

Well Name: SHADY PINES 24-36 STATE FED COM	Well Location: T26S / R29E / SEC 24 / SWSE /	County or Parish/State:
Well Number: 121H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM017225A	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001550012	Well Status: Approved Application for Permit to Drill	Operator: XTO ENERGY INCORPORATED

Notice of Intent

Sundry ID: 2694782

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 09/26/2022

Time Sundry Submitted: 02:09

Date proposed operation will begin: 10/14/2022

Procedure Description: ** Well Name Change, Bottom Hole Location Change, First and Last Take Point Changes, and Casing/Cement XTO Energy, Inc. requests permission to make the following changes to the original APD: Well Name Change from Shady Pines 24-36 to Shady Pines State Fed Com No Additional Surface Disturbance. Change BHL from 200'FSL & 2430'FEL to 50'FSL & 880'FEL, Section 36-T26S-R29E Change FTP fr/330'FNL & 2430'FEL to 330'FNL & 880'FEL Change LTP fr/330'FSL & 2430'FEL to 330'FSL & 880'FEL Casing/Cement changes per the attached drilling program. Attachments: C102 Drilling Program Directional Plan Multibowl Diagram

NOI Attachments

Procedure Description

Shady_Pines_34_36_State_Fed_Com_121H_Attachments_20220926140841.pdf

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Conditions of Approval

Additional

Sundry_2694782_Shady_Pines_24_36_State_Fed_Com_121H_COAs_20221014073032.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: JESSICA DOOLING	Signed on: SEP 26, 2022 02:08 PM
Name: XTO ENERGY INCORPORATED	
Title: Lead Regulatory Coordinator	
Street Address: 6401 HOLIDAY HILL ROAD BLDG 5	
City: MIDLAND	State: TX
Phone: (970) 769-6048	
Email address: JESSICA.DOOLING@EXXONMOBIL.COM	

Field

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

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 10/17/2022
Signature: Chris Walls	

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

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

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015- 50012	² Pool Code 98220	³ Pool Name Purple Sage; Wolfcamp
⁴ Property Code	⁵ Property Name SHADY PINES 24-36 State Fed Com	⁶ Well Number 121H
⁷ OGRID No. 005380	⁸ Operator Name XTO ENERGY, INC.	⁹ Elevation 2,976'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	24	26 S	29 E		366	SOUTH	2,498	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	36	26 S	29 E		50	SOUTH	880	EAST	EDDY

¹² Dedicated Acres 447.7	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁶ S.H.L. SEC. 24 366' GRID AZ.=110°10'25" HORIZ. DIST.=1,726.30' SEC. 25 T26S R29E 330' GRID AZ.=179°44'24" HORIZ. DIST.=6,997.86' LOT ACREAGE TABLE LOT 1 - 23.97 ACRES LOT 2 - 23.93 ACRES LOT 3 - 23.87 ACRES LOT 4 - 23.83 ACRES LOT 2 LOT 3 L.T.P. H 330' B.H.L. D 880' 880'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and 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 such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Jessica Dooling 9/26/2022 Signature Date Jessica Dooling Printed Name jessica.dooling@exxonmobil.com E-mail Address
	¹⁸ SURVEYOR CERTIFICATION 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. 09/23/2022 Date of Survey Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number AW 2019061749
	SHL (NAD83 NME) Y = 371,654.4 X = 664,083.9 LAT. = 32.021140 °N LONG. = 103.937272 °W FTP (NAD83 NME) Y = 371,059.1 X = 665,704.3 LAT. = 32.019487 °N LONG. = 103.932051 °W LTP (NAD83 NME) Y = 364,341.3 X = 665,734.8 LAT. = 32.001020 °N LONG. = 103.932033 °W BHL (NAD83 NME) Y = 364,061.3 X = 665,736.1 LAT. = 32.000250 °N LONG. = 103.932032 °W CORNER COORDINATES (NAD83 NME) A - Y = 371,444.9 N , X = 666,582.5 E B - Y = 368,788.4 N , X = 666,595.0 E C - Y = 366,133.9 N , X = 666,606.9 E D - Y = 364,015.0 N , X = 666,616.3 E E - Y = 371,364.9 N , X = 665,309.0 E F - Y = 368,707.7 N , X = 665,281.7 E G - Y = 366,052.5 N , X = 665,254.3 E H - Y = 364,009.1 N , X = 665,220.9 E SHL (NAD27 NME) Y = 371,596.9 X = 622,898.3 LAT. = 32.021014 °N LONG. = 103.936791 °W FTP (NAD27 NME) Y = 371,001.6 X = 624,518.7 LAT. = 32.019361 °N LONG. = 103.931570 °W LTP (NAD27 NME) Y = 364,284.0 X = 624,549.0 LAT. = 32.000894 °N LONG. = 103.931553 °W BHL (NAD27 NME) Y = 364,004.0 X = 624,550.2 LAT. = 32.000124 °N LONG. = 103.931552 °W CORNER COORDINATES (NAD27 NME) A - Y = 371,387.5 N , X = 625,396.8 E B - Y = 368,731.1 N , X = 625,409.2 E C - Y = 366,076.6 N , X = 625,421.1 E D - Y = 363,957.7 N , X = 625,430.4 E E - Y = 371,307.4 N , X = 624,123.3 E F - Y = 368,650.3 N , X = 624,096.0 E G - Y = 365,995.2 N , X = 624,068.5 E H - Y = 363,951.9 N , X = 624,035.0 E
	SEC. 19 SEC. 30 SEC. 36 SEC. 31

DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.
Shady Pines 24-36 State Fed Com 121H
Projected TD: 17016' MD / 10521' TVD
SHL: 366' FSL & 2498' FEL , Section 24, T26S, R29E
BHL: 50' FSL & 880' FEL , Section 36, T26S, R29E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	878'	Water
Top of Salt	1368'	Water
Base of Salt	2997'	Water
Delaware	3180'	Water
Brushy Canyon	5371'	Water/Oil/Gas
Bone Spring	6943'	Water
1st Bone Spring Ss	7911'	Water/Oil/Gas
2nd Bone Spring Ss	8702'	Water/Oil/Gas
3rd Bone Spring Sh	9373'	Water/Oil/Gas
Wolfcamp	10143'	Water/Oil/Gas
Wolfcamp X	10168'	Water/Oil/Gas
Wolfcamp Y	10246'	Water/Oil/Gas
Wolfcamp A	10271'	Water/Oil/Gas
Target/Land Curve	10521'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

*** Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 1343' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3097' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 9609' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 17016 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9109 feet).

3. Casing Design

Hole Size	MD	TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1343'	1343'	13.375	54.5	J-55	BTC	New	3.11	1.95	11.65
12.25	0' – 3097'	3094'	9.625	40	J-55	BTC	New	1.45	2.88	5.09
8.75	0' – 3197'	3193'	7.625	29.7	RY P-110	Flush Joint	New	2.22	3.32	1.96
8.75	3197' – 9609'	9337'	7.625	29.7	HC L-80	Flush Joint	New	1.62	2.78	2.13
6.75	0' – 9509'	9558'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.87	2.45
6.75	9509' - 17016'	10521	5.5	20	RY P-110	Semi-Flush	New	1.05	1.69	6.98

· Production casing meets the clearance requirements as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

· XTO requests to not utilize centralizers in the curve and lateral

· 9.625 Collapse analyzed using 50% evacuation based on regional experience.

· 7.625 Collapse analyzed using 50% evacuation based on regional experience.

· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

· Test on 5M annular & Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 13-3/8" bottom

B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1343'

Lead: 770 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
 Tail: 300 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
 Top of Cement: Surface
 Compressives: 12-hr = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside using 1" pipe to get cement to surface, if required.

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3097'

Lead: 1260 sxs Class C (mixed at 12.9 ppg, 1.39 ft3/sx, 10.13 gal/sx water)
 Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
 Top of Cement: Surface
 Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9609'

1st Stage

Optional Lead: 130 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
 TOC: 2897
 Tail: 390 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
 TOC: Brushy Canyon @ 5371
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
 Tail: 320 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
 Top of Cement: 0
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (5371') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO 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.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement to surface. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 17016'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9109 feet
 Tail: 510 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9851 feet
 Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

5. Pressure Control Equipment

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 4252 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13.375, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

A variance is requested to cement offline for the surface and intermediate casing strings according to attached offline cementing supporting documentation.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 1343'	17.5	FW/Native	8.3-8.8	35-40	NC
1343' - 3097'	12.25	Brine	9.7-10.2	30-32	NC
3097' - 9609'	8.75	BDE/OBM or FW/Brine	9.7-10.2	30-32	NC
9609' - 17016'	6.75	OBM	12-12.5	50-60	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.7 ppg -10.2 ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 170 to 190 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6568 psi.

10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

COMPANY Delaware Basin Asset (Plans)
FIELD Eddy County
SITE Shady Pines
WELL 121H
WELLPATH OH
DESIGN Plan 1
DEPTHUNT (ft)

WELL INFO
MAP DATUM NAD 1927 (NADCON)
MAP SYSTEM US State Plane 1927
MAP ZONE New Mexico East 3001
WELL LAT 32.021014
WELL LON -103.936792
WELL EW MAP 622898.1
WELL NS MAP 371596.9
CONVERGENCE 0.21
MAGMODEL IGRF2020
DECLINATION 6.56
NORTH REF Grid
GROUND ELEVN 2976
KB ELEVN 3009
VS AZI 179.22

SURVEY TYPE INFORMATION

H 0.00 - 17016.34 PLAN 1 :
XOMR2_OWSG
MWD+IFR1+MS

SURVEY LIST

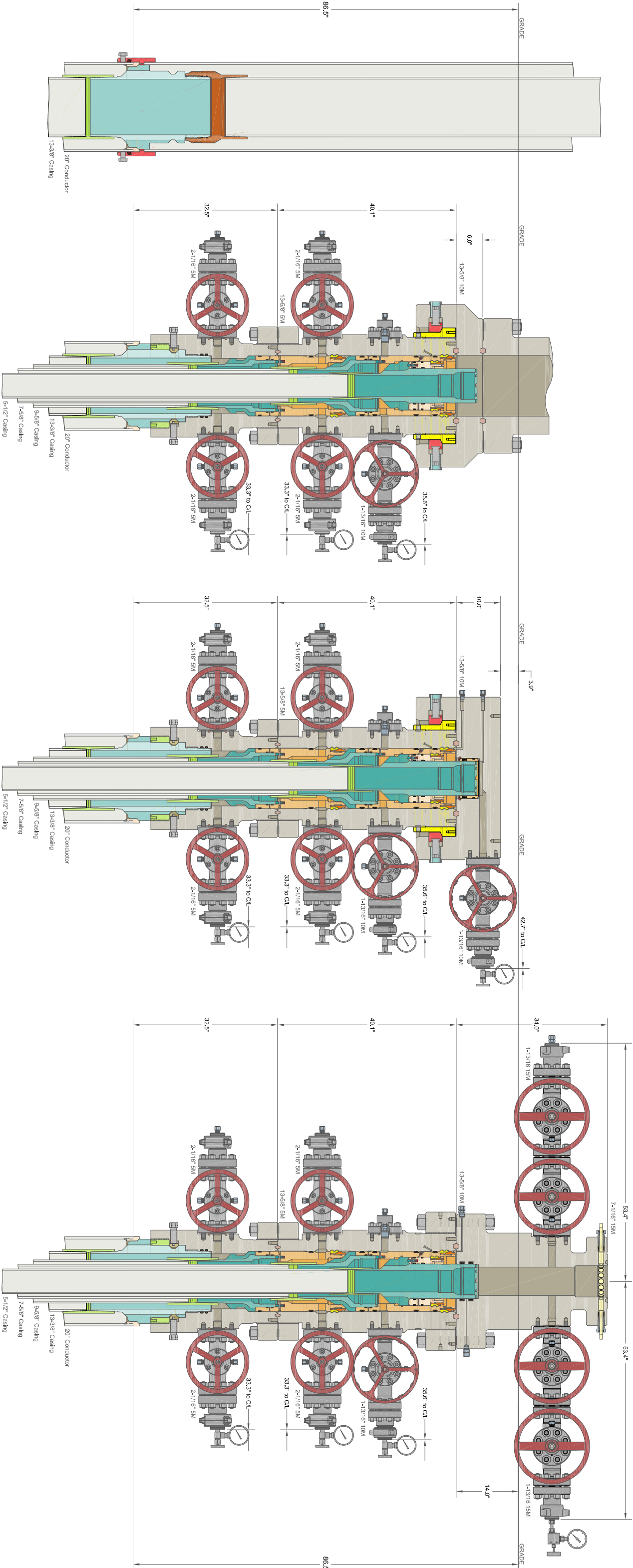
Measured Depth MD	Inclination INC	True Vertical			SubSea TVD	Local N/-S		Local E/-W		Easting X	Northing Y	Latitude LAT	Longitude LON	Dogleg Severity DLS	Build Rate BLD	Turn Rate TRN	Vertical Section VS
		Azimuth AZI	Course L CL	Depth(TVD) TVD		NS	EW										
0	0	0	0	0	0	3009	0	0	0	622898.1	371596.9	32.021014	-103.936792	0	0	0	0
2000	0	0	2000	2000	1009	0	0	0	0	622898.1	371596.9	32.021014	-103.936792	0	0	0	0
2100	2	174.155	100	2099.98	909.02	-1.736	0.178	622898.278	371595.164	32.021009	-103.936791	2	2	0	1.738		
2200	4	174.155	100	2199.838	809.162	-6.942	0.711	622898.811	371589.958	32.020995	-103.93679	2	2	0	6.951		
2300	6	174.155	100	2299.452	709.548	-15.612	1.598	622899.698	371581.288	32.020971	-103.936787	2	2	0	15.632		
2351.352	7.027	174.155	51.352	2350.472	658.528	-21.407	2.191	622900.291	371575.493	32.020955	-103.936785	2	2	0	21.435		
2400	7.027	174.155	48.648	2398.754	610.246	-27.327	2.797	622900.897	371569.573	32.020939	-103.936783	0	0	0	27.363		
2500	7.027	174.155	100	2498.003	510.997	-39.498	4.043	622902.143	371557.402	32.020905	-103.936779	0	0	0	39.549		
2600	7.027	174.155	100	2597.252	411.748	-51.668	5.289	622903.389	371545.232	32.020872	-103.936776	0	0	0	51.735		
2700	7.027	174.155	100	2696.501	312.499	-63.838	6.535	622904.635	371533.062	32.020839	-103.936772	0	0	0	63.921		
2800	7.027	174.155	100	2795.75	213.25	-76.008	7.781	622905.881	371520.892	32.020805	-103.936768	0	0	0	76.107		
2900	7.027	174.155	100	2894.999	114.001	-88.178	9.027	622907.127	371508.722	32.020772	-103.936764	0	0	0	88.293		
3000	7.027	174.155	100	2994.248	14.752	-100.349	10.272	622908.372	371496.551	32.020738	-103.93676	0	0	0	100.479		
3100	7.027	174.155	100	3093.496	-84.496	-112.519	11.518	622909.618	371484.381	32.020705	-103.936756	0	0	0	112.665		
3200	7.027	174.155	100	3192.745	-183.745	-124.689	12.764	622910.864	371472.211	32.020671	-103.936752	0	0	0	124.851		
3300	7.027	174.155	100	3291.994	-282.994	-136.859	14.01	622912.11	371460.041	32.020638	-103.936748	0	0	0	137.037		

3400	7.027	174.155	100	3391.243	-382.243	-149.029	15.256	622913.356	371447.871	32.020604	-103.936745	0	0	0	149.223
3500	7.027	174.155	100	3490.492	-481.492	-161.2	16.502	622914.602	371435.7	32.020571	-103.936741	0	0	0	161.409
3600	7.027	174.155	100	3589.741	-580.741	-173.37	17.747	622915.847	371423.53	32.020537	-103.936737	0	0	0	173.595
3700	7.027	174.155	100	3688.989	-679.989	-185.54	18.993	622917.093	371411.36	32.020504	-103.936733	0	0	0	185.781
3800	7.027	174.155	100	3788.238	-779.238	-197.71	20.239	622918.339	371399.19	32.02047	-103.936729	0	0	0	197.967
3900	7.027	174.155	100	3887.487	-878.487	-209.88	21.485	622919.585	371387.02	32.020437	-103.936725	0	0	0	210.153
4000	7.027	174.155	100	3986.736	-977.736	-222.051	22.731	622920.831	371374.849	32.020403	-103.936721	0	0	0	222.339
4100	7.027	174.155	100	4085.985	-1076.985	-234.221	23.977	622922.077	371362.679	32.02037	-103.936717	0	0	0	234.525
4200	7.027	174.155	100	4185.234	-1176.234	-246.391	25.223	622923.323	371350.509	32.020337	-103.936714	0	0	0	246.711
4300	7.027	174.155	100	4284.483	-1275.483	-258.561	26.468	622924.568	371338.339	32.020303	-103.93671	0	0	0	258.897
4400	7.027	174.155	100	4383.731	-1374.731	-270.731	27.714	622925.814	371326.169	32.02027	-103.936706	0	0	0	271.083
4500	7.027	174.155	100	4482.98	-1473.98	-282.901	28.96	622927.06	371313.999	32.020236	-103.936702	0	0	0	283.269
4600	7.027	174.155	100	4582.229	-1573.229	-295.072	30.206	622928.306	371301.828	32.020203	-103.936698	0	0	0	295.455
4700	7.027	174.155	100	4681.478	-1672.478	-307.242	31.452	622929.552	371289.658	32.020169	-103.936694	0	0	0	307.641
4800	7.027	174.155	100	4780.727	-1771.727	-319.412	32.698	622930.798	371277.488	32.020136	-103.93669	0	0	0	319.827
4900	7.027	174.155	100	4879.976	-1870.976	-331.582	33.943	622932.043	371265.318	32.020102	-103.936686	0	0	0	332.013
5000	7.027	174.155	100	4979.225	-1970.225	-343.752	35.189	622933.289	371253.148	32.020069	-103.936683	0	0	0	344.199
5100	7.027	174.155	100	5078.473	-2069.473	-355.923	36.435	622934.535	371240.977	32.020035	-103.936679	0	0	0	356.385
5200	7.027	174.155	100	5177.722	-2168.722	-368.093	37.681	622935.781	371228.807	32.020002	-103.936675	0	0	0	368.571
5300	7.027	174.155	100	5276.971	-2267.971	-380.263	38.927	622937.027	371216.637	32.019968	-103.936671	0	0	0	380.757
5400	7.027	174.155	100	5376.22	-2367.22	-392.433	40.173	622938.273	371204.467	32.019935	-103.936667	0	0	0	392.943
5500	7.027	174.155	100	5475.469	-2466.469	-404.603	41.418	622939.518	371192.297	32.019901	-103.936663	0	0	0	405.129
5600	7.027	174.155	100	5574.718	-2565.718	-416.774	42.664	622940.764	371180.126	32.019868	-103.936659	0	0	0	417.315
5700	7.027	174.155	100	5673.966	-2664.966	-428.944	43.91	622942.01	371167.956	32.019834	-103.936655	0	0	0	429.501
5800	7.027	174.155	100	5773.215	-2764.215	-441.114	45.156	622943.256	371155.786	32.019801	-103.936652	0	0	0	441.687
5900	7.027	174.155	100	5872.464	-2863.464	-453.284	46.402	622944.502	371143.616	32.019768	-103.936648	0	0	0	453.873
6000	7.027	174.155	100	5971.713	-2962.713	-465.454	47.648	622945.748	371131.446	32.019734	-103.936644	0	0	0	466.059
6100	7.027	174.155	100	6070.962	-3061.962	-477.625	48.893	622946.993	371119.275	32.019701	-103.93664	0	0	0	478.245
6200	7.027	174.155	100	6170.211	-3161.211	-489.795	50.139	622948.239	371107.105	32.019667	-103.936636	0	0	0	490.431
6300	7.027	174.155	100	6269.46	-3260.46	-501.965	51.385	622949.485	371094.935	32.019634	-103.936632	0	0	0	502.617
6400	7.027	174.155	100	6368.708	-3359.708	-514.135	52.631	622950.731	371082.765	32.0196	-103.936628	0	0	0	514.803
6500	7.027	174.155	100	6467.957	-3458.957	-526.305	53.877	622951.977	371070.595	32.019567	-103.936624	0	0	0	526.989
6600	7.027	174.155	100	6567.206	-3558.206	-538.476	55.123	622953.223	371058.424	32.019533	-103.936621	0	0	0	539.175
6700	7.027	174.155	100	6666.455	-3657.455	-550.646	56.368	622954.468	371046.254	32.0195	-103.936617	0	0	0	551.361
6800	7.027	174.155	100	6765.704	-3756.704	-562.816	57.614	622955.714	371034.084	32.019466	-103.936613	0	0	0	563.547
6900	7.027	174.155	100	6864.953	-3855.953	-574.986	58.86	622956.96	371021.914	32.019433	-103.936609	0	0	0	575.733
7000	7.027	174.155	100	6964.202	-3955.202	-587.156	60.106	622958.206	371009.744	32.019399	-103.936605	0	0	0	587.919
7100	7.027	174.155	100	7063.45	-4054.45	-599.326	61.352	622959.452	370997.574	32.019366	-103.936601	0	0	0	600.105
7200	7.027	174.155	100	7162.699	-4153.699	-611.497	62.598	622960.698	370985.403	32.019332	-103.936597	0	0	0	612.291
7300	7.027	174.155	100	7261.948	-4252.948	-623.667	63.843	622961.943	370973.233	32.019299	-103.936593	0	0	0	624.477
7400	7.027	174.155	100	7361.197	-4352.197	-635.837	65.089	622963.189	370961.063	32.019266	-103.936589	0	0	0	636.663
7500	7.027	174.155	100	7460.446	-4451.446	-648.007	66.335	622964.435	370948.893	32.019232	-103.936586	0	0	0	648.849
7600	7.027	174.155	100	7559.695	-4550.695	-660.177	67.581	622965.681	370936.723	32.019199	-103.936582	0	0	0	661.035
7690.513	7.027	174.155	90.513	7649.528	-4640.528	-671.193	68.709	622966.809	370925.707	32.019168	-103.936578	0	0	0	672.065
7700	6.837	174.155	9.487	7658.945	-4649.945	-672.332	68.825	622966.925	370924.568	32.019165	-103.936578	2	-2	0	673.206
7800	4.837	174.155	100	7758.422	-4749.422	-682.449	69.861	622967.961	370914.451	32.019137	-103.936575	2	-2	0	683.336
7900	2.837	174.155	100	7858.193	-4849.193	-689.106	70.542	622968.642	370907.794	32.019119	-103.936573	2	-2	0	690.002
8000	0.837	174.155	100	7958.136	-4949.136	-692.296	70.869	622968.969	370904.604	32.01911	-103.936572	2	-2	0	693.195
8041.865	0	0	41.865	8000	-4991	-692.6	70.9	622969	370904.3	32.019109	-103.936571	2	-2	0	693.5
8100	0	0	58.135	8058.135	-5049.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5

8200	0	0	100	8158.135	-5149.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8300	0	0	100	8258.135	-5249.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8400	0	0	100	8358.135	-5349.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8500	0	0	100	8458.135	-5449.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8600	0	0	100	8558.135	-5549.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8700	0	0	100	8658.135	-5649.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8800	0	0	100	8758.135	-5749.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
8900	0	0	100	8858.135	-5849.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9000	0	0	100	8958.135	-5949.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9100	0	0	100	9058.135	-6049.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9200	0	0	100	9158.135	-6149.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9300	0	0	100	9258.135	-6249.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9400	0	0	100	9358.135	-6349.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9500	0	0	100	9458.135	-6449.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9600	0	0	100	9558.135	-6549.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9700	0	0	100	9658.135	-6649.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9800	0	0	100	9758.135	-6749.135	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9850.865	0	0	50.865	9809	-6800	-692.6	70.9	622969	370904.3	32.019109	-103.936571	0	0	0	693.5
9900	3.931	179.742	49.135	9858.096	-6849.096	-694.285	70.908	622969.008	370902.615	32.019105	-103.936571	8	8	0	695.185
9950	7.931	179.742	50	9907.818	-6898.818	-699.45	70.931	622969.031	370897.45	32.019091	-103.936571	8	8	0	700.35
10000	11.931	179.742	50	9957.059	-6948.059	-708.071	70.97	622969.07	370888.829	32.019067	-103.936571	8	8	0	708.971
10050	15.931	179.742	50	10005.579	-6996.579	-720.106	71.024	622969.124	370876.794	32.019034	-103.936571	8	8	0	721.005
10100	19.931	179.742	50	10053.14	-7044.14	-735.496	71.093	622969.193	370861.404	32.018991	-103.936571	8	8	0	736.395
10150	23.931	179.742	50	10099.513	-7090.513	-754.166	71.177	622969.277	370842.734	32.01894	-103.936571	8	8	0	755.064
10200	27.931	179.742	50	10144.47	-7135.47	-776.026	71.275	622969.375	370820.874	32.01888	-103.936571	8	8	0	776.923
10250	31.931	179.742	50	10187.793	-7178.793	-800.968	71.388	622969.488	370795.932	32.018812	-103.936571	8	8	0	801.865
10300	35.931	179.742	50	10229.27	-7220.27	-828.872	71.513	622969.613	370768.028	32.018735	-103.936571	8	8	0	829.768
10350	39.931	179.742	50	10268.699	-7259.699	-859.601	71.651	622969.751	370737.299	32.01865	-103.936571	8	8	0	860.496
10400	43.931	179.742	50	10305.89	-7296.89	-893.005	71.802	622969.902	370703.895	32.018558	-103.936571	8	8	0	893.899
10450	47.931	179.742	50	10340.659	-7331.659	-928.923	71.963	622970.063	370667.977	32.01846	-103.936571	8	8	0	929.815
10500	51.931	179.742	50	10372.838	-7363.838	-967.178	72.135	622970.235	370629.722	32.018355	-103.936571	8	8	0	968.069
10550	55.931	179.742	50	10402.27	-7393.27	-1007.584	72.317	622970.417	370589.316	32.018244	-103.936571	8	8	0	1008.48
10600	59.931	179.742	50	10428.812	-7419.812	-1049.946	72.508	622970.608	370546.954	32.018127	-103.93657	8	8	0	1050.84
10650	63.931	179.742	50	10452.334	-7443.334	-1094.055	72.706	622970.806	370502.845	32.018006	-103.93657	8	8	0	1094.94
10700	67.931	179.742	50	10472.722	-7463.722	-1139.698	72.912	622971.012	370457.202	32.01788	-103.93657	8	8	0	1140.58
10750	71.931	179.742	50	10489.876	-7480.876	-1186.652	73.123	622971.223	370410.248	32.017751	-103.93657	8	8	0	1187.54
10800	75.931	179.742	50	10503.713	-7494.713	-1234.688	73.339	622971.439	370362.212	32.017619	-103.93657	8	8	0	1235.57
10850	79.931	179.742	50	10514.166	-7505.166	-1283.573	73.559	622971.659	370313.327	32.017485	-103.93657	8	8	0	1284.45
10900	83.931	179.742	50	10521.183	-7512.183	-1333.067	73.782	622971.882	370263.833	32.017349	-103.93657	8	8	0	1333.95
10950	87.931	179.742	50	10524.73	-7515.73	-1382.93	74.006	622972.106	370213.97	32.017212	-103.93657	8	8	0	1383.81
10976.363	90.04	179.742	26.363	10525.197	-7516.197	-1409.288	74.125	622972.225	370187.612	32.017139	-103.93657	8	8	0	1410.17
11000	90.04	179.742	23.637	10525.181	-7516.181	-1432.924	74.231	622972.331	370163.976	32.017074	-103.936569	0	0	0	1433.8
11100	90.04	179.742	100	10525.111	-7516.111	-1532.923	74.681	622972.781	370063.977	32.016799	-103.936569	0	0	0	1533.8
11200	90.04	179.742	100	10525.042	-7516.042	-1632.922	75.131	622973.231	369963.978	32.016524	-103.936569	0	0	0	1633.79
11300	90.04	179.742	100	10524.972	-7515.972	-1732.921	75.581	622973.681	369863.979	32.01625	-103.936569	0	0	0	1733.79
11400	90.04	179.742	100	10524.903	-7515.903	-1832.92	76.031	622974.131	369763.98	32.015975	-103.936568	0	0	0	1833.79
11500	90.04	179.742	100	10524.833	-7515.833	-1932.919	76.481	622974.581	369663.981	32.0157	-103.936568	0	0	0	1933.78
11600	90.04	179.742	100	10524.764	-7515.764	-2032.918	76.93	622975.03	369563.982	32.015425	-103.936568	0	0	0	2033.78
11700	90.04	179.742	100	10524.694	-7515.694	-2132.917	77.38	622975.48	369463.983	32.01515	-103.936568	0	0	0	2133.77
11800	90.04	179.742	100	10524.625	-7515.625	-2232.916	77.83	622975.93	369363.984	32.014875	-103.936567	0	0	0	2233.77

11900	90.04	179.742	100	10524.555	-7515.555	-2332.915	78.28	622976.38	369263.985	32.0146	-103.936567	0	0	0	2333.76
12000	90.04	179.742	100	10524.486	-7515.486	-2432.914	78.73	622976.83	369163.986	32.014325	-103.936567	0	0	0	2433.76
12100	90.04	179.742	100	10524.416	-7515.416	-2532.913	79.18	622977.28	369063.987	32.01405	-103.936567	0	0	0	2533.76
12200	90.04	179.742	100	10524.347	-7515.347	-2632.912	79.63	622977.73	368963.988	32.013775	-103.936566	0	0	0	2633.75
12300	90.04	179.742	100	10524.277	-7515.277	-2732.911	80.08	622978.18	368863.989	32.0135	-103.936566	0	0	0	2733.75
12400	90.04	179.742	100	10524.208	-7515.208	-2832.91	80.53	622978.63	368763.99	32.013226	-103.936566	0	0	0	2833.74
12500	90.04	179.742	100	10524.138	-7515.138	-2932.909	80.98	622979.08	368663.991	32.012951	-103.936565	0	0	0	2933.74
12600	90.04	179.742	100	10524.069	-7515.069	-3032.908	81.43	622979.53	368563.992	32.012676	-103.936565	0	0	0	3033.74
12700	90.04	179.742	100	10523.999	-7514.999	-3132.907	81.88	622979.98	368463.993	32.012401	-103.936565	0	0	0	3133.73
12800	90.04	179.742	100	10523.93	-7514.93	-3232.906	82.33	622980.43	368363.994	32.012126	-103.936565	0	0	0	3233.73
12900	90.04	179.742	100	10523.86	-7514.86	-3332.905	82.78	622980.88	368263.995	32.011851	-103.936564	0	0	0	3333.72
13000	90.04	179.742	100	10523.791	-7514.791	-3432.904	83.229	622981.329	368163.996	32.011576	-103.936564	0	0	0	3433.72
13100	90.04	179.742	100	10523.721	-7514.721	-3532.903	83.679	622981.779	368063.997	32.011301	-103.936564	0	0	0	3533.71
13200	90.04	179.742	100	10523.652	-7514.652	-3632.902	84.129	622982.229	367963.998	32.011026	-103.936564	0	0	0	3633.71
13300	90.04	179.742	100	10523.582	-7514.582	-3732.9	84.579	622982.679	367864	32.010751	-103.936563	0	0	0	3733.71
13400	90.04	179.742	100	10523.513	-7514.513	-3832.899	85.029	622983.129	367764.001	32.010477	-103.936563	0	0	0	3833.7
13500	90.04	179.742	100	10523.443	-7514.443	-3932.898	85.479	622983.579	367664.002	32.010202	-103.936563	0	0	0	3933.7
13600	90.04	179.742	100	10523.374	-7514.374	-4032.897	85.929	622984.029	367564.003	32.009927	-103.936562	0	0	0	4033.69
13700	90.04	179.742	100	10523.304	-7514.304	-4132.896	86.379	622984.479	367464.004	32.009652	-103.936562	0	0	0	4133.69
13800	90.04	179.742	100	10523.235	-7514.235	-4232.895	86.829	622984.929	367364.005	32.009377	-103.936562	0	0	0	4233.69
13900	90.04	179.742	100	10523.165	-7514.165	-4332.894	87.279	622985.379	367264.006	32.009102	-103.936562	0	0	0	4333.68
14000	90.04	179.742	100	10523.096	-7514.096	-4432.893	87.729	622985.829	367164.007	32.008827	-103.936561	0	0	0	4433.68
14100	90.04	179.742	100	10523.027	-7514.027	-4532.892	88.179	622986.279	367064.008	32.008552	-103.936561	0	0	0	4533.67
14200	90.04	179.742	100	10522.957	-7513.957	-4632.891	88.629	622986.729	366964.009	32.008277	-103.936561	0	0	0	4633.67
14300	90.04	179.742	100	10522.888	-7513.888	-4732.89	89.078	622987.178	366864.01	32.008002	-103.936561	0	0	0	4733.66
14400	90.04	179.742	100	10522.818	-7513.818	-4832.889	89.528	622987.628	366764.011	32.007727	-103.93656	0	0	0	4833.66
14500	90.04	179.742	100	10522.749	-7513.749	-4932.888	89.978	622988.078	366664.012	32.007453	-103.93656	0	0	0	4933.66
14600	90.04	179.742	100	10522.679	-7513.679	-5032.887	90.428	622988.528	366564.013	32.007178	-103.93656	0	0	0	5033.65
14700	90.04	179.742	100	10522.61	-7513.61	-5132.886	90.878	622988.978	366464.014	32.006903	-103.93656	0	0	0	5133.65
14800	90.04	179.742	100	10522.54	-7513.54	-5232.885	91.328	622989.428	366364.015	32.006628	-103.936559	0	0	0	5233.64
14900	90.04	179.742	100	10522.471	-7513.471	-5332.884	91.778	622989.878	366264.016	32.006353	-103.936559	0	0	0	5333.64
15000	90.04	179.742	100	10522.401	-7513.401	-5432.883	92.228	622990.328	366164.017	32.006078	-103.936559	0	0	0	5433.64
15100	90.04	179.742	100	10522.332	-7513.332	-5532.882	92.678	622990.778	366064.018	32.005803	-103.936558	0	0	0	5533.63
15200	90.04	179.742	100	10522.262	-7513.262	-5632.881	93.128	622991.228	365964.019	32.005528	-103.936558	0	0	0	5633.63
15300	90.04	179.742	100	10522.193	-7513.193	-5732.88	93.578	622991.678	365864.02	32.005253	-103.936558	0	0	0	5733.62
15400	90.04	179.742	100	10522.123	-7513.123	-5832.879	94.028	622992.128	365764.021	32.004978	-103.936558	0	0	0	5833.62
15500	90.04	179.742	100	10522.054	-7513.054	-5932.878	94.478	622992.578	365664.022	32.004704	-103.936557	0	0	0	5933.61
15600	90.04	179.742	100	10521.984	-7512.984	-6032.877	94.928	622993.028	365564.023	32.004429	-103.936557	0	0	0	6033.61
15700	90.04	179.742	100	10521.915	-7512.915	-6132.876	95.377	622993.477	365464.024	32.004154	-103.936557	0	0	0	6133.61
15800	90.04	179.742	100	10521.845	-7512.845	-6232.875	95.827	622993.927	365364.025	32.003879	-103.936557	0	0	0	6233.6
15900	90.04	179.742	100	10521.776	-7512.776	-6332.874	96.277	622994.377	365264.026	32.003604	-103.936556	0	0	0	6333.6
16000	90.04	179.742	100	10521.706	-7512.706	-6432.872	96.727	622994.827	365164.028	32.003329	-103.936556	0	0	0	6433.59
16100	90.04	179.742	100	10521.637	-7512.637	-6532.871	97.177	622995.277	365064.029	32.003054	-103.936556	0	0	0	6533.59
16200	90.04	179.742	100	10521.567	-7512.567	-6632.87	97.627	622995.727	364964.03	32.002779	-103.936556	0	0	0	6633.59
16300	90.04	179.742	100	10521.498	-7512.498	-6732.869	98.077	622996.177	364864.031	32.002504	-103.936555	0	0	0	6733.58
16400	90.04	179.742	100	10521.428	-7512.428	-6832.868	98.527	622996.627	364764.032	32.002229	-103.936555	0	0	0	6833.58
16500	90.04	179.742	100	10521.359	-7512.359	-6932.867	98.977	622997.077	364664.033	32.001954	-103.936555	0	0	0	6933.57
16600	90.04	179.742	100	10521.289	-7512.289	-7032.866	99.427	622997.527	364564.034	32.00168	-103.936554	0	0	0	7033.57
16700	90.04	179.742	100	10521.22	-7512.22	-7132.865	99.877	622997.977	364464.035	32.001405	-103.936554	0	0	0	7133.56
16800	90.04	179.742	100	10521.15	-7512.15	-7232.864	100.327	622998.427	364364.036	32.00113	-103.936554	0	0	0	7233.56

16900	90.04	179.742	100	10521.081	-7512.081	-7332.863	100.777	622998.877	364264.037	32.000855	-103.936554	0	0	0	7333.56
17000	90.04	179.742	100	10521.011	-7512.011	-7432.862	101.226	622999.326	364164.038	32.00058	-103.936553	0	0	0	7433.55
17016.338	90.04	179.742	16.338	10521	-7512	-7449.2	101.3	622999.4	364147.7	32.000535	-103.936553	0	0	0	7449.89



FORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

CACTUS WELLHEAD LLC			ALL DIMENSIONS APPROXIMATE		
(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO			XTO ENERGY INC		
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head			DELAWARE BASIN		
And Drilling & Skid Configurations			DRAWN	VJK	31MAR22
			APPRV		
			DRAWING NO.	SDT-3301	

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Energy Incorporated
WELL NAME & NO.:	Shady Pines 24-36 State Fed Com 121H
LOCATION:	Sec 24-26S-29E-NMP
COUNTY:	Eddy County, New Mexico

*Updated COAs per Sundry 2694782 approved through engineering on 10/14/2022.
Previously known as **Shady Pines 24-36 121H.***

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Brushy Draw Pool** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 850 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8**

hours or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** 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 or potash.

❖ 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.

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

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. Second stage above DV tool:
 - Cement should tie-back at least **200 feet** into previous casing string. If cement does not circulate see B.1.a, c-d above.
Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.
 - 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.
4. The minimum required fill of cement behind the **5** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- 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.

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

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 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 Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or

if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the

requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), 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 plug. However, **no tests** shall

commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

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.

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 133746

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 133746
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Prior to the submission of this C-104, there was a C-103 NOI submitted for approval. The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval. This action is currently under review from our legal department.	9/19/2024