25	129.18	-149.03	0.00	Bone Spring 1st
9500.00	0.00	179.75	9485.14	151.25	129.18	-149.03	0.00	
9600.00	0.00	179.75	9585.14	151.25	129.18	-149.03	0.00	
9700.00	0.00	179.75	9685.14	151.25	129.18	-149.03	0.00	
9800.00	0.00	179.75	9785.14	151.25	129.18	-149.03	0.00	
9900.00	0.00	179.75	9885.14	151.25	129.18	-149.03	0.00	
9989.86	0.00	179.75	9975.00	151.25	129.18	-149.03	0.00	Bone Spring 2nd
10000.00	0.00	179.75	9985.14	151.25	129.18	-149.03	0.00	
10100.00	0.00	179.75	10085.14	151.25	129.18	-149.03	0.00	
10200.00	0.00	179.75	10185.14	151.25	129.18	-149.03	0.00	
10300.00	0.00	179.75	10285.14	151.25	129.18	-149.03	0.00	
10400.00	0.00	179.75	10385.14	151.25	129.18	-149.03	0.00	
10500.00	0.00	179.75	10485.14	151.25	129.18	-149.03	0.00	
10504.86	0.00	179.75	10490.00	151.25	129.18	-149.03	0.00	3rd Bone Spring Lime
10600.00	0.00	179.75	10585.14	151.25	129.18	-149.03	0.00	
10700.00	0.00	179.75	10685.14	151.25	129.18	-149.03	0.00	
10800.00	0.00	179.75	10785.14	151.25	129.18	-149.03	0.00	
10900.00	0.00	179.75	10885.14	151.25	129.18	-149.03	0.00	
11000.00	0.00	179.75	10985.14	151.25	129.18	-149.03	0.00	
11100.00	0.00	179.75	11085.14	151.25	129.18	-149.03	0.00	
11200.00	0.00	179.75	11185.14	151.25	129.18	-149.03	0.00	
11264.86	0.00	179.75	11250.00	151.25	129.18	-149.03	0.00	Bone Spring 3rd
11300.00	0.00	179.75	11285.14	151.25	129.18	-149.03	0.00	
11332.92	0.00	179.75	11318.06	151.25	129.18	-149.03	0.00	KOP
11400.00	6.71	179.75	11384.99	147.32	129.19	-145.11	10.00	
11500.00	16.71	179.75	11482.79	127.06	129.28	-124.85	10.00	
11600.00	26.71	179.75	11575.58	90.12	129.44	-87.91	10.00	
11700.00	36.71	179.75	11660.54	37.62	129.67	-35.42	10.00	
11800.00	46.71	179.75	11735.10	-28.83	129.96	31.02	10.00	
11837.65	50.47	179.75	11760.00	-57.06	130.09	59.25	10.00	Wolfcamp / Point of Penetration
11900.00	56.71	179.75	11796.99	-107.21	130.30	109.40	10.00	
12000.00	66.71	179.75	11844.33	-195.15	130.69	197.34	10.00	
12100.00	76.71	179.75	11875.67	-289.98	131.10	292.16	10.00	
12200.00	86.71	179.75	11890.08	-388.81	131.53	390.98	10.00	
12237.79	90.49	179.75	11891.00	-426.57	131.70	428.74	10.00	Landing Point

devon

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12300.00	90.49	179.75	11890.47	-488.79	131.97	490.95	0.00	
12400.00	90.49	179.75	11889.62	-588.78	132.41	590.94	0.00	
12500.00	90.49	179.75	11888.77	-688.78	132.84	690.93	0.00	
12600.00	90.49	179.75	11887.92	-788.77	133.28	790.92	0.00	
12700.00	90.49	179.75	11887.07	-888.77	133.72	890.91	0.00	
12800.00	90.49	179.75	11886.22	-988.76	134.15	990.90	0.00	
12900.00	90.49	179.75	11885.38	-1088.76	134.59	1090.88	0.00	
13000.00	90.49	179.75	11884.53	-1188.75	135.02	1190.87	0.00	
13100.00	90.49	179.75	11883.68	-1288.75	135.46	1290.86	0.00	
13200.00	90.49	179.75	11882.83	-1388.74	135.90	1390.85	0.00	
13300.00	90.49	179.75	11881.98	-1488.74	136.33	1490.84	0.00	
13400.00	90.49	179.75	11881.13	-1588.74	136.77	1590.83	0.00	
13500.00	90.49	179.75	11880.28	-1688.73	137.21	1690.81	0.00	
13600.00	90.49	179.75	11879.43	-1788.73	137.64	1790.80	0.00	
13700.00	90.49	179.75	11878.58	-1888.72	138.08	1890.79	0.00	
13800.00	90.49	179.75	11877.73	-1988.72	138.52	1990.78	0.00	
13900.00	90.49	179.75	11876.88	-2088.71	138.95	2090.77	0.00	
14000.00	90.49	179.75	11876.03	-2188.71	139.39	2190.76	0.00	
14100.00	90.49	179.75	11875.18	-2288.70	139.83	2290.75	0.00	
14200.00	90.49	179.75	11874.33	-2388.70	140.26	2390.73	0.00	
14300.00	90.49	179.75	11873.48	-2488.69	140.70	2490.72	0.00	
14400.00	90.49	179.75	11872.63	-2588.69	141.14	2590.71	0.00	
14500.00	90.49	179.75	11871.79	-2688.69	141.57	2690.70	0.00	
14600.00	90.49	179.75	11870.94	-2788.68	142.01	2790.69	0.00	
14700.00	90.49	179.75	11870.09	-2888.68	142.45	2890.68	0.00	
14800.00	90.49	179.75	11869.24	-2988.67	142.88	2990.66	0.00	
14900.00	90.49	179.75	11868.39	-3088.67	143.32	3090.65	0.00	
15000.00	90.49	179.75	11867.54	-3188.66	143.76	3190.64	0.00	
15100.00	90.49	179.75	11866.69	-3288.66	144.19	3290.63	0.00	
15200.00	90.49	179.75	11865.84	-3388.65	144.63	3390.62	0.00	
15300.00	90.49	179.75	11864.99	-3488.65	145.07	3490.61	0.00	
15400.00	90.49	179.75	11864.14	-3588.64	145.50	3590.60	0.00	
15500.00	90.49	179.75	11863.29	-3688.64	145.94	3690.58	0.00	
15600.00	90.49	179.75	11862.44	-3788.64	146.38	3790.57	0.00	
15700.00	90.49	179.75	11861.59	-3888.63	146.81	3890.56	0.00	
15800.00	90.49	179.75	11860.74	-3988.63	147.25	3990.55	0.00	
15900.00	90.49	179.75	11859.89	-4088.62	147.69	4090.54	0.00	
16000.00	90.49	179.75	11859.04	-4188.62	148.12	4190.53	0.00	
16100.00	90.49	179.75	11858.20	-4288.61	148.56	4290.51	0.00	
16200.00	90.49	179.75	11857.35	-4388.61	149.00	4390.50	0.00	
16300.00	90.49	179.75	11856.50	-4488.60	149.43	4490.49	0.00	
16400.00	90.49	179.75	11855.65	-4588.60	149.87	4590.48	0.00	
16500.00	90.49	179.75	11854.80	-4688.59	150.31	4690.47	0.00	
16600.00	90.49	179.75	11853.95	-4788.59	150.74	4790.46	0.00	
16700.00	90.49	179.75	11853.10	-4888.59	151.18	4890.45	0.00	
16800.00	90.49	179.75	11852.25	-4988.58	151.61	4990.43	0.00	
16900.00	90.49	179.75	11851.40	-5088.58	152.05	5090.42	0.00	
17000.00	90.49	179.75	11850.55	-5188.57	152.49	5190.41	0.00	
17100.00	90.49	179.75	11849.70	-5288.57	152.92	5290.40	0.00	
17200.00	90.49	179.75	11848.85	-5388.56	153.36	5390.39	0.00	
17300.00	90.49	179.75	11848.00	-5488.56	153.80	5490.38	0.00	
17400.00	90.49	179.75	11847.15	-5588.55	154.23	5590.36	0.00	
17500.00	90.49	179.75	11846.30	-5688.55	154.67	5690.35	0.00	
17600.00	90.49	179.75	11845.45	-5788.54	155.11	5790.34	0.00	
17700.00	90.49	179.75	11844.60	-5888.54	155.54	5890.33	0.00	
17800.00	90.49	179.75	11843.76	-5988.54	155.98	5990.32	0.00	
17900.00	90.49	179.75	11842.91	-6088.53	156.42	6090.31	0.00	
18000.00	90.49	179.75	11842.06	-6188.53	156.85	6190.30	0.00	
18100.00	90.49	179.75	11841.21	-6288.52	157.29	6290.28	0.00	
18200.00	90.49	179.75	11840.36	-6388.52	157.73	6390.27	0.00	
18300.00	90.49	179.75	11839.51	-6488.51	158.16	6490.26	0.00	
18400.00	90.49	179.75	11838.66	-6588.51	158.60	6590.25	0.00	
18500.00	90.49	179.75	11837.81	-6688.50	159.04	6690.24	0.00	
18600.00	90.49	179.75	11836.96	-6788.50	159.47	6790.23	0.00	
18700.00	90.49	179.75	11836.11	-6888.49	159.91	6890.22	0.00	
18800.00	90.49	179.75	11835.26	-6988.49	160.35	6990.20	0.00	
18900.00	90.49	179.75	11834.41	-7088.49	160.78	7090.19	0.00	
19000.00	90.49	179.75	11833.56	-7188.48	161.22	7190.18	0.00	
19100.00	90.49	179.75	11832.71	-7288.48	161.66	7290.17	0.00	
19200.00	90.49	179.75	11831.86	-7388.47	162.09	7390.16	0.00	

devon

Well: Cotton Draw Unit 618H
County: Eddy
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
19300.00	90.49	179.75	11831.01	-7488.47	162.53	7490.15	0.00	
19400.00	90.49	179.75	11830.17	-7588.46	162.97	7590.13	0.00	
19500.00	90.49	179.75	11829.32	-7688.46	163.40	7690.12	0.00	
19600.00	90.49	179.75	11828.47	-7788.45	163.84	7790.11	0.00	
19700.00	90.49	179.75	11827.62	-7888.45	164.28	7890.10	0.00	
19800.00	90.49	179.75	11826.77	-7988.44	164.71	7990.09	0.00	
19900.00	90.49	179.75	11825.92	-8088.44	165.15	8090.08	0.00	
20000.00	90.49	179.75	11825.07	-8188.43	165.59	8190.07	0.00	
20100.00	90.49	179.75	11824.22	-8288.43	166.02	8290.05	0.00	
20200.00	90.49	179.75	11823.37	-8388.43	166.46	8390.04	0.00	
20300.00	90.49	179.75	11822.52	-8488.42	166.90	8490.03	0.00	
20400.00	90.49	179.75	11821.67	-8588.42	167.33	8590.02	0.00	
20500.00	90.49	179.75	11820.82	-8688.41	167.77	8690.01	0.00	
20600.00	90.49	179.75	11819.97	-8788.41	168.20	8790.00	0.00	
20700.00	90.49	179.75	11819.12	-8888.40	168.64	8889.98	0.00	
20800.00	90.49	179.75	11818.27	-8988.40	169.08	8989.97	0.00	
20900.00	90.49	179.75	11817.42	-9088.39	169.51	9089.96	0.00	
21000.00	90.49	179.75	11816.58	-9188.39	169.95	9189.95	0.00	
21100.00	90.49	179.75	11815.73	-9288.38	170.39	9289.94	0.00	
21200.00	90.49	179.75	11814.88	-9388.38	170.82	9389.93	0.00	
21300.00	90.49	179.75	11814.03	-9488.38	171.26	9489.92	0.00	
21400.00	90.49	179.75	11813.18	-9588.37	171.70	9589.90	0.00	
21500.00	90.49	179.75	11812.33	-9688.37	172.13	9689.89	0.00	
21600.00	90.49	179.75	11811.48	-9788.36	172.57	9789.88	0.00	
21700.00	90.49	179.75	11810.63	-9888.36	173.01	9889.87	0.00	
21800.00	90.49	179.75	11809.78	-9988.35	173.44	9989.86	0.00	
21900.00	90.49	179.75	11808.93	-10088.35	173.88	10089.85	0.00	
22000.00	90.49	179.75	11808.08	-10188.34	174.32	10189.83	0.00	
22045.76	90.49	179.75	11807.69	-10234.10	174.52	10235.59	0.00	EXIT
22100.00	90.49	179.75	11807.23	-10288.34	174.75	10289.82	0.00	
22125.76	90.49	179.75	11807.00	-10314.10	174.84	10315.58	0.00	BHL

Well: Cotton Draw Unit 618H
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MD (ft)	INC (°)	AZI (°)	TVD (ft)	NS (ft)	EW (ft)	VS (ft)	DLS (°/100ft)	Comment

Cotton Draw Unit 618H

1. Geologic Formations

TVD of target	11808	Pilot hole depth	N/A
MD at TD:	22126	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		
Bone Spring 1st	9420		
Bone Spring 2nd	9975		
3rd Bone Spring Lime	10490		
Bone Spring 3rd	11250		
Wolfcamp	11760		

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

Cotton Draw Unit 618H

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Casing Interval		Casing Interval	
					From (MD)	To (MD)	From (TVD)	To (TVD)
14 3/4	10 3/4	45 1/2	J-55	BTC	0	685	0	685
9 7/8	8 5/8	32	P110EC	Sprint FJ	0	11233	0	11233
7 7/8	5 1/2	20	P110EC	DWC / C-IS+	0	22126	0	11808

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

3. Cementing Program (Primary Design)

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

Casing	# Sks	TOC	Wt. ppg	Yld (ft3/sack)	Slurry Description
Surface	421	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	480	Surf	13.0	2.3	2nd State: Bradenhead Squeeze - Lead: Class C Cement + additives
	514	6804	13.2	1.44	Tail: Class H / C + additives
Production	117	9333	9	3.27	Lead: Class H /C + additives
	1428	11333	13.2	1.44	Tail: Class H / C + additives

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

Cotton Draw Unit 618H

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

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

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

7. Drilling Conditions

Condition	Specfiy what type and where?
BH pressure at deepest TVD	6447
Abnormal temperature	No

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

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

8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

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

Attachments

X Directional Plan
_____ Other, describe

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 421368

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 421368
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	1/16/2025