

Well Name: TAMBORA 36 35 FED COM	Well Location: T20S / R29E / SEC 36 / SESE / 32.5256876 / -104.0226659	County or Parish/State: EDDY / NM
Well Number: 333H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM110351	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001555560	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2827041

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 12/11/2024	Time Sundry Submitted: 05:07
Date proposed operation will begin: 12/11/2024	

Procedure Description: Attention Long Vo Devon Energy Production Co., L.P. (Devon) respectfully request to skid over from the original permitted SHL location of 1142 FSL, 690 FEL, SEC 36-20S-29E and re-drill the approved subject wellbore in a different SHL due to conductor and drilling design change. The new SHL will be 1127 FSL, 690 FEL, SEC 36-20S-29E. The new well name will be TAMBORA 36 35 FED COM 333H and have a separate API. We request the original well associated with API 30-015-55560 to have a well name change to TAMBORA 36 35 FED COM 333Y. Please see the attached new plat, drill plan, and directional.

NOI Attachments

Procedure Description

- WA022025525_TAMBORA_36_35_FED_COM_333H_WL_R3_SIGNED_20241211152051.pdf
- 13.375_54.5lb_J55_20241211152055.pdf
- 10.75_45.5lb_J55_BTC_20241211152053.pdf
- Wellhead_Diverter_Drawing_20241211152046.pdf
- TAMBORA_36_35_FED_COM_333H__20241211152048.pdf
- TAMBORA_36_35_FED_COM_333H_Directional_Plan_12_11_24_20241211152047.pdf
- 8.625_32lb_P110EC_SPRINT_FJ_VST_20241211152048.pdf
- 5.5_23lb_P110_HP_CDC_HTQ_20241211152047.pdf

Received by OCD: 12/18/2024 9:05:36 AM

Page 2 of 65

Well Name: TAMBORA 36 35 FED COM	Well Location: T20S / R29E / SEC 36 / SESE / 32.5256876 / -104.0226659	County or Parish/State: EDDY / NM
Well Number: 333H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM110351	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001555560	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Conditions of Approval

Specialist Review

Tambora_36_35_Fed_Com_333H_Sundry_ID_2827041_20241216101053.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: DEC 12, 2024 08:02 AM

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: 12/16/2024

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 <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: SESE / 1123 FSL / 815 FEL / TWSP: 20S / RANGE: 29E / SECTION: 36 / LAT: 32.5256876 / LONG: -104.0226659 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 654 FNL / 201 FWL / TWSP: 20S / RANGE: 29E / SECTION: 35 / LAT: 32.5255846 / LONG: -104.0374922 (TVD: 9664 feet, MD: 14900 feet)

PPP: SESE / 661 FNL / 394 FEL / TWSP: 20S / RANGE: 29E / SECTION: 36 / LAT: 32.5255725 / LONG: -104.0220677 (TVD: 9744 feet, MD: 10145 feet)

BHL: SWSW / 1080 FSL / 20 FWL / TWSP: 20S / RANGE: 29E / SECTION: 35 / LAT: 32.5255957 / LONG: -104.0542543 (TVD: 9578 feet, MD: 20067 feet)

CONFIDENTIAL

C-102 Submit Electronically Via OCD Permitting		State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION				Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled		Revised July 9, 2024						
WELL LOCATION INFORMATION														
API Number 30-015-55881		Pool Code 98857		Pool Name WC 20S29E28; WOLFCAMP										
Property Code 336433		Property Name TAMBORA 36-35 FED COM						Well Number 333H						
OGRID No. 6137		Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.						Ground Level Elevation 3412.5						
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 P	Section 36	Township 20-S	Range 29-E	Lot	Ft. from N/S 1127/S	Ft. from E/W 690/E	Latitude 32.5257006°	Longitude -104.0222603°	County EDDY					
Bottom Hole Location														
UL M	Section 35	Township 20-S	Range 29-E	Lot	Ft. from N/S 705/S	Ft. from E/W 20/W	Latitude 32.5245651°	Longitude -104.0542549°	County EDDY					
Dedicated Acres 640		Infill or Defining Well INFILL		Defining Well API 3001555562		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 P	Section 36	Township 20S	Range 29E	Lot	Ft. from N/S 705 S	Ft. from E/W 67 E	Latitude 32.5244	Longitude -104.0203	County EDDY					
First Take Point (FTP)														
UL P	Section 36	Township 20-S	Range 29-E	Lot	Ft. from N/S 705/S	Ft. from E/W 100/E	Latitude 32.5245393°	Longitude -104.0203494°	County EDDY					
Last Take Point (LTP)														
UL M	Section 35	Township 20-S	Range 29-E	Lot	Ft. from N/S 705/S	Ft. from E/W 100/W	Latitude 32.5245649°	Longitude -104.0539954°	County EDDY					
Unitized Area: <input type="checkbox"/> Area of Uniform Interest: <input type="checkbox"/>					Spacing Unit Type: <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> 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. <i>Chelsey Green</i> 12/11/24 Signature Date CHELSEY GREEN Printed Name CHELSEY.GREEN@DVN.COM E-mail Address					SURVEYOR NOTES: 1. BEARINGS SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (3001), NAD 83 (2011), BASED FROM GPS OBSERVATIONS, OCCUPYING A WHS CONTROL POINT (5/8" REBAR), LOCATED AT AT N:573800.961 E:638393.683 ORTHO:3310.859. DETERMINED BY AN OPUS SOLUTION ON SEPTEMBER 5TH, 2019. UNITS REPRESENTED ON THIS PLAT ARE IN US SURVEY FEET. 2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND DISTANCES IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000234835 3. ELEVATIONS SHOWN OR LISTED ARE EXISTING GROUND ELEVATIONS UNLESS NOTED. 4. KARST AREAS, POTASH BUFFERS, LEASE AREAS AND DRILL ISLANDS, IF SHOWN, WERE PROVIDED BY DEVON ENERGY AND NOT LOCATED ON THE GROUND AS A PART OF THIS SURVEY, LOCATIONS ARE APPROXIMATE.					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 my supervision, and that the same is true and correct to the best of my belief. <div style="text-align: center;">  </div> Signature and Seal of Professional Surveyor: 20250 John E. Allen 12/06/2024 Certificate No. Name Date of Survey				
Page: 1 of 2		Drawn By: JMA		Checked By: JEA		Date Drawn: 12/06/2024		Revision: R3						

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

TAMBORA 36-35 FED COM 333H SURFACE HOLE LOCATION

1127' FSL - 690' FEL
EL: 3412.5'
N: 555120.52
E: 637212.39
LAT: 32.5257006°
LON: -104.0222603°

KICK OFF POINT	FIRST TAKE POINT (PPP 1)
705' FSL - 67' FEL	705' FSL - 100' FEL
N: 554700.2	N: 554699.76
E: 637835	E: 637802.59
LAT: 32.5244	LAT: 32.5245393°
LON: -104.0203	LON: -104.0203494°

PPP 2	LAST TAKE POINT
706' FSL - 0' FEL	705' FSL - 100' FWL
N: 554690.01	N: 554680.24
E: 632621.40	E: 627432.46
LAT: 32.5245532°	LAT: 32.5245649°
LON: -104.0371598°	LON: -104.0539954°

BOTTOM HOLE LOCATION
705' FSL - 20' FWL
N: 554680.11
E: 627352.48
LAT: 32.5245651°
LON: -104.0542549°

COORDINATE TABLE

A	N: 559260.26	E: 627322.02
B	N: 559264.72	E: 629959.96
C	N: 559264.68	E: 632610.58
D	N: 559273.48	E: 635255.24
E	N: 559282.69	E: 637898.72
F	N: 559280.52	E: 640538.24
G	N: 556638.20	E: 637900.30
H	N: 556624.36	E: 632616.82
I	N: 556617.29	E: 627328.34
J	N: 553975.28	E: 627334.00
K	N: 553979.66	E: 629978.53
L	N: 553984.04	E: 632623.07
M	N: 553989.38	E: 635266.70
N	N: 553995.18	E: 637903.38
O	N: 554002.32	E: 640551.15

LEGEND

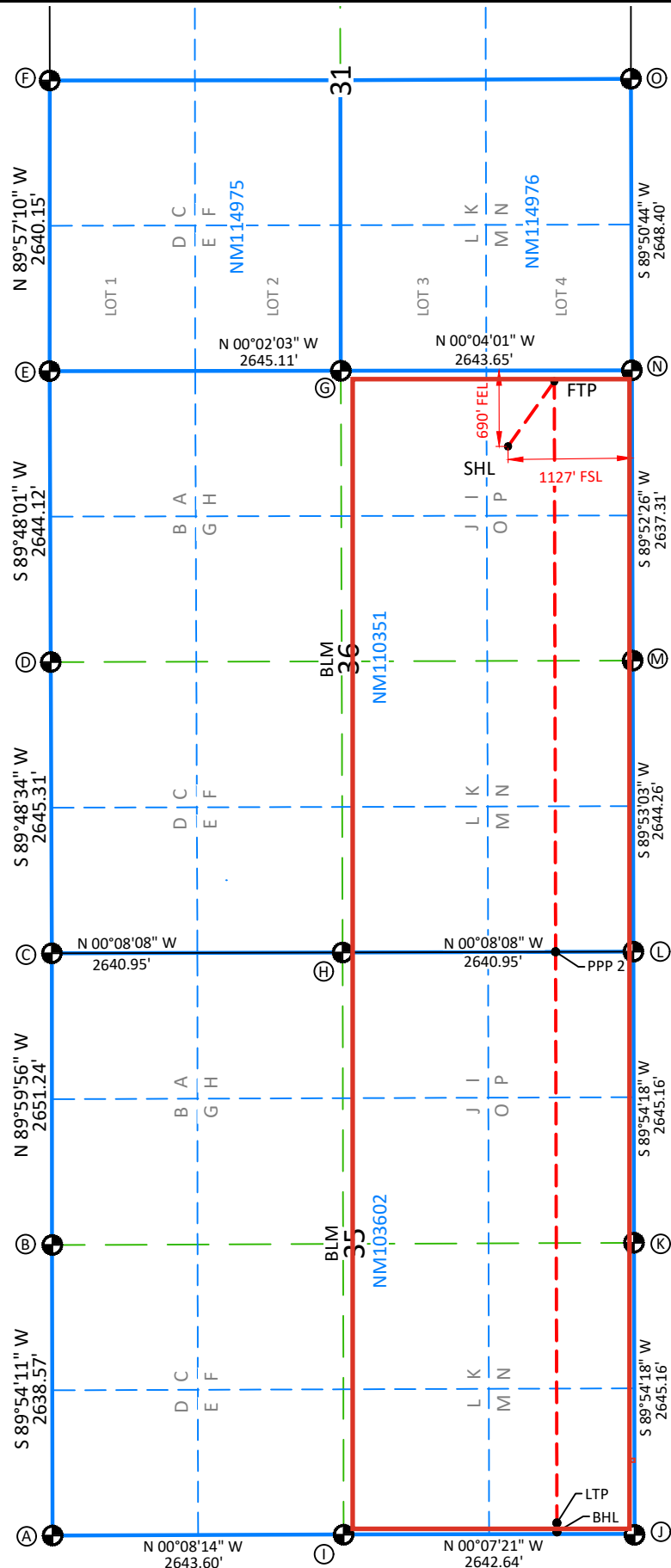
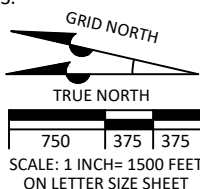
	SECTION LINE
	1/4 SECTION LINE
	1/16 SECTION LINE
	WELL PATH
	LEASE LINE
NM010101010	LEASE ID NUMBER
	FOUND USGLO B.C. ON 1" PIPE, "1916"
	PLSS CORNER

NOTES:

1. BASIS OF BEARINGS, COORDINATES AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE NEW MEXICO COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, NEW MEXICO EAST (3001) WITH A CONVERGENCE ANGLE OF -0°08'00.86" AND BASED ON CONTROL POINT STREET GLIDE AT N. 558290.968' E. 617876.978'.

2. DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000236530.

3. ELEVATIONS SHOWN ARE EXISTING GROUND ELEVATIONS.





13-3/8" 54.50# .380 J-55

Dimensions (Nominal)

Outside Diameter	13.375	in.
Wall	0.380	in.
Inside Diameter	12.615	in.
Drift	12.459	in.
Weight, T&C	54.500	lbs/ft
Weight, PE	52.790	lbs/ft

Performance Ratings, Minimum

Collapse, PE	1130	psi
Internal Yields Pressure		
PE	2730	psi
STC	2730	PSI
BTC	2730	psi
Yield Strength, Pipe Body	853	1000 lbs
Joint Strength, STC	514	1000 lbs
Joint Strength, BTC	909	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.



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

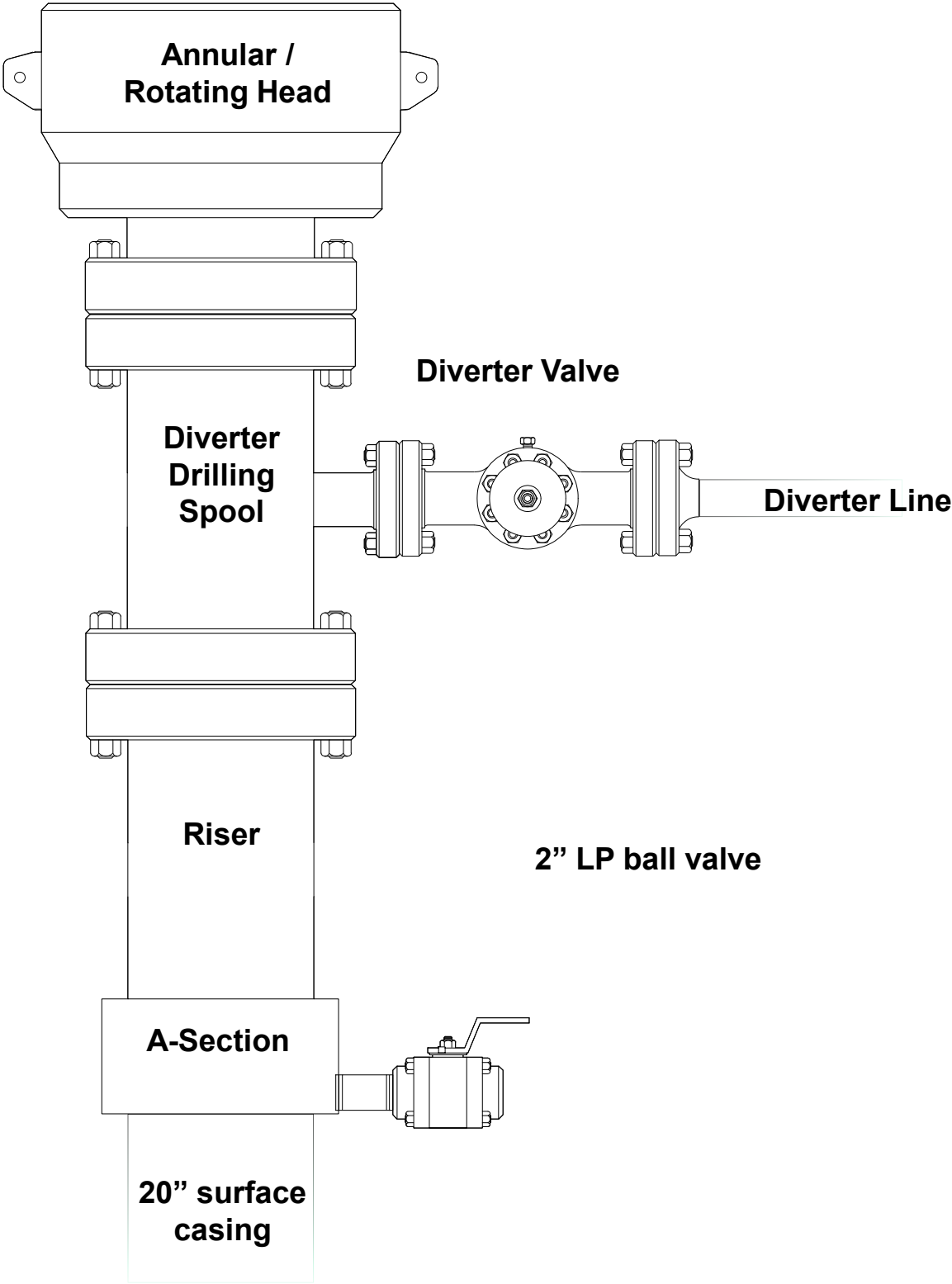
Dimensions (Nominal)

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

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. Geologic Formations

TVD of target	10600	Pilot hole depth	N/A
MD at TD:	20922	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	180		
Salt	444		
Base of Salt	1616		
Capitan Reef Top	1951		
Delaware	3942		
Cherry Canyon	3964		
Brushy Canyon	4882		
1st Bone Spring Lime	6509		
Bone Spring 1st	7621		
Bone Spring 2nd	8355		
3rd Bone Spring Lime	8663		
Bone Spring 3rd	9403		
Wolfcamp	9830		

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

TAMBORA 36-35 FED COM 333H

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
26	20	94.0	K-55	BTC	0.0	250 MD	0	250 TVD
17 1/2	13 3/8	54.5	J-55	BTC	0.0	1850 MD	0	1850 TVD
12 1/4	10 3/4	45.5	J-55	BTC SCC	0	4000	0	4000
9 7/8	5 1/2	23.0	P110HP	CDC HTQ	0	20922 MD	0	10600 TVD

• 9.875" hole down to KOP, then 8.75" to bottom of curve, then 8.5" to Total Depth

• The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	479	Surf	13.2	1.44	Lead: Class C Cement + additives
Int	2285	0	13.2	1.44	Tail: Class H / C + additives
Int 2	142	Surf	9	3.27	Lead: Class C Cement + additives
	364	1951	13.2	1.44	Tail: Class H / C + additives
Production	1259	0	9	3.27	Lead: Class H / C + additives
	3577	8160	13.2	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate 2 casing string with the first stage being pumped conventionally with the calculated top of cement at the Capitan Reef and the second stage performed as a bradenhead squeeze with planned cement from the Capitan Reef 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 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 BOPF requirements.

Casing String	% Excess
Surface	50%
Intermediate	30%
Intermediate 2 (Two Stage)	25%
Prod	10%

TAMBORA 36-35 FED COM 333H

2. Casing Program (Alternative Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
26	20	94.0	K-55	BTC	0.0	250 MD	0	250 TVD
17 1/2	13 3/8	54.5	J-55	BTC	0.0	1850 MD	0	1850 TVD
12 1/4	10 3/4	45.5	J-55	BTC SCC	0	4000	0	4000
9 7/8	8 5/8	32.0	P110EC	Sprint FJ	0	9811	0	9811
7 7/8	5 1/2	23.0	P110HP	CDC HTQ	0	20922 MD	0	10600 TVD

- All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.
- The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

3. Cementing Program (Alternative Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	479	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	2285	0	13.2	1.44	Tail: Class H / C + additives
Int 2	142	Surf	9	3.27	Lead: Class C Cement + additives
	364	1951	13.2	1.44	Tail: Class H / C + additives
Int 3	350	2000	13	3.27	Lead: Class H / C + additives
	367	6000	13.8	1.44	Tail: Class H / C + additives
Production	476	0	9	3.27	Lead: Class H / C + additives
	1689	8160	13.8	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate 2 casing string with the first stage being pumped conventionally with the calculated top of cement at the Capitan Reef and the second stage performed as a bradenhead squeeze with planned cement from the Capitan Reef 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 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 ROPF requirements.

Casing String	% Excess
Surface	50%
Intermediate	30%
Intermediate 2 (Two Stage)	25%
Prod	10%

TAMBORA 36-35 FED COM 333H

4. Pressure Control Equipment (Four String Design)

BOP installed and tested before drilling which hole?		Size?	Min. Required WP	Type	✓	Tested to:
Int	13-5/8"	5M	Annular		X	50% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Int 1	13-5/8"	5M	Annular (5M)		X	100% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Production	13-5/8"	5M	Annular (5M)		X	100% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
N	A variance is requested to run a 5 M annular on a 10M system					

Diverter will be utilized on the 26in Surface hole. BOP will be rigged up on the first intermediate

5. Mud Program (Four String Design)

Section	Type	Weight (ppg)
Surface	WBM	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Intermediate 1	WBM	8.5-9
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	5788
Abnormal temperature	No

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

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

N	H ₂ S is present
Y	H ₂ S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

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

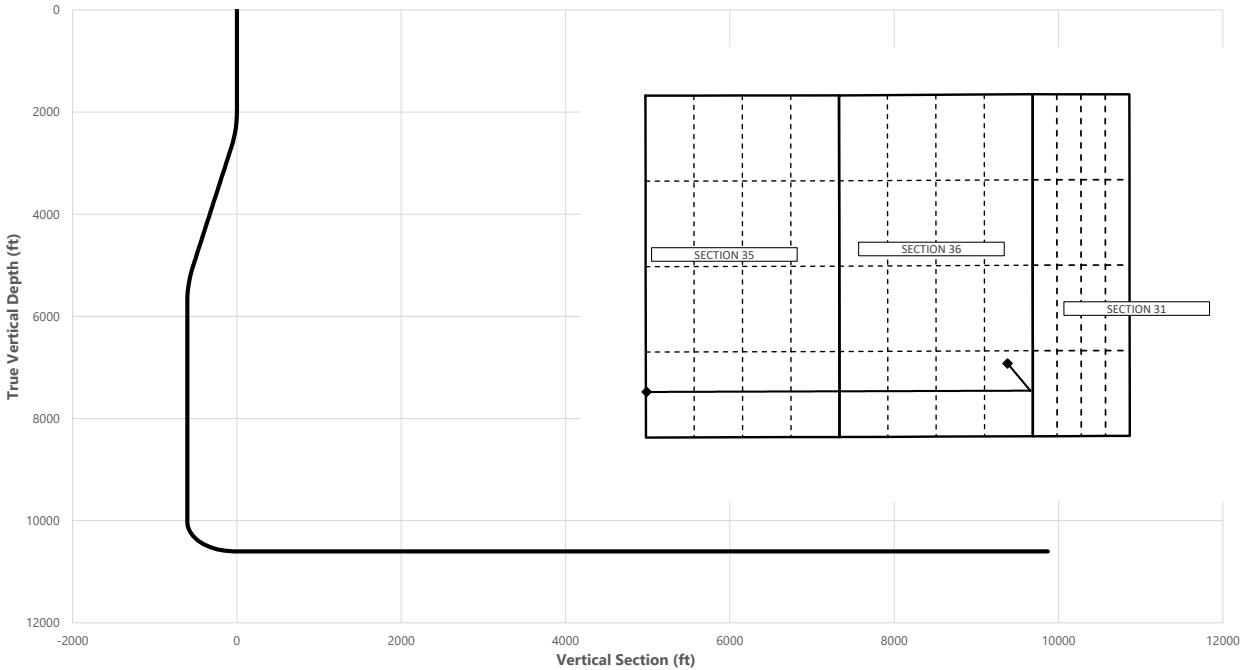
TAMBORA 36-35 FED COM 332H



Well: TAMBORA 36-35 FED COM 333H
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	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	124.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2700.00	14.00	124.00	2693.06	-47.59	70.55	-68.35	2.00	Hold Tangent
5103.24	14.00	124.00	5024.91	-372.70	552.55	-535.37	0.00	Drop to Vertical
5803.24	0.00	124.00	5717.97	-420.28	623.10	-603.72	2.00	Hold Vertical
10112.32	0.00	269.89	10027.04	-420.28	623.10	-603.72	0.00	KOP
11012.32	90.00	269.89	10600.00	-421.38	50.14	-31.29	10.00	Landing Point
20922.39	90.00	269.89	10600.00	-440.41	-9859.91	9869.74	0.00	BHL



Key Depths	MD (ft)	TVD (ft)
Rustler	180.00	180.00
Salt	444.00	444.00
Base of Salt	1616.00	1616.00
Capitan Reef Top	1951.00	1951.00
Delaware	3987.18	3942.00
Cherry Canyon	4009.85	3964.00
Brushy Canyon	4955.96	4882.00
1st Bone Spring Lime	6594.28	6509.00
Bone Spring 1st	7706.28	7621.00
Bone Spring 2nd	8440.28	8355.00
3rd Bone Spring Lime	8748.28	8663.00
Bone Spring 3rd	9488.28	9403.00
Wolfcamp / Point of Penetration	9915.28	9830.00
exit	20842.39	10600.01

	MD (ft)	TVD (ft)	Lat (°)	Long (°)	Section Footages
SHL	0.00	0.00	32.5256	-104.0223	1127' FSL, 690' FEL of Sec 36 in T20S, R29E
KOP	10112.32	10027.04	32.5244	-104.0203	705' FSL, 67' FEL of Sec 36 in T20S, R29E
Point of Penetration	9915.28	9830.00	32.5245	-104.0203	705' FSL, 100' FEL of Sec 36 in T20S, R29E
Exit	20842.39	10600.01	32.5246	-104.0540	705' FSL, 100' FWL of Sec 35 in T20S, R29E
BHL	20922.39	10600.00	32.5245	-104.0543	705' FSL, 20' FWL of Sec 35 in T20S, R29E

	Y	X
KOP	554700.2	637835

TAMBORA 36-35 FED COM 332H



Well: TAMBORA 36-35 FED COM 333H
 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	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	124.00	100.00	0.00	0.00	0.00	0.00	
180.00	0.00	124.00	180.00	0.00	0.00	0.00	0.00	Rustler
200.00	0.00	124.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	124.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	124.00	400.00	0.00	0.00	0.00	0.00	
444.00	0.00	124.00	444.00	0.00	0.00	0.00	0.00	Salt
500.00	0.00	124.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	124.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	124.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	124.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	124.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	124.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	124.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	124.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	124.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	124.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	124.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	124.00	1600.00	0.00	0.00	0.00	0.00	
1616.00	0.00	124.00	1616.00	0.00	0.00	0.00	0.00	Base of Salt
1700.00	0.00	124.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	124.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	124.00	1900.00	0.00	0.00	0.00	0.00	
1951.00	0.00	124.00	1951.00	0.00	0.00	0.00	0.00	Capitan Reef Top
2000.00	0.00	124.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	124.00	2099.98	-0.98	1.45	-1.40	2.00	
2200.00	4.00	124.00	2199.84	-3.90	5.79	-5.61	2.00	
2300.00	6.00	124.00	2299.45	-8.78	13.01	-12.61	2.00	
2400.00	8.00	124.00	2398.70	-15.59	23.11	-22.39	2.00	
2500.00	10.00	124.00	2497.47	-24.34	36.08	-34.96	2.00	
2600.00	12.00	124.00	2595.62	-35.01	51.90	-50.29	2.00	
2700.00	14.00	124.00	2693.06	-47.59	70.55	-68.35	2.00	Hold Tangent
2800.00	14.00	124.00	2790.08	-61.11	90.60	-87.79	0.00	
2900.00	14.00	124.00	2887.11	-74.64	110.66	-107.22	0.00	
3000.00	14.00	124.00	2984.14	-88.17	130.72	-126.65	0.00	
3100.00	14.00	124.00	3081.17	-101.70	150.77	-146.08	0.00	
3200.00	14.00	124.00	3178.20	-115.23	170.83	-165.52	0.00	
3300.00	14.00	124.00	3275.23	-128.75	190.89	-184.95	0.00	
3400.00	14.00	124.00	3372.26	-142.28	210.94	-204.38	0.00	
3500.00	14.00	124.00	3469.29	-155.81	231.00	-223.82	0.00	
3600.00	14.00	124.00	3566.32	-169.34	251.05	-243.25	0.00	
3700.00	14.00	124.00	3663.35	-182.87	271.11	-262.68	0.00	
3800.00	14.00	124.00	3760.38	-196.39	291.17	-282.11	0.00	
3900.00	14.00	124.00	3857.41	-209.92	311.22	-301.55	0.00	
3987.18	14.00	124.00	3942.00	-221.72	328.71	-318.49	0.00	Delaware
4000.00	14.00	124.00	3954.44	-223.45	331.28	-320.98	0.00	
4009.85	14.00	124.00	3964.00	-224.78	333.26	-322.89	0.00	Cherry Canyon
4100.00	14.00	124.00	4051.47	-236.98	351.34	-340.41	0.00	
4200.00	14.00	124.00	4148.50	-250.51	371.39	-359.84	0.00	
4300.00	14.00	124.00	4245.53	-264.03	391.45	-379.28	0.00	
4400.00	14.00	124.00	4342.56	-277.56	411.50	-398.71	0.00	
4500.00	14.00	124.00	4439.59	-291.09	431.56	-418.14	0.00	
4600.00	14.00	124.00	4536.62	-304.62	451.62	-437.57	0.00	
4700.00	14.00	124.00	4633.65	-318.15	471.67	-457.01	0.00	
4800.00	14.00	124.00	4730.68	-331.67	491.73	-476.44	0.00	
4900.00	14.00	124.00	4827.71	-345.20	511.79	-495.87	0.00	
4955.96	14.00	124.00	4882.00	-352.77	523.01	-506.74	0.00	Brushy Canyon
5000.00	14.00	124.00	4924.74	-358.73	531.84	-515.30	0.00	
5100.00	14.00	124.00	5021.77	-372.26	551.90	-534.74	0.00	
5103.24	14.00	124.00	5024.91	-372.70	552.55	-535.37	0.00	Drop to Vertical
5200.00	12.06	124.00	5119.17	-384.90	570.64	-552.89	2.00	
5300.00	10.06	124.00	5217.31	-395.63	586.55	-568.31	2.00	
5400.00	8.06	124.00	5316.05	-404.44	599.61	-580.96	2.00	
5500.00	6.06	124.00	5415.29	-411.32	609.80	-590.84	2.00	
5600.00	4.06	124.00	5514.89	-416.25	617.12	-597.93	2.00	
5700.00	2.06	124.00	5614.75	-419.24	621.55	-602.23	2.00	
5800.00	0.06	124.00	5714.72	-420.28	623.10	-603.72	2.00	
5803.24	0.00	124.00	5717.97	-420.28	623.10	-603.72	2.00	Hold Vertical
5900.00	0.00	269.89	5814.72	-420.28	623.10	-603.72	0.00	
6000.00	0.00	269.89	5914.72	-420.28	623.10	-603.72	0.00	

TAMBORA 36-35 FED COM 332H



Well: TAMBORA 36-35 FED COM 333H
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
6100.00	0.00	269.89	6014.72	-420.28	623.10	-603.72	0.00	
6200.00	0.00	269.89	6114.72	-420.28	623.10	-603.72	0.00	
6300.00	0.00	269.89	6214.72	-420.28	623.10	-603.72	0.00	
6400.00	0.00	269.89	6314.72	-420.28	623.10	-603.72	0.00	
6500.00	0.00	269.89	6414.72	-420.28	623.10	-603.72	0.00	
6594.28	0.00	269.89	6509.00	-420.28	623.10	-603.72	0.00	1st Bone Spring Lime
6600.00	0.00	269.89	6514.72	-420.28	623.10	-603.72	0.00	
6700.00	0.00	269.89	6614.72	-420.28	623.10	-603.72	0.00	
6800.00	0.00	269.89	6714.72	-420.28	623.10	-603.72	0.00	
6900.00	0.00	269.89	6814.72	-420.28	623.10	-603.72	0.00	
7000.00	0.00	269.89	6914.72	-420.28	623.10	-603.72	0.00	
7100.00	0.00	269.89	7014.72	-420.28	623.10	-603.72	0.00	
7200.00	0.00	269.89	7114.72	-420.28	623.10	-603.72	0.00	
7300.00	0.00	269.89	7214.72	-420.28	623.10	-603.72	0.00	
7400.00	0.00	269.89	7314.72	-420.28	623.10	-603.72	0.00	
7500.00	0.00	269.89	7414.72	-420.28	623.10	-603.72	0.00	
7600.00	0.00	269.89	7514.72	-420.28	623.10	-603.72	0.00	
7700.00	0.00	269.89	7614.72	-420.28	623.10	-603.72	0.00	
7706.28	0.00	269.89	7621.00	-420.28	623.10	-603.72	0.00	Bone Spring 1st
7800.00	0.00	269.89	7714.72	-420.28	623.10	-603.72	0.00	
7900.00	0.00	269.89	7814.72	-420.28	623.10	-603.72	0.00	
8000.00	0.00	269.89	7914.72	-420.28	623.10	-603.72	0.00	
8100.00	0.00	269.89	8014.72	-420.28	623.10	-603.72	0.00	
8200.00	0.00	269.89	8114.72	-420.28	623.10	-603.72	0.00	
8300.00	0.00	269.89	8214.72	-420.28	623.10	-603.72	0.00	
8400.00	0.00	269.89	8314.72	-420.28	623.10	-603.72	0.00	
8440.28	0.00	269.89	8355.00	-420.28	623.10	-603.72	0.00	Bone Spring 2nd
8500.00	0.00	269.89	8414.72	-420.28	623.10	-603.72	0.00	
8600.00	0.00	269.89	8514.72	-420.28	623.10	-603.72	0.00	
8700.00	0.00	269.89	8614.72	-420.28	623.10	-603.72	0.00	
8748.28	0.00	269.89	8663.00	-420.28	623.10	-603.72	0.00	3rd Bone Spring Lime
8800.00	0.00	269.89	8714.72	-420.28	623.10	-603.72	0.00	
8900.00	0.00	269.89	8814.72	-420.28	623.10	-603.72	0.00	
9000.00	0.00	269.89	8914.72	-420.28	623.10	-603.72	0.00	
9100.00	0.00	269.89	9014.72	-420.28	623.10	-603.72	0.00	
9200.00	0.00	269.89	9114.72	-420.28	623.10	-603.72	0.00	
9300.00	0.00	269.89	9214.72	-420.28	623.10	-603.72	0.00	
9400.00	0.00	269.89	9314.72	-420.28	623.10	-603.72	0.00	
9488.28	0.00	269.89	9403.00	-420.28	623.10	-603.72	0.00	Bone Spring 3rd
9500.00	0.00	269.89	9414.72	-420.28	623.10	-603.72	0.00	
9600.00	0.00	269.89	9514.72	-420.28	623.10	-603.72	0.00	
9700.00	0.00	269.89	9614.72	-420.28	623.10	-603.72	0.00	
9800.00	0.00	269.89	9714.72	-420.28	623.10	-603.72	0.00	
9900.00	0.00	269.89	9814.72	-420.28	623.10	-603.72	0.00	
9915.28	0.00	269.89	9830.00	-420.28	623.10	-603.72	0.00	Wolfcamp / Point of Penetration
10000.00	0.00	269.89	9914.72	-420.28	623.10	-603.72	0.00	
10100.00	0.00	269.89	10014.72	-420.28	623.10	-603.72	0.00	
10112.32	0.00	269.89	10027.04	-420.28	623.10	-603.72	0.00	KOP
10200.00	8.77	269.89	10114.38	-420.30	616.40	-597.03	10.00	
10300.00	18.77	269.89	10211.39	-420.34	592.63	-573.28	10.00	
10400.00	28.77	269.89	10302.79	-420.42	552.38	-533.07	10.00	
10500.00	38.77	269.89	10385.81	-420.53	496.87	-477.61	10.00	
10600.00	48.77	269.89	10457.93	-420.66	427.78	-408.58	10.00	
10700.00	58.77	269.89	10516.96	-420.81	347.22	-328.09	10.00	
10800.00	68.77	269.89	10561.11	-420.99	257.63	-238.59	10.00	
10900.00	78.77	269.89	10589.03	-421.17	161.74	-142.78	10.00	
11000.00	88.77	269.89	10599.87	-421.36	62.46	-43.59	10.00	
11012.32	90.00	269.89	10600.00	-421.38	50.14	-31.29	10.00	Landing Point
11100.00	90.00	269.89	10600.00	-421.55	-37.54	56.32	0.00	
11200.00	90.00	269.89	10600.00	-421.75	-137.54	156.22	0.00	
11300.00	90.00	269.89	10600.00	-421.94	-237.54	256.13	0.00	
11400.00	90.00	269.89	10600.00	-422.13	-337.54	356.04	0.00	
11500.00	90.00	269.89	10600.00	-422.32	-437.54	455.95	0.00	
11600.00	90.00	269.89	10600.00	-422.51	-537.54	555.86	0.00	
11700.00	90.00	269.89	10600.00	-422.71	-637.54	655.77	0.00	
11800.00	90.00	269.89	10600.00	-422.90	-737.54	755.68	0.00	
11900.00	90.00	269.89	10600.00	-423.09	-837.54	855.59	0.00	
12000.00	90.00	269.89	10600.00	-423.28	-937.54	955.49	0.00	
12100.00	90.00	269.89	10600.00	-423.48	-1037.54	1055.40	0.00	
12200.00	90.00	269.89	10600.00	-423.67	-1137.54	1155.31	0.00	


TAMBORA 36-35 FED COM 332H



Well: TAMBORA 36-35 FED COM 333H
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
12300.00	90.00	269.89	10600.00	-423.86	-1237.54	1255.22	0.00	
12400.00	90.00	269.89	10600.00	-424.05	-1337.54	1355.13	0.00	
12500.00	90.00	269.89	10600.00	-424.25	-1437.54	1455.04	0.00	
12600.00	90.00	269.89	10600.00	-424.44	-1537.54	1554.95	0.00	
12700.00	90.00	269.89	10600.00	-424.63	-1637.54	1654.86	0.00	
12800.00	90.00	269.89	10600.00	-424.82	-1737.54	1754.76	0.00	
12900.00	90.00	269.89	10600.00	-425.02	-1837.54	1854.67	0.00	
13000.00	90.00	269.89	10600.00	-425.21	-1937.54	1954.58	0.00	
13100.00	90.00	269.89	10600.00	-425.40	-2037.54	2054.49	0.00	
13200.00	90.00	269.89	10600.00	-425.59	-2137.54	2154.40	0.00	
13300.00	90.00	269.89	10600.00	-425.79	-2237.54	2254.31	0.00	
13400.00	90.00	269.89	10600.00	-425.98	-2337.54	2354.22	0.00	
13500.00	90.00	269.89	10600.00	-426.17	-2437.54	2454.13	0.00	
13600.00	90.00	269.89	10600.00	-426.36	-2537.54	2554.03	0.00	
13700.00	90.00	269.89	10600.00	-426.55	-2637.54	2653.94	0.00	
13800.00	90.00	269.89	10600.00	-426.75	-2737.54	2753.85	0.00	
13900.00	90.00	269.89	10600.00	-426.94	-2837.54	2853.76	0.00	
14000.00	90.00	269.89	10600.00	-427.13	-2937.54	2953.67	0.00	
14100.00	90.00	269.89	10600.00	-427.32	-3037.54	3053.58	0.00	
14200.00	90.00	269.89	10600.00	-427.52	-3137.54	3153.49	0.00	
14300.00	90.00	269.89	10600.00	-427.71	-3237.54	3253.40	0.00	
14400.00	90.00	269.89	10600.00	-427.90	-3337.54	3353.31	0.00	
14500.00	90.00	269.89	10600.00	-428.09	-3437.54	3453.21	0.00	
14600.00	90.00	269.89	10600.00	-428.29	-3537.54	3553.12	0.00	
14700.00	90.00	269.89	10600.00	-428.48	-3637.54	3653.03	0.00	
14800.00	90.00	269.89	10600.01	-428.67	-3737.53	3752.94	0.00	
14900.00	90.00	269.89	10600.01	-428.86	-3837.53	3852.85	0.00	
15000.00	90.00	269.89	10600.01	-429.06	-3937.53	3952.76	0.00	
15100.00	90.00	269.89	10600.01	-429.25	-4037.53	4052.67	0.00	
15200.00	90.00	269.89	10600.01	-429.44	-4137.53	4152.58	0.00	
15300.00	90.00	269.89	10600.01	-429.63	-4237.53	4252.48	0.00	
15400.00	90.00	269.89	10600.01	-429.83	-4337.53	4352.39	0.00	
15500.00	90.00	269.89	10600.01	-430.02	-4437.53	4452.30	0.00	
15600.00	90.00	269.89	10600.01	-430.21	-4537.53	4552.21	0.00	
15700.00	90.00	269.89	10600.01	-430.40	-4637.53	4652.12	0.00	
15800.00	90.00	269.89	10600.01	-430.59	-4737.53	4752.03	0.00	
15900.00	90.00	269.89	10600.01	-430.79	-4837.53	4851.94	0.00	
16000.00	90.00	269.89	10600.01	-430.98	-4937.53	4951.85	0.00	
16100.00	90.00	269.89	10600.01	-431.17	-5037.53	5051.75	0.00	
16200.00	90.00	269.89	10600.01	-431.36	-5137.53	5151.66	0.00	
16300.00	90.00	269.89	10600.01	-431.56	-5237.53	5251.57	0.00	
16400.00	90.00	269.89	10600.01	-431.75	-5337.53	5351.48	0.00	
16500.00	90.00	269.89	10600.01	-431.94	-5437.53	5451.39	0.00	
16600.00	90.00	269.89	10600.01	-432.13	-5537.53	5551.30	0.00	
16700.00	90.00	269.89	10600.01	-432.33	-5637.53	5651.21	0.00	
16800.00	90.00	269.89	10600.01	-432.52	-5737.53	5751.12	0.00	
16900.00	90.00	269.89	10600.01	-432.71	-5837.53	5851.03	0.00	
17000.00	90.00	269.89	10600.01	-432.90	-5937.53	5950.93	0.00	
17100.00	90.00	269.89	10600.01	-433.10	-6037.53	6050.84	0.00	
17200.00	90.00	269.89	10600.01	-433.29	-6137.53	6150.75	0.00	
17300.00	90.00	269.89	10600.01	-433.48	-6237.53	6250.66	0.00	
17400.00	90.00	269.89	10600.01	-433.67	-6337.53	6350.57	0.00	
17500.00	90.00	269.89	10600.01	-433.87	-6437.53	6450.48	0.00	
17600.00	90.00	269.89	10600.01	-434.06	-6537.53	6550.39	0.00	
17700.00	90.00	269.89	10600.01	-434.25	-6637.53	6650.30	0.00	
17800.00	90.00	269.89	10600.01	-434.44	-6737.53	6750.20	0.00	
17900.00	90.00	269.89	10600.01	-434.63	-6837.53	6850.11	0.00	
18000.00	90.00	269.89	10600.01	-434.83	-6937.53	6950.02	0.00	
18100.00	90.00	269.89	10600.01	-435.02	-7037.53	7049.93	0.00	
18200.00	90.00	269.89	10600.01	-435.21	-7137.53	7149.84	0.00	
18300.00	90.00	269.89	10600.01	-435.40	-7237.53	7249.75	0.00	
18400.00	90.00	269.89	10600.01	-435.60	-7337.53	7349.66	0.00	
18500.00	90.00	269.89	10600.01	-435.79	-7437.53	7449.57	0.00	
18600.00	90.00	269.89	10600.01	-435.98	-7537.53	7549.47	0.00	
18700.00	90.00	269.89	10600.01	-436.17	-7637.53	7649.38	0.00	
18800.00	90.00	269.89	10600.01	-436.37	-7737.53	7749.29	0.00	
18900.00	90.00	269.89	10600.01	-436.56	-7837.53	7849.20	0.00	
19000.00	90.00	269.89	10600.01	-436.75	-7937.53	7949.11	0.00	
19100.00	90.00	269.89	10600.01	-436.94	-8037.53	8049.02	0.00	
19200.00	90.00	269.89	10600.01	-437.14	-8137.53	8148.93	0.00	



Well: TAMBORA 36-35 FED COM 333H

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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
19300.00	90.00	269.89	10600.01	-437.33	-8237.53	8248.84	0.00	
19400.00	90.00	269.89	10600.01	-437.52	-8337.53	8348.74	0.00	
19500.00	90.00	269.89	10600.01	-437.71	-8437.53	8448.65	0.00	
19600.00	90.00	269.89	10600.01	-437.91	-8537.53	8548.56	0.00	
19700.00	90.00	269.89	10600.01	-438.10	-8637.53	8648.47	0.00	
19800.00	90.00	269.89	10600.01	-438.29	-8737.53	8748.38	0.00	
19900.00	90.00	269.89	10600.01	-438.48	-8837.53	8848.29	0.00	
20000.00	90.00	269.89	10600.01	-438.67	-8937.53	8948.20	0.00	
20100.00	90.00	269.89	10600.01	-438.87	-9037.53	9048.11	0.00	
20200.00	90.00	269.89	10600.01	-439.06	-9137.52	9148.02	0.00	
20300.00	90.00	269.89	10600.01	-439.25	-9237.52	9247.92	0.00	
20400.00	90.00	269.89	10600.01	-439.44	-9337.52	9347.83	0.00	
20500.00	90.00	269.89	10600.01	-439.64	-9437.52	9447.74	0.00	
20600.00	90.00	269.89	10600.01	-439.83	-9537.52	9547.65	0.00	
20700.00	90.00	269.89	10600.01	-440.02	-9637.52	9647.56	0.00	
20800.00	90.00	269.89	10600.01	-440.21	-9737.52	9747.47	0.00	
20842.39	90.00	269.89	10600.01	-440.30	-9779.91	9789.82	0.00	exit
20900.00	90.00	269.89	10600.01	-440.41	-9837.52	9847.38	0.00	
20922.39	90.00	269.89	10600.00	-440.41	-9859.91	9869.74	0.00	BHL

Issued on: 16 Dec. 2020 by Logan Van Gorp



Connection Data Sheet

OD	Weight (lb/ft)	Wall Th.	Grade	Alt. Drift:	Connection
8 5/8 in.	Nominal: 32.00 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

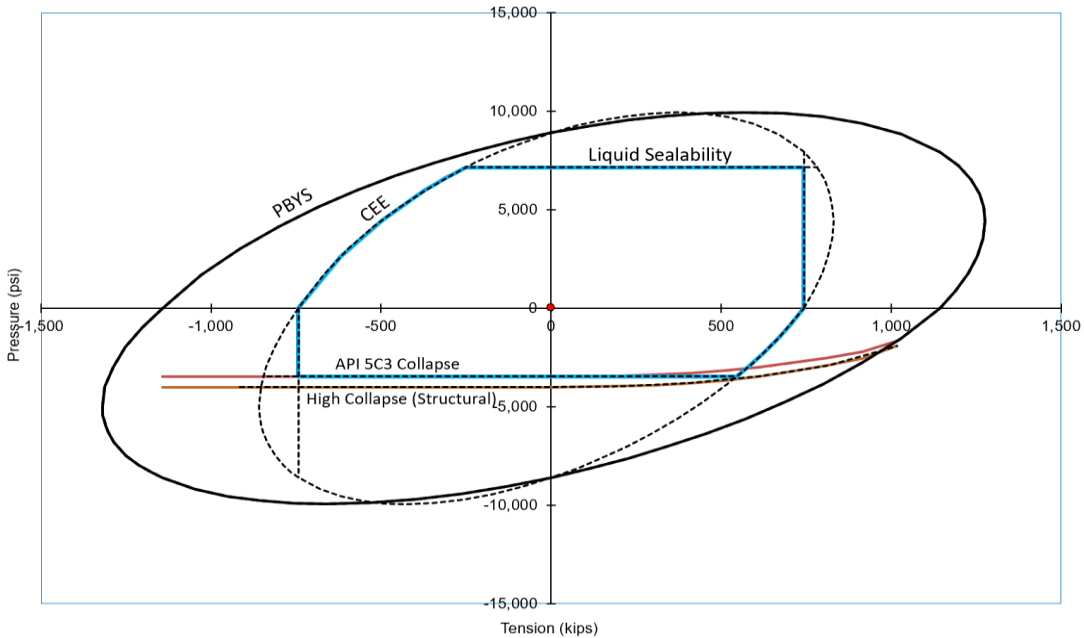
CONNECTION PROPERTIES		
Connection Type	Semi-Premium Integral Flush	
Connection OD (nom):	8.665	in.
Connection ID (nom):	7.954	in.
Make-Up Loss	2.614	in.
Critical Cross Section	6.038	sqin.
Tension Efficiency	65.0	% of pipe
Compression Efficiency	65.0	% of pipe
Internal Pressure Efficiency	80.0	% of pipe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



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

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

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

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

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





U. S. Steel Tubular Products

5.500" 23.00lb/ft (0.415" Wall) P110 HP USS-CDC HTQ[®]

8/13/2024 10:44:04 AM



MECHANICAL PROPERTIES	Pipe	USS-CDC HTQ [®]		--
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-CDC HTQ [®]		--
Outside Diameter	5.500	6.300	in.	--
Wall Thickness	0.415	--	in.	--
Inside Diameter	4.670	4.670	in.	--
Standard Drift	4.545	4.545	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	23.00	--	lb/ft	--
Plain End Weight	22.56	--	lb/ft	--
SECTION AREA	Pipe	USS-CDC HTQ [®]		--
Critical Area	6.630	6.630	sq. in.	--
Joint Efficiency	--	97.0	%	--
PERFORMANCE	Pipe	USS-CDC HTQ [®]		--
Minimum Collapse Pressure	16,470	16,470	psi	--
External Pressure Leak Resistance	--	13,180	psi	--
Minimum Internal Yield Pressure	16,500	16,240	psi	--
Minimum Pipe Body Yield Strength	829,000	--	lb	--
Joint Strength	--	804,000	lb	--
Compression Rating	--	482,000	lb	--
Reference Length	--	23,304	ft	--
Maximum Uniaxial Bend Rating	--	60.6	deg/100 ft	--
MAKE-UP DATA	Pipe	USS-CDC HTQ [®]		--
Make-Up Loss	--	4.63	in.	--
Minimum Make-Up Torque	--	15,000	ft-lb	--
Maximum Make-Up Torque	--	21,000	ft-lb	--
Connection Yield Torque	--	30,800	ft-lb	--

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.

Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3.

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.).
4.

Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5.

Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Cal II.

Legal Notice

USS - CDC HTQ[®] (High Torque Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Buttress threaded and coupled connection designed for drilling with casing applications. 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.

Well Name: TAMBORA 36 35 FED COM	Well Location: T20S / R29E / SEC 36 / SESE / 32.5256876 / -104.0226659	County or Parish/State: EDDY / NM
Well Number: 333H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM110351	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001555560	Operator: DEVON ENERGY PRODUCTION COMPANY LP	

Notice of Intent

Sundry ID: 2827041

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 12/11/2024	Time Sundry Submitted: 05:07
Date proposed operation will begin: 12/11/2024	

Procedure Description: Attention Long Vo Devon Energy Production Co., L.P. (Devon) respectfully request to skid over from the original permitted SHL location of 1142 FSL, 690 FEL, SEC 36-20S-29E and re-drill the approved subject wellbore in a different SHL due to conductor and drilling design change. The new SHL will be 1127 FSL, 690 FEL, SEC 36-20S-29E. The new well name will be TAMBORA 36 35 FED COM 333H and have a separate API. We request the original well associated with API 30-015-55560 to have a well name change to TAMBORA 36 35 FED COM 333Y. Please see the attached new plat, drill plan, and directional.

NOI Attachments

Procedure Description

- WA022025525_TAMBORA_36_35_FED_COM_333H_WL_R3_SIGNED_20241211152051.pdf
- 13.375_54.5lb_J55_20241211152055.pdf
- 10.75_45.5lb_J55_BTC_20241211152053.pdf
- Wellhead_Diverter_Drawing_20241211152046.pdf
- TAMBORA_36_35_FED_COM_333H__20241211152048.pdf
- TAMBORA_36_35_FED_COM_333H_Directional_Plan_12_11_24_20241211152047.pdf
- 8.625_32lb_P110EC_SPRINT_FJ_VST_20241211152048.pdf
- 5.5_23lb_P110_HP_CDC_HTQ_20241211152047.pdf

Received by OCD: 12/18/2024 9:05:36 AM

Page 25 of 65

Well Name: TAMBORA 36 35 FED COM	Well Location: T20S / R29E / SEC 36 / SESE / 32.5256876 / -104.0226659	County or Parish/State: EDDY / NM
Well Number: 333H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM110351	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001555560	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: CHELSEY GREEN

Signed on: DEC 12, 2024 08:02 AM

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:

**PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Devon Energy Production Company LP
LOCATION:	Section 36, T.20 S., R.29 E., NMPM
COUNTY:	Eddy County, New Mexico

WELL NAME & NO.:	Tambora 36 35 Fed Com 333H
ATS/API ID:	N/a
APD ID:	N/a
Sundry ID:	2827041

COA

Primary Design:

H2S	No		
Potash	Secretary	None	
Cave/Karst Potential	Medium		
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 checked="" type="checkbox"/> 4 String <input type="checkbox"/> 5 String	Capitan Reef Int 2	<input type="checkbox"/> WIPP
Other	Pilot Hole None	<input type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter Int 2	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

Alternate Design:

Potash	Secretary	None	
Cave/Karst Potential	Medium		
Cave/Karst Potential	<input type="checkbox"/> Critical		
Other	<input type="checkbox"/> 4 String <input checked="" type="checkbox"/> 5 String	Capitan Reef Int 2	<input type="checkbox"/> WIPP
Other	Pilot Hole None	<input type="checkbox"/> Open Annulus	
Cementing	Contingency Squeeze None	Echo-Meter Int 2	Primary Cement Squeeze None

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet **43 CFR part 3170 Subpart 3176**, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

PRIMARY DESIGN

B. CASING

1. The **20** inch surface casing shall be set at approximately **450 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 **26** 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.

Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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

2. The minimum required fill of cement behind the **13-3/8** inch intermediate casing is:
 - 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, potash or capitan reef.**

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

3. The minimum required fill of cement behind the **10-3/4** inch intermediate casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **50 feet** on top of Capitan Reef top **or 500 feet** into the previous casing, whichever is greater 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. 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, potash or capitan reef.

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 **Capitan Reef at 1951'**.
- b. Second stage:
 - Operator will perform bradenhead squeeze from the top of **Capitan Reef** to at least **50 feet** on top of the Capitan Reef top **or 500 feet** into the previous casing, whichever is greater and may be lower than USGS Marker Bed No. 126. If cement does not meet the minimum tie-back requirement, the appropriate BLM office shall be notified. **(Squeeze 142 sxs Class C)**
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

Operator has proposed to pump down **13-3/8" X 10-3/4"** 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 **10-3/4"** casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. Operator must run one CBL per Well Pad. Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

- ❖ In Medium Cave/Karst 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.

- ❖ 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.
- ❖ In Capitan Reef 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.

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

4. 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, potash or capitan reef.

ALTERNATE DESIGN

C. CASING

5. The **20** inch surface casing shall be set at approximately **450 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 **26** inch in diameter.
 - e. 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.
 - f. 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)
 - g. 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.
 - h. If cement falls back, remedial cementing will be done prior to drilling out that string.

Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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

6. The minimum required fill of cement behind the **13-3/8** 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, potash or capitan reef.

Option 2:

Operator has proposed a DV tool(s), the depth may be adjusted as long as the cement is changed proportionally. The DV tool(s) may be cancelled if cement circulates to surface on the first stage.

DV tool(s) shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall contact the BLM if DV tool(s) depth cannot be set in this range. If an ECP is used, it is to be set a minimum of 50' below the shoe to provide cement across the shoe. If it cannot be set below the shoe, a CBL shall be run to verify cement coverage.

- c. First stage to DV tool(s): Cement to circulate. If cement does not circulate off the DV tool(s), contact the appropriate BLM office before proceeding with second stage cement job.
- d. Second stage above DV tool(s):
 - Cement to surface. If cement does not circulate, contact the appropriate BLM office.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

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

7. The minimum required fill of cement behind the **10-3/4** inch intermediate casing is:

Option 1 (Single Stage):

- Cement should tie-back at least **50 feet** on top of Capitan Reef top **or 500 feet** into the previous casing, whichever is greater 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. 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, potash or capitan reef.

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.

- e. First stage: Operator will cement with intent to reach the top of the **Capitan Reef at 1951'**.
- f. Second stage:
 - Operator will perform bradenhead squeeze from the top of **Capitan Reef** to at least **50 feet** on top of the Capitan Reef top **or 500 feet** into the previous casing, whichever is greater and may be lower than USGS Marker Bed No. 126. If cement does not meet the minimum tie-back requirement, the appropriate BLM office shall be notified. **(Squeeze 142 sxs Class C)**
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, potash or capitan reef.

Operator has proposed to pump down **13-3/8" X 10-3/4"** 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 10-3/4" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. Operator must run one CBL per Well Pad. Operator may conduct a negative and positive pressure test during completion to remediate sustained casing pressure.

- ❖ In Medium Cave/Karst 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.
- ❖ 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.
- ❖ In Capitan Reef 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.

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

8. The minimum required fill of cement behind the **8-5/8** inch intermediate 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, potash or capitan reef.

❖ The mud weight shall be from 10-10.5 ppg.

9. 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, potash or capitan reef.

Cement excess is less than 25%, more cement is required if washout occurs. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

D. 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 tested to **800** psi. A Diverter system is approved as a variance to drill the **13-3/8** inch intermediate casing section in a **17-1/2** inch hole.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **13-3/8** intermediate casing shoe shall be **3000 (3M)** psi. **Annular which shall be tested to 2100 (70% Working Pressure) psi.**

- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **10-3/4** inch intermediate casing shoe shall be **5000 (5M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

Option 2:

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be tested to **800** psi. A Diverter system is approved as a variance to drill the **13-3/8** inch intermediate casing section in a **17-1/2** inch hole.
- b. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the **13-3/8** inch intermediate 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.

E. 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) 12/16/2024

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

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

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<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"/> 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

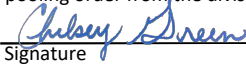

0. SHL: SESE / 1123 FSL / 815 FEL / TWSP: 20S / RANGE: 29E / SECTION: 36 / LAT: 32.5256876 / LONG: -104.0226659 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 654 FNL / 201 FWL / TWSP: 20S / RANGE: 29E / SECTION: 35 / LAT: 32.5255846 / LONG: -104.0374922 (TVD: 9664 feet, MD: 14900 feet)

PPP: SESE / 661 FNL / 394 FEL / TWSP: 20S / RANGE: 29E / SECTION: 36 / LAT: 32.5255725 / LONG: -104.0220677 (TVD: 9744 feet, MD: 10145 feet)

BHL: SWSW / 1080 FSL / 20 FWL / TWSP: 20S / RANGE: 29E / SECTION: 35 / LAT: 32.5255957 / LONG: -104.0542543 (TVD: 9578 feet, MD: 20067 feet)

CONFIDENTIAL

C-102 Submit Electronically Via OCD Permitting		State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION				Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled		Revised July 9, 2024						
WELL LOCATION INFORMATION														
API Number		Pool Code 98857		Pool Name WC 20S29E28; WOLFCAMP										
Property Code 336433		Property Name TAMBORA 36-35 FED COM						Well Number 333H						
OGRID No. 6137		Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.						Ground Level Elevation 3412.5						
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 P	Section 36	Township 20-S	Range 29-E	Lot	Ft. from N/S 1127/S	Ft. from E/W 690/E	Latitude 32.5257006°	Longitude -104.0222603°	County EDDY					
Bottom Hole Location														
UL M	Section 35	Township 20-S	Range 29-E	Lot	Ft. from N/S 705/S	Ft. from E/W 20/W	Latitude 32.5245651°	Longitude -104.0542549°	County EDDY					
Dedicated Acres 640		Infill or Defining Well INFILL		Defining Well API 3001555562		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 P	Section 36	Township 20S	Range 29E	Lot	Ft. from N/S 705 S	Ft. from E/W 67 E	Latitude 32.5244	Longitude -104.0203	County EDDY					
First Take Point (FTP)														
UL P	Section 36	Township 20-S	Range 29-E	Lot	Ft. from N/S 705/S	Ft. from E/W 100/E	Latitude 32.5245393°	Longitude -104.0203494°	County EDDY					
Last Take Point (LTP)														
UL M	Section 35	Township 20-S	Range 29-E	Lot	Ft. from N/S 705/S	Ft. from E/W 100/W	Latitude 32.5245649°	Longitude -104.0539954°	County EDDY					
Unitized Area: <input type="checkbox"/>		Area of Uniform Interest: <input type="checkbox"/>		Spacing Unit Type: <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> 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.  Signature _____ Date 12/11/24 Printed Name _____ CHELSEY GREEN CHELSEY.GREEN@DVN.COM E-mail Address _____					SURVEYOR NOTES: 1. BEARINGS SHOWN ARE GRID BASED ON THE NEW MEXICO STATE PLANE EAST ZONE COORDINATE SYSTEM (3001), NAD 83 (2011), BASED FROM GPS OBSERVATIONS, OCCUPYING A WHS CONTROL POINT (5/8" REBAR), LOCATED AT AT N:573800.961 E:638393.683 ORTHO:3310.859. DETERMINED BY AN OPUS SOLUTION ON SEPTEMBER 5TH, 2019. UNITS REPRESENTED ON THIS PLAT ARE IN US SURVEY FEET. 2. DISTANCES DEPICTED HEREON ARE REPORTED AS GROUND DISTANCES IN US SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000234835 3. ELEVATIONS SHOWN OR LISTED ARE EXISTING GROUND ELEVATIONS UNLESS NOTED. 4. KARST AREAS, POTASH BUFFERS, LEASE AREAS AND DRILL ISLANDS, IF SHOWN, WERE PROVIDED BY DEVON ENERGY AND NOT LOCATED ON THE GROUND AS A PART OF THIS SURVEY, LOCATIONS ARE APPROXIMATE.					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 my supervision, and that the same is true and correct to the best of my belief.  Signature and Seal of Professional Surveyor: 20250 _____ John E. Allen _____ 12/06/2024 Certificate No. Name Date of Survey				
Page: 1 of 2		Drawn By: JMA		Checked By: JEA		Date Drawn: 12/06/2024		Revision: R3						

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

TAMBORA 36-35 FED COM 333H SURFACE HOLE LOCATION

1127' FSL - 690' FEL
EL: 3412.5'
N: 555120.52
E: 637212.39
LAT: 32.5257006°
LON: -104.0222603°

KICK OFF POINT	FIRST TAKE POINT (PPP 1)
705' FSL - 67' FEL	705' FSL - 100' FEL
N: 554700.2	N: 554699.76
E: 637835	E: 637802.59
LAT: 32.5244	LAT: 32.5245393°
LON: -104.0203	LON: -104.0203494°

PPP 2	LAST TAKE POINT
706' FSL - 0' FEL	705' FSL - 100' FWL
N: 554690.01	N: 554680.24
E: 632621.40	E: 627432.46
LAT: 32.5245532°	LAT: 32.5245649°
LON: -104.0371598°	LON: -104.0539954°

BOTTOM HOLE LOCATION
705' FSL - 20' FWL
N: 554680.11
E: 627352.48
LAT: 32.5245651°
LON: -104.0542549°

COORDINATE TABLE

A	N: 559260.26	E: 627322.02
B	N: 559264.72	E: 629959.96
C	N: 559264.68	E: 632610.58
D	N: 559273.48	E: 635255.24
E	N: 559282.69	E: 637898.72
F	N: 559280.52	E: 640538.24
G	N: 556638.20	E: 637900.30
H	N: 556624.36	E: 632616.82
I	N: 556617.29	E: 627328.34
J	N: 553975.28	E: 627334.00
K	N: 553979.66	E: 629978.53
L	N: 553984.04	E: 632623.07
M	N: 553989.38	E: 635266.70
N	N: 553995.18	E: 637903.38
O	N: 554002.32	E: 640551.15

LEGEND

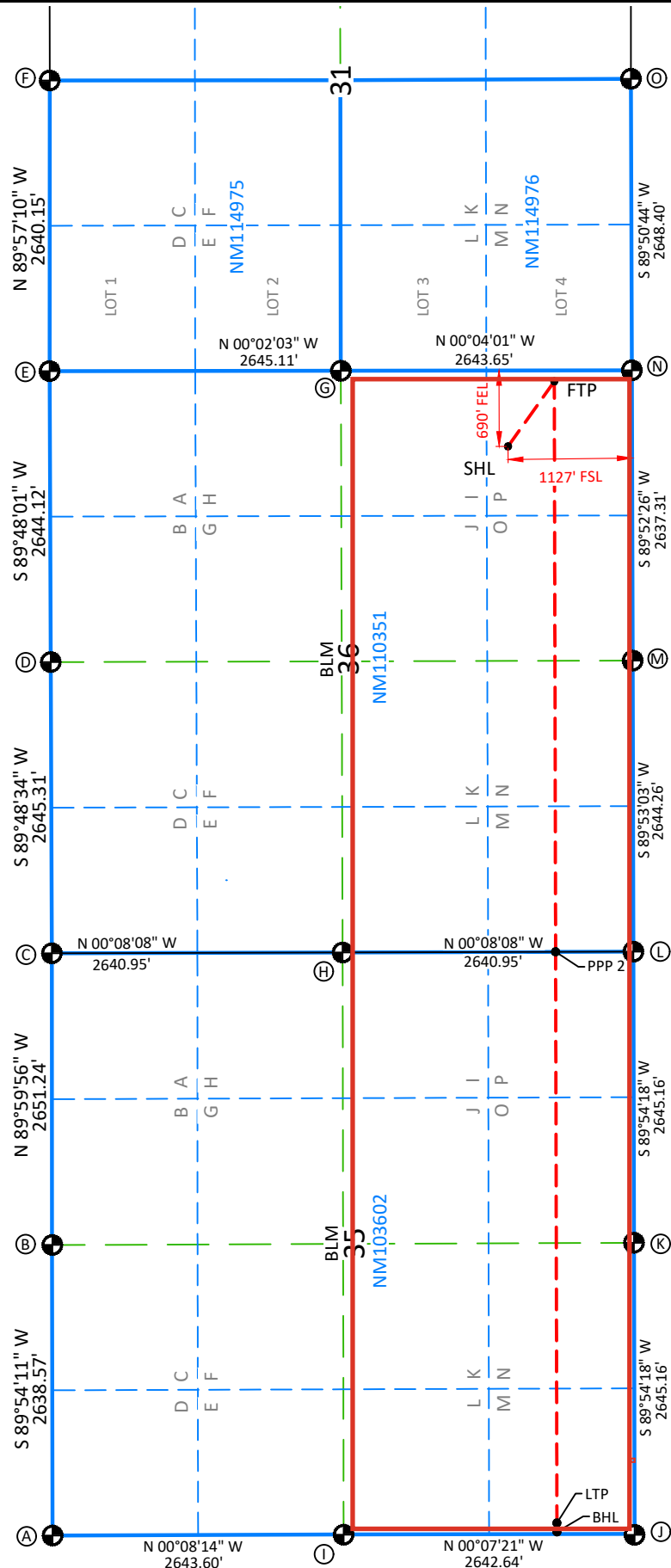
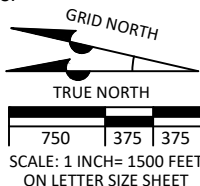
	SECTION LINE
	1/4 SECTION LINE
	1/16 SECTION LINE
	WELL PATH
	LEASE LINE
NM010101010	LEASE ID NUMBER
	FOUND USGLO B.C. ON 1" PIPE, "1916"
	PLSS CORNER

NOTES:

1. BASIS OF BEARINGS, COORDINATES AND DISTANCES ARE A LAMBERT CONICAL PROJECTION OF THE NEW MEXICO COORDINATE SYSTEM, STATE PLANE GRID, NAD 83, NEW MEXICO EAST (3001) WITH A CONVERGENCE ANGLE OF -0°08'00.86" AND BASED ON CONTROL POINT STREET GLIDE AT N. 558290.968' E. 617876.978'.

2. DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET USING A COMBINED SCALE FACTOR OF 1.000236530.

3. ELEVATIONS SHOWN ARE EXISTING GROUND ELEVATIONS.





13-3/8" 54.50# .380 J-55

Dimensions (Nominal)

Outside Diameter	13.375	in.
Wall	0.380	in.
Inside Diameter	12.615	in.
Drift	12.459	in.
Weight, T&C	54.500	lbs/ft
Weight, PE	52.790	lbs/ft

Performance Ratings, Minimum

Collapse, PE	1130	psi
Internal Yields Pressure		
PE	2730	psi
STC	2730	PSI
BTC	2730	psi
Yield Strength, Pipe Body	853	1000 lbs
Joint Strength, STC	514	1000 lbs
Joint Strength, BTC	909	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.



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

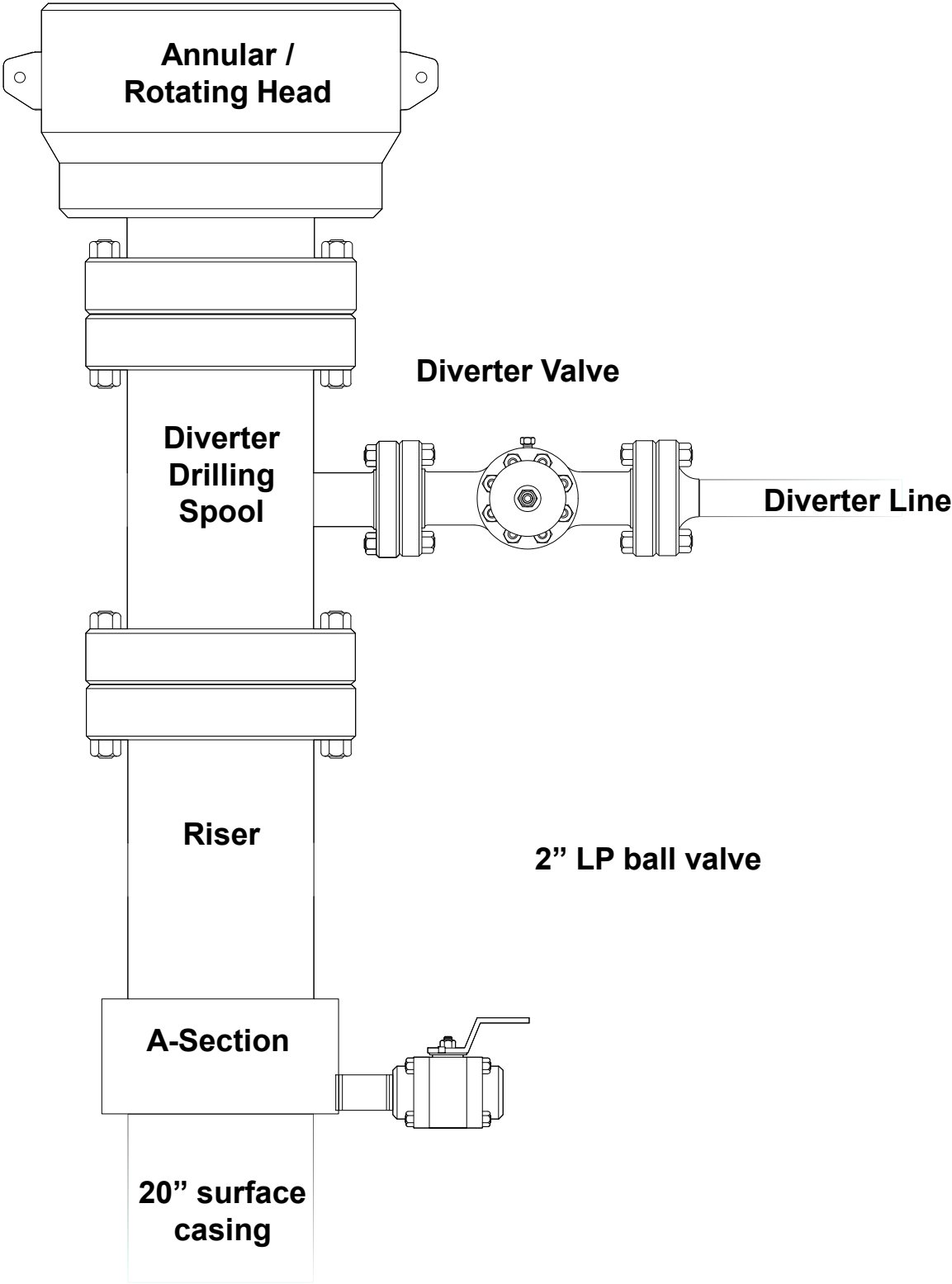
Dimensions (Nominal)

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

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.



TAMBORA 36-35 FED COM 333H

1. Geologic Formations

TVD of target	10600	Pilot hole depth	N/A
MD at TD:	20922	Deepest expected fresh water	

Basin

Formation	Depth (TVD) from KB	Water/Mineral Bearing/Target Zone?	Hazards*
Rustler	180		
Salt	444		
Base of Salt	1616		
Capitan Reef Top	1951		
Delaware	3942		
Cherry Canyon	3964		
Brushy Canyon	4882		
1st Bone Spring Lime	6509		
Bone Spring 1st	7621		
Bone Spring 2nd	8355		
3rd Bone Spring Lime	8663		
Bone Spring 3rd	9403		
Wolfcamp	9830		

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

TAMBORA 36-35 FED COM 333H

2. Casing Program (Primary Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
26	20	94.0	K-55	BTC	0.0	250 MD	0	250 TVD
17 1/2	13 3/8	54.5	J-55	BTC	0.0	1850 MD	0	1850 TVD
12 1/4	10 3/4	45.5	J-55	BTC SCC	0	4000	0	4000
9 7/8	5 1/2	23.0	P110HP	CDC HTQ	0	20922 MD	0	10600 TVD

• 9.875" hole down to KOP, then 8.75" to bottom of curve, then 8.5" to Total Depth

• The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

3. Cementing Program (Primary Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	479	Surf	13.2	1.44	Lead: Class C Cement + additives
Int	2285	0	13.2	1.44	Tail: Class H / C + additives
Int 2	142	Surf	9	3.27	Lead: Class C Cement + additives
	364	1951	13.2	1.44	Tail: Class H / C + additives
Production	1259	0	9	3.27	Lead: Class H / C + additives
	3577	8160	13.2	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate 2 casing string with the first stage being pumped conventionally with the calculated top of cement at the Capitan Reef and the second stage performed as a bradenhead squeeze with planned cement from the Capitan Reef 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 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 BOPF requirements.

Casing String	% Excess
Surface	50%
Intermediate	30%
Intermediate 2 (Two Stage)	25%
Prod	10%

TAMBORA 36-35 FED COM 333H

2. Casing Program (Alternative Design)

Hole Size	Csg. Size	Wt (PPF)	Grade	Conn	Top (MD)	Bottom (MD)	Top (TVD)	Bottom (TVD)
26	20	94.0	K-55	BTC	0.0	250 MD	0	250 TVD
17 1/2	13 3/8	54.5	J-55	BTC	0.0	1850 MD	0	1850 TVD
12 1/4	10 3/4	45.5	J-55	BTC SCC	0	4000	0	4000
9 7/8	8 5/8	32.0	P110EC	Sprint FJ	0	9811	0	9811
7 7/8	5 1/2	23.0	P110HP	CDC HTQ	0	20922 MD	0	10600 TVD

- All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 IILB.1.h Must have table for contingency casing.
- The Rustler top will be validated via drilling parameters (i.e. reduction in ROP), and the surface casing setting depth will be revised accordingly. In addition, surface casing will be set a minimum of 25' above the top of the salt.

3. Cementing Program (Alternative Design)

Casing	# Sks	TOC	Wt. (lb/gal)	Yld (ft3/sack)	Slurry Description
Surface	479	Surf	13.2	1.44	Lead: Class C Cement + additives
Int 1	2285	0	13.2	1.44	Tail: Class H / C + additives
Int 2	142	Surf	9	3.27	Lead: Class C Cement + additives
	364	1951	13.2	1.44	Tail: Class H / C + additives
Int 3	350	2000	13	3.27	Lead: Class H / C + additives
	367	6000	13.8	1.44	Tail: Class H / C + additives
Production	476	0	9	3.27	Lead: Class H / C + additives
	1689	8160	13.8	1.44	Tail: Class H / C + additives

Assuming no returns are established while drilling, Devon requests to pump a two stage cement job on the intermediate 2 casing string with the first stage being pumped conventionally with the calculated top of cement at the Capitan Reef and the second stage performed as a bradenhead squeeze with planned cement from the Capitan Reef 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 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 ROPF requirements.

Casing String	% Excess
Surface	50%
Intermediate	30%
Intermediate 2 (Two Stage)	25%
Prod	10%

TAMBORA 36-35 FED COM 333H

4. Pressure Control Equipment (Four String Design)

BOP installed and tested before drilling which hole?		Size?	Min. Required WP	Type	✓	Tested to:
Int	13-5/8"	5M	Annular		X	50% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Int 1	13-5/8"	5M	Annular (5M)		X	100% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
Production	13-5/8"	5M	Annular (5M)		X	100% of rated working pressure
			Blind Ram		X	5M
			Pipe Ram			
			Double Ram		X	
			Other*			
N	A variance is requested for the use of a diverter on the surface casing. See attached for schematic.					
N	A variance is requested to run a 5 M annular on a 10M system					

Diverter will be utilized on the 26in Surface hole. BOP will be rigged up on the first intermediate

5. Mud Program (Four String Design)

Section	Type	Weight (ppg)
Surface	WBM	8.5-9
Intermediate	DBE / Cut Brine	10-10.5
Intermediate 1	WBM	8.5-9
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	5788
Abnormal temperature	No

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

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

N	H ₂ S is present
Y	H ₂ S plan attached.

8. Other facets of operation

Is this a walking operation? Potentially

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

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

Will be pre-setting casing? Potentially

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

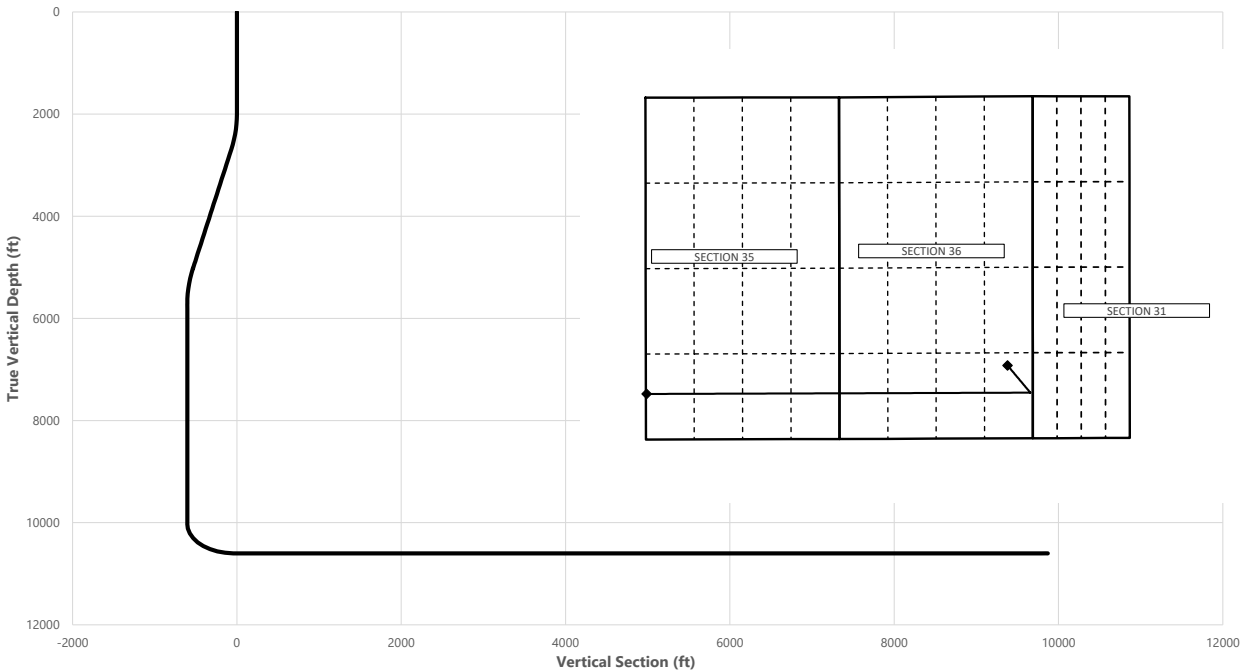
TAMBORA 36-35 FED COM 332H



Well: TAMBORA 36-35 FED COM 333H
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	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	124.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2700.00	14.00	124.00	2693.06	-47.59	70.55	-68.35	2.00	Hold Tangent
5103.24	14.00	124.00	5024.91	-372.70	552.55	-535.37	0.00	Drop to Vertical
5803.24	0.00	124.00	5717.97	-420.28	623.10	-603.72	2.00	Hold Vertical
10112.32	0.00	269.89	10027.04	-420.28	623.10	-603.72	0.00	KOP
11012.32	90.00	269.89	10600.00	-421.38	50.14	-31.29	10.00	Landing Point
20922.39	90.00	269.89	10600.00	-440.41	-9859.91	9869.74	0.00	BHL



Key Depths	MD	TVD
	(ft)	(ft)
Rustler	180.00	180.00
Salt	444.00	444.00
Base of Salt	1616.00	1616.00
Capitan Reef Top	1951.00	1951.00
Delaware	3987.18	3942.00
Cherry Canyon	4009.85	3964.00
Brushy Canyon	4955.96	4882.00
1st Bone Spring Lime	6594.28	6509.00
Bone Spring 1st	7706.28	7621.00
Bone Spring 2nd	8440.28	8355.00
3rd Bone Spring Lime	8748.28	8663.00
Bone Spring 3rd	9488.28	9403.00
Wolfcamp / Point of Penetration	9915.28	9830.00
exit	20842.39	10600.01

SHL
KOP
Point of Penetration
Exit
BHL

MD	TVD	Lat	Long	Section Footages
(ft)	(ft)	(°)	(°)	
0.00	0.00	32.5256	-104.0223	1127' FSL, 690' FEL of Sec 36 in T20S, R29E
10112.32	10027.04	32.5244	-104.0203	705' FSL, 67' FEL of Sec 36 in T20S, R29E
9915.28	9830.00	32.5245	-104.0203	705' FSL, 100' FEL of Sec 36 in T20S, R29E
20842.39	10600.01	32.5246	-104.0540	705' FSL, 100' FWL of Sec 35 in T20S, R29E
20922.39	10600.00	32.5245	-104.0543	705' FSL, 20' FWL of Sec 35 in T20S, R29E

	Y	X
KOP	554700.2	637835

TAMBORA 36-35 FED COM 332H



Well: TAMBORA 36-35 FED COM 333H
 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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	SHL
100.00	0.00	124.00	100.00	0.00	0.00	0.00	0.00	
180.00	0.00	124.00	180.00	0.00	0.00	0.00	0.00	Rustler
200.00	0.00	124.00	200.00	0.00	0.00	0.00	0.00	
300.00	0.00	124.00	300.00	0.00	0.00	0.00	0.00	
400.00	0.00	124.00	400.00	0.00	0.00	0.00	0.00	
444.00	0.00	124.00	444.00	0.00	0.00	0.00	0.00	Salt
500.00	0.00	124.00	500.00	0.00	0.00	0.00	0.00	
600.00	0.00	124.00	600.00	0.00	0.00	0.00	0.00	
700.00	0.00	124.00	700.00	0.00	0.00	0.00	0.00	
800.00	0.00	124.00	800.00	0.00	0.00	0.00	0.00	
900.00	0.00	124.00	900.00	0.00	0.00	0.00	0.00	
1000.00	0.00	124.00	1000.00	0.00	0.00	0.00	0.00	
1100.00	0.00	124.00	1100.00	0.00	0.00	0.00	0.00	
1200.00	0.00	124.00	1200.00	0.00	0.00	0.00	0.00	
1300.00	0.00	124.00	1300.00	0.00	0.00	0.00	0.00	
1400.00	0.00	124.00	1400.00	0.00	0.00	0.00	0.00	
1500.00	0.00	124.00	1500.00	0.00	0.00	0.00	0.00	
1600.00	0.00	124.00	1600.00	0.00	0.00	0.00	0.00	
1616.00	0.00	124.00	1616.00	0.00	0.00	0.00	0.00	Base of Salt
1700.00	0.00	124.00	1700.00	0.00	0.00	0.00	0.00	
1800.00	0.00	124.00	1800.00	0.00	0.00	0.00	0.00	
1900.00	0.00	124.00	1900.00	0.00	0.00	0.00	0.00	
1951.00	0.00	124.00	1951.00	0.00	0.00	0.00	0.00	Capitan Reef Top
2000.00	0.00	124.00	2000.00	0.00	0.00	0.00	0.00	Start Tangent
2100.00	2.00	124.00	2099.98	-0.98	1.45	-1.40	2.00	
2200.00	4.00	124.00	2199.84	-3.90	5.79	-5.61	2.00	
2300.00	6.00	124.00	2299.45	-8.78	13.01	-12.61	2.00	
2400.00	8.00	124.00	2398.70	-15.59	23.11	-22.39	2.00	
2500.00	10.00	124.00	2497.47	-24.34	36.08	-34.96	2.00	
2600.00	12.00	124.00	2595.62	-35.01	51.90	-50.29	2.00	
2700.00	14.00	124.00	2693.06	-47.59	70.55	-68.35	2.00	Hold Tangent
2800.00	14.00	124.00	2790.08	-61.11	90.60	-87.79	0.00	
2900.00	14.00	124.00	2887.11	-74.64	110.66	-107.22	0.00	
3000.00	14.00	124.00	2984.14	-88.17	130.72	-126.65	0.00	
3100.00	14.00	124.00	3081.17	-101.70	150.77	-146.08	0.00	
3200.00	14.00	124.00	3178.20	-115.23	170.83	-165.52	0.00	
3300.00	14.00	124.00	3275.23	-128.75	190.89	-184.95	0.00	
3400.00	14.00	124.00	3372.26	-142.28	210.94	-204.38	0.00	
3500.00	14.00	124.00	3469.29	-155.81	231.00	-223.82	0.00	
3600.00	14.00	124.00	3566.32	-169.34	251.05	-243.25	0.00	
3700.00	14.00	124.00	3663.35	-182.87	271.11	-262.68	0.00	
3800.00	14.00	124.00	3760.38	-196.39	291.17	-282.11	0.00	
3900.00	14.00	124.00	3857.41	-209.92	311.22	-301.55	0.00	
3987.18	14.00	124.00	3942.00	-221.72	328.71	-318.49	0.00	Delaware
4000.00	14.00	124.00	3954.44	-223.45	331.28	-320.98	0.00	
4009.85	14.00	124.00	3964.00	-224.78	333.26	-322.89	0.00	Cherry Canyon
4100.00	14.00	124.00	4051.47	-236.98	351.34	-340.41	0.00	
4200.00	14.00	124.00	4148.50	-250.51	371.39	-359.84	0.00	
4300.00	14.00	124.00	4245.53	-264.03	391.45	-379.28	0.00	
4400.00	14.00	124.00	4342.56	-277.56	411.50	-398.71	0.00	
4500.00	14.00	124.00	4439.59	-291.09	431.56	-418.14	0.00	
4600.00	14.00	124.00	4536.62	-304.62	451.62	-437.57	0.00	
4700.00	14.00	124.00	4633.65	-318.15	471.67	-457.01	0.00	
4800.00	14.00	124.00	4730.68	-331.67	491.73	-476.44	0.00	
4900.00	14.00	124.00	4827.71	-345.20	511.79	-495.87	0.00	
4955.96	14.00	124.00	4882.00	-352.77	523.01	-506.74	0.00	Brushy Canyon
5000.00	14.00	124.00	4924.74	-358.73	531.84	-515.30	0.00	
5100.00	14.00	124.00	5021.77	-372.26	551.90	-534.74	0.00	
5103.24	14.00	124.00	5024.91	-372.70	552.55	-535.37	0.00	Drop to Vertical
5200.00	12.06	124.00	5119.17	-384.90	570.64	-552.89	2.00	
5300.00	10.06	124.00	5217.31	-395.63	586.55	-568.31	2.00	
5400.00	8.06	124.00	5316.05	-404.44	599.61	-580.96	2.00	
5500.00	6.06	124.00	5415.29	-411.32	609.80	-590.84	2.00	
5600.00	4.06	124.00	5514.89	-416.25	617.12	-597.93	2.00	
5700.00	2.06	124.00	5614.75	-419.24	621.55	-602.23	2.00	
5800.00	0.06	124.00	5714.72	-420.28	623.10	-603.72	2.00	
5803.24	0.00	124.00	5717.97	-420.28	623.10	-603.72	2.00	Hold Vertical
5900.00	0.00	269.89	5814.72	-420.28	623.10	-603.72	0.00	
6000.00	0.00	269.89	5914.72	-420.28	623.10	-603.72	0.00	

TAMBORA 36-35 FED COM 332H




Well: TAMBORA 36-35 FED COM 333H
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
6100.00	0.00	269.89	6014.72	-420.28	623.10	-603.72	0.00	
6200.00	0.00	269.89	6114.72	-420.28	623.10	-603.72	0.00	
6300.00	0.00	269.89	6214.72	-420.28	623.10	-603.72	0.00	
6400.00	0.00	269.89	6314.72	-420.28	623.10	-603.72	0.00	
6500.00	0.00	269.89	6414.72	-420.28	623.10	-603.72	0.00	
6594.28	0.00	269.89	6509.00	-420.28	623.10	-603.72	0.00	1st Bone Spring Lime
6600.00	0.00	269.89	6514.72	-420.28	623.10	-603.72	0.00	
6700.00	0.00	269.89	6614.72	-420.28	623.10	-603.72	0.00	
6800.00	0.00	269.89	6714.72	-420.28	623.10	-603.72	0.00	
6900.00	0.00	269.89	6814.72	-420.28	623.10	-603.72	0.00	
7000.00	0.00	269.89	6914.72	-420.28	623.10	-603.72	0.00	
7100.00	0.00	269.89	7014.72	-420.28	623.10	-603.72	0.00	
7200.00	0.00	269.89	7114.72	-420.28	623.10	-603.72	0.00	
7300.00	0.00	269.89	7214.72	-420.28	623.10	-603.72	0.00	
7400.00	0.00	269.89	7314.72	-420.28	623.10	-603.72	0.00	
7500.00	0.00	269.89	7414.72	-420.28	623.10	-603.72	0.00	
7600.00	0.00	269.89	7514.72	-420.28	623.10	-603.72	0.00	
7700.00	0.00	269.89	7614.72	-420.28	623.10	-603.72	0.00	
7706.28	0.00	269.89	7621.00	-420.28	623.10	-603.72	0.00	Bone Spring 1st
7800.00	0.00	269.89	7714.72	-420.28	623.10	-603.72	0.00	
7900.00	0.00	269.89	7814.72	-420.28	623.10	-603.72	0.00	
8000.00	0.00	269.89	7914.72	-420.28	623.10	-603.72	0.00	
8100.00	0.00	269.89	8014.72	-420.28	623.10	-603.72	0.00	
8200.00	0.00	269.89	8114.72	-420.28	623.10	-603.72	0.00	
8300.00	0.00	269.89	8214.72	-420.28	623.10	-603.72	0.00	
8400.00	0.00	269.89	8314.72	-420.28	623.10	-603.72	0.00	
8440.28	0.00	269.89	8355.00	-420.28	623.10	-603.72	0.00	Bone Spring 2nd
8500.00	0.00	269.89	8414.72	-420.28	623.10	-603.72	0.00	
8600.00	0.00	269.89	8514.72	-420.28	623.10	-603.72	0.00	
8700.00	0.00	269.89	8614.72	-420.28	623.10	-603.72	0.00	
8748.28	0.00	269.89	8663.00	-420.28	623.10	-603.72	0.00	3rd Bone Spring Lime
8800.00	0.00	269.89	8714.72	-420.28	623.10	-603.72	0.00	
8900.00	0.00	269.89	8814.72	-420.28	623.10	-603.72	0.00	
9000.00	0.00	269.89	8914.72	-420.28	623.10	-603.72	0.00	
9100.00	0.00	269.89	9014.72	-420.28	623.10	-603.72	0.00	
9200.00	0.00	269.89	9114.72	-420.28	623.10	-603.72	0.00	
9300.00	0.00	269.89	9214.72	-420.28	623.10	-603.72	0.00	
9400.00	0.00	269.89	9314.72	-420.28	623.10	-603.72	0.00	
9488.28	0.00	269.89	9403.00	-420.28	623.10	-603.72	0.00	Bone Spring 3rd
9500.00	0.00	269.89	9414.72	-420.28	623.10	-603.72	0.00	
9600.00	0.00	269.89	9514.72	-420.28	623.10	-603.72	0.00	
9700.00	0.00	269.89	9614.72	-420.28	623.10	-603.72	0.00	
9800.00	0.00	269.89	9714.72	-420.28	623.10	-603.72	0.00	
9900.00	0.00	269.89	9814.72	-420.28	623.10	-603.72	0.00	
9915.28	0.00	269.89	9830.00	-420.28	623.10	-603.72	0.00	Wolfcamp / Point of Penetration
10000.00	0.00	269.89	9914.72	-420.28	623.10	-603.72	0.00	
10100.00	0.00	269.89	10014.72	-420.28	623.10	-603.72	0.00	
10112.32	0.00	269.89	10027.04	-420.28	623.10	-603.72	0.00	KOP
10200.00	8.77	269.89	10114.38	-420.30	616.40	-597.03	10.00	
10300.00	18.77	269.89	10211.39	-420.34	592.63	-573.28	10.00	
10400.00	28.77	269.89	10302.79	-420.42	552.38	-533.07	10.00	
10500.00	38.77	269.89	10385.81	-420.53	496.87	-477.61	10.00	
10600.00	48.77	269.89	10457.93	-420.66	427.78	-408.58	10.00	
10700.00	58.77	269.89	10516.96	-420.81	347.22	-328.09	10.00	
10800.00	68.77	269.89	10561.11	-420.99	257.63	-238.59	10.00	
10900.00	78.77	269.89	10589.03	-421.17	161.74	-142.78	10.00	
11000.00	88.77	269.89	10599.87	-421.36	62.46	-43.59	10.00	
11012.32	90.00	269.89	10600.00	-421.38	50.14	-31.29	10.00	Landing Point
11100.00	90.00	269.89	10600.00	-421.55	-37.54	56.32	0.00	
11200.00	90.00	269.89	10600.00	-421.75	-137.54	156.22	0.00	
11300.00	90.00	269.89	10600.00	-421.94	-237.54	256.13	0.00	
11400.00	90.00	269.89	10600.00	-422.13	-337.54	356.04	0.00	
11500.00	90.00	269.89	10600.00	-422.32	-437.54	455.95	0.00	
11600.00	90.00	269.89	10600.00	-422.51	-537.54	555.86	0.00	
11700.00	90.00	269.89	10600.00	-422.71	-637.54	655.77	0.00	
11800.00	90.00	269.89	10600.00	-422.90	-737.54	755.68	0.00	
11900.00	90.00	269.89	10600.00	-423.09	-837.54	855.59	0.00	
12000.00	90.00	269.89	10600.00	-423.28	-937.54	955.49	0.00	
12100.00	90.00	269.89	10600.00	-423.48	-1037.54	1055.40	0.00	
12200.00	90.00	269.89	10600.00	-423.67	-1137.54	1155.31	0.00	

TAMBORA 36-35 FED COM 332H

		Well: TAMBORA 36-35 FED COM 333H						Geodetic System: US State Plane 1983	
		County: Eddy						Datum: North American Datum 1927	
		Wellbore: Permit Plan						Ellipsoid: Clarke 1866	
		Design: Permit Plan #1						Zone: 3001 - NM East (NAD83)	
MD	INC	AZI	TVD	NS	EW	VS	DLS	Comment	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)		
12300.00	90.00	269.89	10600.00	-423.86	-1237.54	1255.22	0.00		
12400.00	90.00	269.89	10600.00	-424.05	-1337.54	1355.13	0.00		
12500.00	90.00	269.89	10600.00	-424.25	-1437.54	1455.04	0.00		
12600.00	90.00	269.89	10600.00	-424.44	-1537.54	1554.95	0.00		
12700.00	90.00	269.89	10600.00	-424.63	-1637.54	1654.86	0.00		
12800.00	90.00	269.89	10600.00	-424.82	-1737.54	1754.76	0.00		
12900.00	90.00	269.89	10600.00	-425.02	-1837.54	1854.67	0.00		
13000.00	90.00	269.89	10600.00	-425.21	-1937.54	1954.58	0.00		
13100.00	90.00	269.89	10600.00	-425.40	-2037.54	2054.49	0.00		
13200.00	90.00	269.89	10600.00	-425.59	-2137.54	2154.40	0.00		
13300.00	90.00	269.89	10600.00	-425.79	-2237.54	2254.31	0.00		
13400.00	90.00	269.89	10600.00	-425.98	-2337.54	2354.22	0.00		
13500.00	90.00	269.89	10600.00	-426.17	-2437.54	2454.13	0.00		
13600.00	90.00	269.89	10600.00	-426.36	-2537.54	2554.03	0.00		
13700.00	90.00	269.89	10600.00	-426.55	-2637.54	2653.94	0.00		
13800.00	90.00	269.89	10600.00	-426.75	-2737.54	2753.85	0.00		
13900.00	90.00	269.89	10600.00	-426.94	-2837.54	2853.76	0.00		
14000.00	90.00	269.89	10600.00	-427.13	-2937.54	2953.67	0.00		
14100.00	90.00	269.89	10600.00	-427.32	-3037.54	3053.58	0.00		
14200.00	90.00	269.89	10600.00	-427.52	-3137.54	3153.49	0.00		
14300.00	90.00	269.89	10600.00	-427.71	-3237.54	3253.40	0.00		
14400.00	90.00	269.89	10600.00	-427.90	-3337.54	3353.31	0.00		
14500.00	90.00	269.89	10600.00	-428.09	-3437.54	3453.21	0.00		
14600.00	90.00	269.89	10600.00	-428.29	-3537.54	3553.12	0.00		
14700.00	90.00	269.89	10600.00	-428.48	-3637.54	3653.03	0.00		
14800.00	90.00	269.89	10600.01	-428.67	-3737.53	3752.94	0.00		
14900.00	90.00	269.89	10600.01	-428.86	-3837.53	3852.85	0.00		
15000.00	90.00	269.89	10600.01	-429.06	-3937.53	3952.76	0.00		
15100.00	90.00	269.89	10600.01	-429.25	-4037.53	4052.67	0.00		
15200.00	90.00	269.89	10600.01	-429.44	-4137.53	4152.58	0.00		
15300.00	90.00	269.89	10600.01	-429.63	-4237.53	4252.48	0.00		
15400.00	90.00	269.89	10600.01	-429.83	-4337.53	4352.39	0.00		
15500.00	90.00	269.89	10600.01	-430.02	-4437.53	4452.30	0.00		
15600.00	90.00	269.89	10600.01	-430.21	-4537.53	4552.21	0.00		
15700.00	90.00	269.89	10600.01	-430.40	-4637.53	4652.12	0.00		
15800.00	90.00	269.89	10600.01	-430.59	-4737.53	4752.03	0.00		
15900.00	90.00	269.89	10600.01	-430.79	-4837.53	4851.94	0.00		
16000.00	90.00	269.89	10600.01	-430.98	-4937.53	4951.85	0.00		
16100.00	90.00	269.89	10600.01	-431.17	-5037.53	5051.75	0.00		
16200.00	90.00	269.89	10600.01	-431.36	-5137.53	5151.66	0.00		
16300.00	90.00	269.89	10600.01	-431.56	-5237.53	5251.57	0.00		
16400.00	90.00	269.89	10600.01	-431.75	-5337.53	5351.48	0.00		
16500.00	90.00	269.89	10600.01	-431.94	-5437.53	5451.39	0.00		
16600.00	90.00	269.89	10600.01	-432.13	-5537.53	5551.30	0.00		
16700.00	90.00	269.89	10600.01	-432.33	-5637.53	5651.21	0.00		
16800.00	90.00	269.89	10600.01	-432.52	-5737.53	5751.12	0.00		
16900.00	90.00	269.89	10600.01	-432.71	-5837.53	5851.03	0.00		
17000.00	90.00	269.89	10600.01	-432.90	-5937.53	5950.93	0.00		
17100.00	90.00	269.89	10600.01	-433.10	-6037.53	6050.84	0.00		
17200.00	90.00	269.89	10600.01	-433.29	-6137.53	6150.75	0.00		
17300.00	90.00	269.89	10600.01	-433.48	-6237.53	6250.66	0.00		
17400.00	90.00	269.89	10600.01	-433.67	-6337.53	6350.57	0.00		
17500.00	90.00	269.89	10600.01	-433.87	-6437.53	6450.48	0.00		
17600.00	90.00	269.89	10600.01	-434.06	-6537.53	6550.39	0.00		
17700.00	90.00	269.89	10600.01	-434.25	-6637.53	6650.30	0.00		
17800.00	90.00	269.89	10600.01	-434.44	-6737.53	6750.20	0.00		
17900.00	90.00	269.89	10600.01	-434.63	-6837.53	6850.11	0.00		
18000.00	90.00	269.89	10600.01	-434.83	-6937.53	6950.02	0.00		
18100.00	90.00	269.89	10600.01	-435.02	-7037.53	7049.93	0.00		
18200.00	90.00	269.89	10600.01	-435.21	-7137.53	7149.84	0.00		
18300.00	90.00	269.89	10600.01	-435.40	-7237.53	7249.75	0.00		
18400.00	90.00	269.89	10600.01	-435.60	-7337.53	7349.66	0.00		
18500.00	90.00	269.89	10600.01	-435.79	-7437.53	7449.57	0.00		
18600.00	90.00	269.89	10600.01	-435.98	-7537.53	7549.47	0.00		
18700.00	90.00	269.89	10600.01	-436.17	-7637.53	7649.38	0.00		
18800.00	90.00	269.89	10600.01	-436.37	-7737.53	7749.29	0.00		
18900.00	90.00	269.89	10600.01	-436.56	-7837.53	7849.20	0.00		
19000.00	90.00	269.89	10600.01	-436.75	-7937.53	7949.11	0.00		
19100.00	90.00	269.89	10600.01	-436.94	-8037.53	8049.02	0.00		
19200.00	90.00	269.89	10600.01	-437.14	-8137.53	8148.93	0.00		



Well: TAMBORA 36-35 FED COM 333H
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	INC	AZI	TVD	NS	EW	VS	DLS	Comment
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	
19300.00	90.00	269.89	10600.01	-437.33	-8237.53	8248.84	0.00	
19400.00	90.00	269.89	10600.01	-437.52	-8337.53	8348.74	0.00	
19500.00	90.00	269.89	10600.01	-437.71	-8437.53	8448.65	0.00	
19600.00	90.00	269.89	10600.01	-437.91	-8537.53	8548.56	0.00	
19700.00	90.00	269.89	10600.01	-438.10	-8637.53	8648.47	0.00	
19800.00	90.00	269.89	10600.01	-438.29	-8737.53	8748.38	0.00	
19900.00	90.00	269.89	10600.01	-438.48	-8837.53	8848.29	0.00	
20000.00	90.00	269.89	10600.01	-438.67	-8937.53	8948.20	0.00	
20100.00	90.00	269.89	10600.01	-438.87	-9037.53	9048.11	0.00	
20200.00	90.00	269.89	10600.01	-439.06	-9137.52	9148.02	0.00	
20300.00	90.00	269.89	10600.01	-439.25	-9237.52	9247.92	0.00	
20400.00	90.00	269.89	10600.01	-439.44	-9337.52	9347.83	0.00	
20500.00	90.00	269.89	10600.01	-439.64	-9437.52	9447.74	0.00	
20600.00	90.00	269.89	10600.01	-439.83	-9537.52	9547.65	0.00	
20700.00	90.00	269.89	10600.01	-440.02	-9637.52	9647.56	0.00	
20800.00	90.00	269.89	10600.01	-440.21	-9737.52	9747.47	0.00	
20842.39	90.00	269.89	10600.01	-440.30	-9779.91	9789.82	0.00	exit
20900.00	90.00	269.89	10600.01	-440.41	-9837.52	9847.38	0.00	
20922.39	90.00	269.89	10600.00	-440.41	-9859.91	9869.74	0.00	BHL

Issued on: 16 Dec. 2020 by Logan Van Gorp



Connection Data Sheet

OD	Weight (lb/ft)	Wall Th.	Grade	Alt. Drift:	Connection
8 5/8 in.	Nominal: 32.00 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






U. S. Steel Tubular Products

5.500" 23.00lb/ft (0.415" Wall) P110 HP USS-CDC HTQ[®]

8/13/2024 10:44:04 AM

				
MECHANICAL PROPERTIES	Pipe	USS-CDC HTQ [®]		--
Minimum Yield Strength	125,000	--	psi	--
Maximum Yield Strength	140,000	--	psi	--
Minimum Tensile Strength	130,000	--	psi	--
DIMENSIONS	Pipe	USS-CDC HTQ [®]		--
Outside Diameter	5.500	6.300	in.	--
Wall Thickness	0.415	--	in.	--
Inside Diameter	4.670	4.670	in.	--
Standard Drift	4.545	4.545	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	23.00	--	lb/ft	--
Plain End Weight	22.56	--	lb/ft	--
SECTION AREA	Pipe	USS-CDC HTQ [®]		--
Critical Area	6.630	6.630	sq. in.	--
Joint Efficiency	--	97.0	%	--
PERFORMANCE	Pipe	USS-CDC HTQ [®]		--
Minimum Collapse Pressure	16,470	16,470	psi	--
External Pressure Leak Resistance	--	13,180	psi	--
Minimum Internal Yield Pressure	16,500	16,240	psi	--
Minimum Pipe Body Yield Strength	829,000	--	lb	--
Joint Strength	--	804,000	lb	--
Compression Rating	--	482,000	lb	--
Reference Length	--	23,304	ft	--
Maximum Uniaxial Bend Rating	--	60.6	deg/100 ft	--
MAKE-UP DATA	Pipe	USS-CDC HTQ [®]		--
Make-Up Loss	--	4.63	in.	--
Minimum Make-Up Torque	--	15,000	ft-lb	--
Maximum Make-Up Torque	--	21,000	ft-lb	--
Connection Yield Torque	--	30,800	ft-lb	--

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.

Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3.

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.).
4.

Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
5.

Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Cal II.

Legal Notice

USS - CDC HTQ[®] (High Torque Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Buttress threaded and coupled connection designed for drilling with casing applications. 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.

36-20-29-P Sundry ID 2827041 Tambora 36-35 Fed Com 333H Eddy NM110351 DEVON ENERGY PRODUCTION COMPANY LP 13-22g 2-27-2024 LV

Tambora 36-35 Fed Com 333H

20	surface csg in a		26	inch hole.		Design Factors				Surface		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	94.00		k 55	btc	34.96	2.47	2.09	450	11	3.50	4.67	42,300
"B"				btc				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,281				Tail Cmt	does not	circ to sfc.	Totals:	450				42,300
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
26	1.5053	479	690	677	2	9.00	602	2M				2.50
Site plot (pipe racks 3 or 4) as per D.O.D. (D 4), not found.												

13 3/8		casing inside the		20		Design Factors				Int 1		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50		j 55	btc	8.46	1.12	1.46	1,850	3	2.76	1.88	100,825
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,104								Totals:	1,850			100,825
The cement volume(s) are intended to achieve a top of						0	ft from surface or a		450			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
17 1/2	0.6946	2285	3290	1431	130	10.50	990	2M				1.56
r D V Tool(s):								sum of sx	Σ CuFt			Σ%excess
t by stage % :								2285	3290			130
Class 'H' tail cmt yld > 1.20												

Tail cmt												
10 3/4		casing inside the		13 3/8		Design Factors			Int 2			
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	45.50		j 55	btc scc	2.78	1.12	0.62	4,000	2	1.04	2.11	182,000
"B"								0				0
"C"								0				0
"D"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 761								Totals:	4,000			182,000
The cement volume(s) are intended to achieve a top of						0	ft from surface or a		1850			overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
12 1/4	0.1882	364	1190	844	41	9.00	3450	5M				0.50
Setting Depths for D V Tool(s):							sum of sx	Σ CuFt				Σ%excess
% excess cmt by stage:							506	1655				96
Class 'C' tail cmt yld > 1.35												
burst fluid gradient(s) for segment(s): A, B, C, D = 0.3, 0.3, 0, 0 All > 0.70,												
OK												

5 1/2		casing inside the		10 3/4		Design Factors					Prod 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	23.00		p 110	cdc htq	3.30	2.85	2.81	20,922	3	4.71	4.77	481,206	
"B"								0				0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,332								Totals:	20,922			481,206	
The cement volume(s) are intended to achieve a top of								3500	ft from surface or a	500		overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist	
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg	
9 7/8	0.3669	4836	9268	6396	45	10.50						1.79	
Class 'H' tail cmt yld > 1.20													
Capitan Reef est top XXXX.													

36-20-29-P Sundry ID 2827041 Tambora 36-35 Fed Com 333H-Alt

Tambora 36-35 Fed Com 333H

20	surface csg in a		26	inch hole.		Design Factors			Surface			
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	94.00		k 55	btc	34.96	2.47	2.09	450	11	3.50	4.67	42,300
"B"				btc				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,281				Tail Cmt	does not	circ to sfc.	Totals:	450				42,300
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
26	1.5053	479	690	677	2	9.00	602	2M				2.50
Site plot (pipe racks 3 or 4) as per 0.0.0.0.0.0.4. not found												

13 3/8		casing inside the		20		Design Factors				Int 1		
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	54.50		j 55	btc	8.46	1.12	1.46	1,850	3	2.76	1.88	100,825
"B"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,104								Totals:	1,850			100,825
The cement volume(s) are intended to achieve a top of						0	ft from surface or a		450			overlap.
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
17 1/2	0.6946	2285	3290	1431	130	10.50	990	2M				1.56
D V Tool(s):						sum of sx		Σ CuFt				Σ%excess
t by stage % :						#VALUE!		2285	3290			130
Class 'H' tail cmt yld > 1.20												

Tail cmt		casing inside the		13 3/8		Design Factors				Int 2		
10 3/4												
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	45.50		j 55	btc scc	2.78	1.12	0.67	4,000	2	1.12	2.11	182,000
"B"								0				0
"C"								0				0
"D"								0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 761								Totals:	4,000			182,000
The cement volume(s) are intended to achieve a top of						0	ft from surface or a		1850	overlap.		
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Dist
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cplg
12 1/4	0.1882	364	1190	844	41	9.00	3193	5M				0.50
Setting Depths for D V Tool(s):							sum of sx	Σ CuFt				Σ%excess
% excess cmt by stage:							506	1655				96
Class 'C' tail cmt yld > 1.35												
burst fluid gradient(s) for segment(s): A, B, C, D = 0.3, 0.3, 0.3, 0.3 All > 0.0, OK												

8 5/8	casing inside the			10 3/4	Design Factors				Int 3			
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	32.00		p 110	vam sprint fj	2.37	0.75	1.24	9,811	1	2.07	1.25	313,952
"B"									0			0
w/8.4#/g mud, 30min Sfc Csg Test psig: 724								Totals:	9,811			313,952
The cement volume(s) are intended to achieve a top of					3500	ft from surface or a		500			overlap.	
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd			Min Dist	
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE			Hole-Cplg	
9 7/8	0.1261	717	1673	800	109	10.50	3450	5M			0.61	
Class 'H' tail cmt yld > 1.20												
Capitan Reef est top XXXX.												

Tail cmt													
5 1/2		casing inside the			8 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade			Coupling	Joint	Collapse	Burst	Length	B@s	a-B	Weight	
"A"	23.00			p 110	vam sprint fj	3.30	2.85	2.81	20,922	3	4.71	481,206	
"B"									0			0	
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,332									Totals:	20,922	481,206		
The cement volume(s) are intended to achieve a top of									9311	ft from surface or a		500	overlap.
Hole	Annular	1 Stage		1 Stage	Min	1 Stage	Drilling					Min Dist	
Size	Volume	Cmt Sx		CuFt Cmt	Cu Ft	% Excess	Mud Wt					Hole-Cplg	
7 7/8	0.1733	2165		3989	3669	9	10.50					0.79	
Class 'H' tail cmt yld > 1.20													

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 413327

CONDITIONS

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 413327
	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.	12/18/2024
ward.rikala	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	12/18/2024
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	12/18/2024