

Well Name: POKER LAKE 23 DTD FEDERAL COM	Well Location: T24S / R30E / SEC 23 / SWNE /	County or Parish/State:
Well Number: 157H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name: POKER LAKE	Unit or CA Number: NMNM071016X
US Well Number: 3001549650	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2682465

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 07/17/2022

Time Sundry Submitted: 05:10

Date proposed operation will begin: 08/14/2022

Procedure Description: **Well name change, pool name change, surface hole location change, bottom hole location change, first and last take point changes XTO Permian Operating, LLC requests permission to make the following changes to the original APD: Change well name from Poker Lake Unit 23 DTD to Poker Lake 23 DTD Federal Com Change Pool Name from Purple Sage; Wolfcamp to Purple Sage; Bone Spring Change SHL from 1342’FNL & 1710’FEL to 837”FNL & 1743’FEL, Section 23-T24S-R30E for drilling efficiencies and operational safety. No Additional Surface Disturbance. Change BHL from 200’FNL & 1210’FEL to 200”FNL & 2410’FEL, Section 2-T24S-R30E Change FTP fr/100’FSL & 1210’FEL to 100’FSL & 2410’FEL Change LTP fr/330’FNL & 1210’FEL to 330’FNL & 2410’FEL Attachments: C102 Drilling Program Directional Plan

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Poker_Lake_23_DTD_Federal_Com_157H_Attachments_20220717170935.pdf

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Conditions of Approval

Additional

Sec_23_24S_30E_NMP_2682465_Poker_Lake_Unit_23_DTD_Federal_Com_157H_Eddy_NMNM068905_XTO_13_22_44783_AM_20220814123138.pdf

Sec_23_24S_30E_NMP_2682465_Poker_Lake_Unit_23_DTD_Federal_Com_157H_Eddy_NMNM030452_COAs_20220814123138.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: JUL 17, 2022 05:09 PM

Name: XTO PERMIAN OPERATING LLC

Title: Lead Regulatory Coordinator

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND **State:** TX

Phone: (970) 796-6048

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: 08/22/2022

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- 49650	² Pool Code 98319	³ Pool Name WC 015 G06 S242630A; Bone Spring
⁴ Property Code 332954	⁵ Property Name POKER LAKE 23 DTD FEDERAL COM	⁶ Well Number 157H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC	⁹ Elevation 3,426'

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
B	23	24 S	30 E		837	NORTH	1,743	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
2	2	24 S	30 E		200	NORTH	2,410	EAST	EDDY

¹² Dedicated Acres 480.38	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 SHL (NAD83 NME) Y = 439,864.7 X = 691,255.9 LAT. = 32.208336 "N LONG. = 103.848610 "W FTP (NAD83 NME) Y = 440,797.4 X = 690,587.0 LAT. = 32.210908 "N LONG. = 103.850759 "W CORNER COORDINATES (NAD83 NME) <table border="0"> <tr><td>A - Y = 440,695.8 N</td><td>X = 690,318.7 E</td></tr> <tr><td>B - Y = 443,332.7 N</td><td>X = 690,316.5 E</td></tr> <tr><td>C - Y = 445,969.1 N</td><td>X = 690,314.3 E</td></tr> <tr><td>D - Y = 448,606.1 N</td><td>X = 690,296.3 E</td></tr> <tr><td>E - Y = 451,241.1 N</td><td>X = 690,278.3 E</td></tr> <tr><td>F - Y = 453,878.5 N</td><td>X = 690,267.5 E</td></tr> <tr><td>G - Y = 456,518.6 N</td><td>X = 690,256.7 E</td></tr> <tr><td>H - Y = 440,703.6 N</td><td>X = 691,657.9 E</td></tr> <tr><td>I - Y = 443,341.5 N</td><td>X = 691,655.2 E</td></tr> <tr><td>J - Y = 445,982.8 N</td><td>X = 691,652.3 E</td></tr> <tr><td>K - Y = 448,617.4 N</td><td>X = 691,633.4 E</td></tr> <tr><td>L - Y = 451,254.5 N</td><td>X = 691,614.2 E</td></tr> <tr><td>M - Y = 453,892.0 N</td><td>X = 691,604.4 E</td></tr> <tr><td>N - Y = 456,529.5 N</td><td>X = 691,594.5 E</td></tr> </table> SHL (NAD27 NME) Y = 439,805.7 X = 650,072.1 LAT. = 32.208212 "N LONG. = 103.848124 "W FTP (NAD27 NME) Y = 440,738.3 X = 649,403.2 LAT. = 32.210784 "N LONG. = 103.850273 "W CORNER COORDINATES (NAD27 NME) <table border="0"> <tr><td>A - Y = 440,636.8 N</td><td>X = 649,135.0 E</td></tr> <tr><td>B - Y = 443,273.6 N</td><td>X = 649,132.9 E</td></tr> <tr><td>C - Y = 445,909.9 N</td><td>X = 649,130.8 E</td></tr> <tr><td>D - Y = 448,546.9 N</td><td>X = 649,112.8 E</td></tr> <tr><td>E - Y = 451,181.8 N</td><td>X = 649,094.9 E</td></tr> <tr><td>F - Y = 453,819.1 N</td><td>X = 649,084.2 E</td></tr> <tr><td>G - Y = 456,459.1 N</td><td>X = 649,073.5 E</td></tr> <tr><td>H - Y = 440,644.6 N</td><td>X = 650,474.1 E</td></tr> <tr><td>I - Y = 443,282.4 N</td><td>X = 650,471.5 E</td></tr> <tr><td>J - Y = 445,923.7 N</td><td>X = 650,468.7 E</td></tr> <tr><td>K - Y = 448,558.1 N</td><td>X = 650,449.9 E</td></tr> <tr><td>L - Y = 451,195.2 N</td><td>X = 650,430.8 E</td></tr> <tr><td>M - Y = 453,832.6 N</td><td>X = 650,421.1 E</td></tr> <tr><td>N - Y = 456,470.0 N</td><td>X = 650,411.3 E</td></tr> </table>	A - Y = 440,695.8 N	X = 690,318.7 E	B - Y = 443,332.7 N	X = 690,316.5 E	C - Y = 445,969.1 N	X = 690,314.3 E	D - Y = 448,606.1 N	X = 690,296.3 E	E - Y = 451,241.1 N	X = 690,278.3 E	F - Y = 453,878.5 N	X = 690,267.5 E	G - Y = 456,518.6 N	X = 690,256.7 E	H - Y = 440,703.6 N	X = 691,657.9 E	I - Y = 443,341.5 N	X = 691,655.2 E	J - Y = 445,982.8 N	X = 691,652.3 E	K - Y = 448,617.4 N	X = 691,633.4 E	L - Y = 451,254.5 N	X = 691,614.2 E	M - Y = 453,892.0 N	X = 691,604.4 E	N - Y = 456,529.5 N	X = 691,594.5 E	A - Y = 440,636.8 N	X = 649,135.0 E	B - Y = 443,273.6 N	X = 649,132.9 E	C - Y = 445,909.9 N	X = 649,130.8 E	D - Y = 448,546.9 N	X = 649,112.8 E	E - Y = 451,181.8 N	X = 649,094.9 E	F - Y = 453,819.1 N	X = 649,084.2 E	G - Y = 456,459.1 N	X = 649,073.5 E	H - Y = 440,644.6 N	X = 650,474.1 E	I - Y = 443,282.4 N	X = 650,471.5 E	J - Y = 445,923.7 N	X = 650,468.7 E	K - Y = 448,558.1 N	X = 650,449.9 E	L - Y = 451,195.2 N	X = 650,430.8 E	M - Y = 453,832.6 N	X = 650,421.1 E	N - Y = 456,470.0 N	X = 650,411.3 E	SECTION 2 LOT 2 - 40.1 ACRES GRID AZ. = 359°45'50" HORIZ. DIST. = 15,523.51' GRID AZ. = 324°21'11" HORIZ. DIST. = 1,147.74'	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. <i>Jessica Dooling</i> 7/11/2022 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. 06-30-2022 Date of Survey Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number AW 2021060772
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DRILLING PLAN: BLM COMPLIANCE
(Supplement to BLM 3160-3)

XTO Energy Inc.

PLU 23 Dog Town Draw 157H

Projected TD: 25949' MD / 9839' TVD

SHL: 837' FNL & 1743' FEL , Section 23, T24S, R30E

BHL: 200' FNL & 2410' FEL , Section 2, T24S, R30E

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	513'	Water
Top of Salt	871'	Water
Base of Salt	3856'	Water
Delaware	4084'	Water
Brushy Canyon	6299'	Water/Oil/Gas
Bone Spring	7907'	Water
1st Bone Spring Ss	8912'	Water/Oil/Gas
2nd Bone Spring Ss	9667'	Water/Oil/Gas
Target/Land Curve	9839'	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 @ 613' (258' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 9.625 inch casing at 8985' and cemented to surface. A 8.75 inch curve and 8.75 inch lateral hole will be drilled to 25949 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8685 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 613'	13.375	54.5	J-55	BTC	New	1.07	4.07	25.53
12.25	0' – 713'	9.625	40	HC P-110	BTC	New	3.11	11.76	3.51
12.25	713' – 8985'	9.625	40	HC L-80	BTC	New	2.26	1.49	2.77
8.75	0' – 8885'	5.5	23	RY P-110	Semi-Premium	New	1.21	3.42	1.87
8.75	8885' - 25949'	5.5	23	RY P-110	Semi-Premium	New	1.21	3.09	2.01

- XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface 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.
- 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on 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" SOW 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 9-5/8" 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 +/- 613'

Lead: 230 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 = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 9.625, 40 New casing to be set at +/- 8985'

1st Stage

Optional Lead: 1060 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 770 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6299

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: 2220 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 9-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6299') 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 inside the first intermediate casing. 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, 23 New Semi-Premium, RY P-110 casing to be set at +/- 25949'

Lead: 60 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8685 feet

Tail: 3640 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9185 feet

Compressives: 12-hr = 800 psi 24 hr = 1500 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 3M Hydral and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2542 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, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nipping up on the 9.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M 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.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 613'	17.5	FW/Native	8.7-9.2	35-40	NC
613' - 8985'	12.25	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
8985' - 25949'	8.75	OBM	9.2-9.7	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 cut 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. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. 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 165 to 185 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 4707 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.

Well Plan Report - PLU 23 Dog Town Draw 157H

Measured Depth: 25949.00 ft **Site:** PLU 23 DTD
PAD C

TVD RKB: 9839.00 ft

Location

Cartographic Reference System: New Mexico
East - NAD 27

Northing: 439803.64 ft

Easting: 650089.84 ft

RKB: 3462.00 ft

Ground Level: 3432.00 ft

North Reference: Grid

Convergence Angle: 0.26 Deg

Plan Sections PLU 23 Dog Town Draw 157H									
Measured		TVD				Build	Turn	Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00	
3055.16	11.10	278.51	3051.69	7.94	-53.03	2.00	0.00	2.00	
6007.03	11.10	278.51	5948.31	92.06	-615.23	0.00	0.00	0.00	
6562.19	0.00	0.00	6500.00	100.00	-668.26	-2.00	0.00	2.00	
9185.19	0.00	0.00	9123.00	100.00	-668.26	0.00	0.00	0.00	
10310.18	90.00	359.78	9839.20	816.19	-671.06	8.00	0.00	8.00	PLU 23 DTD BHL 10
25949.07	90.00	359.78	9839.00	16454.96	-732.20	0.00	0.00	0.00	PLU 23 DTD BHL 10

Planned Survey PLU 23 Dog Town Draw 157H					
Measured			TVD		
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)
0.000	0.000	0.000	0.000	0.000	0.000
100.000	0.000	0.000	100.000	0.000	0.000
200.000	0.000	0.000	200.000	0.000	0.000

300.000	0.000	0.000	300.000	0.000	0.000
400.000	0.000	0.000	400.000	0.000	0.000
500.000	0.000	0.000	500.000	0.000	0.000
600.000	0.000	0.000	600.000	0.000	0.000
700.000	0.000	0.000	700.000	0.000	0.000
800.000	0.000	0.000	800.000	0.000	0.000
900.000	0.000	0.000	900.000	0.000	0.000
1000.000	0.000	0.000	1000.000	0.000	0.000
1100.000	0.000	0.000	1100.000	0.000	0.000
1200.000	0.000	0.000	1200.000	0.000	0.000
1300.000	0.000	0.000	1300.000	0.000	0.000
1400.000	0.000	0.000	1400.000	0.000	0.000
1500.000	0.000	0.000	1500.000	0.000	0.000
1600.000	0.000	0.000	1600.000	0.000	0.000
1700.000	0.000	0.000	1700.000	0.000	0.000
1800.000	0.000	0.000	1800.000	0.000	0.000
1900.000	0.000	0.000	1900.000	0.000	0.000
2000.000	0.000	0.000	2000.000	0.000	0.000
2100.000	0.000	0.000	2100.000	0.000	0.000
2200.000	0.000	0.000	2200.000	0.000	0.000
2300.000	0.000	0.000	2300.000	0.000	0.000
2400.000	0.000	0.000	2400.000	0.000	0.000
2500.000	0.000	0.000	2500.000	0.000	0.000
2600.000	1.999	278.500	2599.980	0.260	-1.720
2700.000	4.000	278.500	2699.838	1.030	-6.900
2800.000	6.000	278.500	2799.452	2.320	-15.520
2900.000	7.999	278.500	2898.702	4.130	-27.570
3000.000	10.000	278.500	2997.465	6.440	-43.040
3055.100	11.100	278.500	3051.690	7.940	-53.030
3100.000	11.100	278.500	3095.692	9.210	-61.570
3200.000	11.100	278.500	3193.821	12.060	-80.610
3300.000	11.100	278.500	3291.949	14.910	-99.660
3400.000	11.100	278.500	3390.077	17.760	-118.710
3500.000	11.100	278.500	3488.205	20.610	-137.750
3600.000	11.100	278.500	3586.334	23.460	-156.800
3700.000	11.100	278.500	3684.462	26.310	-175.840
3800.000	11.100	278.500	3782.590	29.160	-194.890
3900.000	11.100	278.500	3880.718	32.010	-213.930
4000.000	11.100	278.500	3978.846	34.860	-232.980
4100.000	11.100	278.500	4076.975	37.710	-252.020
4200.000	11.100	278.500	4175.103	40.560	-271.070
4300.000	11.100	278.500	4273.231	43.410	-290.120

4400.000	11.100	278.500	4371.359	46.260	-309.160
4500.000	11.100	278.500	4469.487	49.110	-328.210
4600.000	11.100	278.500	4567.616	51.960	-347.250
4700.000	11.100	278.500	4665.744	54.810	-366.300
4800.000	11.100	278.500	4763.872	57.660	-385.340
4900.000	11.100	278.500	4862.000	60.510	-404.390
5000.000	11.100	278.500	4960.128	63.360	-423.430
5100.000	11.100	278.500	5058.257	66.210	-442.480
5200.000	11.100	278.500	5156.385	69.060	-461.530
5300.000	11.100	278.500	5254.513	71.910	-480.570
5400.000	11.100	278.500	5352.641	74.760	-499.620
5500.000	11.100	278.500	5450.769	77.610	-518.660
5600.000	11.100	278.500	5548.898	80.460	-537.710
5700.000	11.100	278.500	5647.026	83.310	-556.750
5800.000	11.100	278.500	5745.154	86.160	-575.800
5900.000	11.100	278.500	5843.282	89.010	-594.840
6007.000	11.100	278.500	5948.310	92.060	-615.230
6100.000	9.243	278.500	6039.813	94.490	-631.470
6200.000	7.243	278.500	6138.775	96.620	-645.650
6300.000	5.243	278.500	6238.176	98.230	-656.400
6400.000	3.243	278.500	6337.897	99.320	-663.720
6500.000	1.243	278.500	6437.815	99.900	-667.590
6562.100	0.000	0.000	6500.000	100.000	-668.260
6600.000	0.000	0.000	6537.811	100.000	-668.260
6700.000	0.000	0.000	6637.811	100.000	-668.260
6800.000	0.000	0.000	6737.811	100.000	-668.260
6900.000	0.000	0.000	6837.811	100.000	-668.260
7000.000	0.000	0.000	6937.811	100.000	-668.260
7100.000	0.000	0.000	7037.811	100.000	-668.260
7200.000	0.000	0.000	7137.811	100.000	-668.260
7300.000	0.000	0.000	7237.811	100.000	-668.260
7400.000	0.000	0.000	7337.811	100.000	-668.260
7500.000	0.000	0.000	7437.811	100.000	-668.260
7600.000	0.000	0.000	7537.811	100.000	-668.260
7700.000	0.000	0.000	7637.811	100.000	-668.260
7800.000	0.000	0.000	7737.811	100.000	-668.260
7900.000	0.000	0.000	7837.811	100.000	-668.260
8000.000	0.000	0.000	7937.811	100.000	-668.260
8100.000	0.000	0.000	8037.811	100.000	-668.260
8200.000	0.000	0.000	8137.811	100.000	-668.260
8300.000	0.000	0.000	8237.811	100.000	-668.260
8400.000	0.000	0.000	8337.811	100.000	-668.260

8500.000	0.000	0.000	8437.811	100.000	-668.260
8600.000	0.000	0.000	8537.811	100.000	-668.260
8700.000	0.000	0.000	8637.811	100.000	-668.260
8800.000	0.000	0.000	8737.811	100.000	-668.260
8900.000	0.000	0.000	8837.811	100.000	-668.260
9000.000	0.000	0.000	8937.811	100.000	-668.260
9100.000	0.000	0.000	9037.811	100.000	-668.260
9185.100	0.000	0.000	9123.000	100.000	-668.260
9200.000	1.184	359.700	9137.810	100.150	-668.260
9300.000	9.184	359.700	9237.320	109.180	-668.300
9400.000	17.180	359.700	9334.604	131.970	-668.390
9500.000	25.180	359.700	9427.771	168.080	-668.530
9600.000	33.180	359.700	9515.005	216.800	-668.720
9700.000	41.180	359.700	9594.609	277.190	-668.950
9800.000	49.180	359.700	9665.034	348.070	-669.230
9900.000	57.180	359.700	9724.909	428.070	-669.540
10000.000	65.180	359.700	9773.068	515.610	-669.890
10100.000	73.180	359.700	9808.575	609.010	-670.250
10200.000	81.180	359.700	9830.737	706.440	-670.630
10300.000	89.180	359.700	9839.125	806.000	-671.020
10310.000	90.000	359.700	9839.197	816.190	-671.060
10400.000	90.000	359.700	9839.197	906.000	-671.410
10500.000	90.000	359.700	9839.197	1006.000	-671.800
10600.000	90.000	359.700	9839.197	1106.000	-672.190
10700.000	90.000	359.700	9839.197	1206.000	-672.590
10800.000	90.000	359.700	9839.197	1306.000	-672.980
10900.000	90.000	359.700	9839.197	1406.000	-673.370
11000.000	90.000	359.700	9839.197	1506.000	-673.760
11100.000	90.000	359.700	9839.197	1606.000	-674.150
11200.000	90.000	359.700	9839.197	1706.000	-674.540
11300.000	90.000	359.700	9839.197	1805.990	-674.930
11400.000	90.000	359.700	9839.197	1905.990	-675.320
11500.000	90.000	359.700	9839.197	2005.990	-675.710
11600.000	90.000	359.700	9839.197	2105.990	-676.100
11700.000	90.000	359.700	9839.197	2205.990	-676.490
11800.000	90.000	359.700	9839.197	2305.990	-676.890
11900.000	90.000	359.700	9839.197	2405.990	-677.280
12000.000	90.000	359.700	9839.197	2505.990	-677.670
12100.000	90.000	359.700	9839.197	2605.990	-678.060
12200.000	90.000	359.700	9839.197	2705.990	-678.450
12300.000	90.000	359.700	9839.197	2805.990	-678.840
12400.000	90.000	359.700	9839.197	2905.990	-679.230

12500.000	90.000	359.700	9839.197	3005.990	-679.620
12600.000	90.000	359.700	9839.197	3105.980	-680.010
12700.000	90.000	359.700	9839.197	3205.980	-680.400
12800.000	90.000	359.700	9839.197	3305.980	-680.790
12900.000	90.000	359.700	9839.197	3405.980	-681.190
13000.000	90.000	359.700	9839.197	3505.980	-681.580
13100.000	90.000	359.700	9839.197	3605.980	-681.970
13200.000	90.000	359.700	9839.197	3705.980	-682.360
13300.000	90.000	359.700	9839.197	3805.980	-682.750
13400.000	90.000	359.700	9839.197	3905.980	-683.140
13500.000	90.000	359.700	9839.197	4005.980	-683.530
13600.000	90.000	359.700	9839.197	4105.980	-683.920
13700.000	90.000	359.700	9839.197	4205.980	-684.310
13800.000	90.000	359.700	9839.197	4305.980	-684.700
13900.000	90.000	359.700	9839.197	4405.970	-685.090
14000.000	90.000	359.700	9839.197	4505.970	-685.490
14100.000	90.000	359.700	9839.197	4605.970	-685.880
14200.000	90.000	359.700	9839.197	4705.970	-686.270
14300.000	90.000	359.700	9839.197	4805.970	-686.660
14400.000	90.000	359.700	9839.197	4905.970	-687.050
14500.000	90.000	359.700	9839.197	5005.970	-687.440
14600.000	90.000	359.700	9839.197	5105.970	-687.830
14700.000	90.000	359.700	9839.197	5205.970	-688.220
14800.000	90.000	359.700	9839.197	5305.970	-688.610
14900.000	90.000	359.700	9839.197	5405.970	-689.000
15000.000	90.000	359.700	9839.197	5505.970	-689.390
15100.000	90.000	359.700	9839.197	5605.970	-689.790
15200.000	90.000	359.700	9839.197	5705.960	-690.180
15300.000	90.000	359.700	9839.197	5805.960	-690.570
15400.000	90.000	359.700	9839.197	5905.960	-690.960
15500.000	90.000	359.700	9839.197	6005.960	-691.350
15600.000	90.000	359.700	9839.197	6105.960	-691.740
15700.000	90.000	359.700	9839.197	6205.960	-692.130
15800.000	90.000	359.700	9839.197	6305.960	-692.520
15900.000	90.000	359.700	9839.197	6405.960	-692.910
16000.000	90.000	359.700	9839.197	6505.960	-693.300
16100.000	90.000	359.700	9839.197	6605.960	-693.690
16200.000	90.000	359.700	9839.197	6705.960	-694.090
16300.000	90.000	359.700	9839.197	6805.960	-694.480
16400.000	90.000	359.700	9839.197	6905.960	-694.870
16500.000	90.000	359.700	9839.197	7005.960	-695.260
16600.000	90.000	359.700	9839.197	7105.950	-695.650

16700.000	90.000	359.700	9839.197	7205.950	-696.040
16800.000	90.000	359.700	9839.197	7305.950	-696.430
16900.000	90.000	359.700	9839.197	7405.950	-696.820
17000.000	90.000	359.700	9839.197	7505.950	-697.210
17100.000	90.000	359.700	9839.197	7605.950	-697.600
17200.000	90.000	359.700	9839.197	7705.950	-697.990
17300.000	90.000	359.700	9839.197	7805.950	-698.390
17400.000	90.000	359.700	9839.197	7905.950	-698.780
17500.000	90.000	359.700	9839.197	8005.950	-699.170
17600.000	90.000	359.700	9839.197	8105.950	-699.560
17700.000	90.000	359.700	9839.197	8205.950	-699.950
17800.000	90.000	359.700	9839.197	8305.950	-700.340
17900.000	90.000	359.700	9839.197	8405.940	-700.730
18000.000	90.000	359.700	9839.197	8505.940	-701.120
18100.000	90.000	359.700	9839.197	8605.940	-701.510
18200.000	90.000	359.700	9839.197	8705.940	-701.900
18300.000	90.000	359.700	9839.197	8805.940	-702.290
18400.000	90.000	359.700	9839.197	8905.940	-702.690
18500.000	90.000	359.700	9839.197	9005.940	-703.080
18600.000	90.000	359.700	9839.197	9105.940	-703.470
18700.000	90.000	359.700	9839.197	9205.940	-703.860
18800.000	90.000	359.700	9839.197	9305.940	-704.250
18900.000	90.000	359.700	9839.197	9405.940	-704.640
19000.000	90.000	359.700	9839.197	9505.940	-705.030
19100.000	90.000	359.700	9839.197	9605.940	-705.420
19200.000	90.000	359.700	9839.197	9705.930	-705.810
19300.000	90.000	359.700	9839.197	9805.930	-706.200
19400.000	90.000	359.700	9839.197	9905.930	-706.600
19500.000	90.000	359.700	9839.197	10005.930	-706.990
19600.000	90.000	359.700	9839.197	10105.930	-707.380
19700.000	90.000	359.700	9839.197	10205.930	-707.770
19800.000	90.000	359.700	9839.197	10305.930	-708.160
19900.000	90.000	359.700	9839.197	10405.930	-708.550
20000.000	90.000	359.700	9839.197	10505.930	-708.940
20100.000	90.000	359.700	9839.197	10605.930	-709.330
20200.000	90.000	359.700	9839.197	10705.930	-709.720
20300.000	90.000	359.700	9839.197	10805.930	-710.110
20400.000	90.000	359.700	9839.197	10905.930	-710.500
20500.000	90.000	359.700	9839.197	11005.920	-710.900
20600.000	90.000	359.700	9839.197	11105.920	-711.290
20700.000	90.000	359.700	9839.197	11205.920	-711.680
20800.000	90.000	359.700	9839.197	11305.920	-712.070

20900.000	90.000	359.700	9839.197	11405.920	-712.460
21000.000	90.000	359.700	9839.197	11505.920	-712.850
21100.000	90.000	359.700	9839.197	11605.920	-713.240
21200.000	90.000	359.700	9839.197	11705.920	-713.630
21300.000	90.000	359.700	9839.197	11805.920	-714.020
21400.000	90.000	359.700	9839.197	11905.920	-714.410
21500.000	90.000	359.700	9839.197	12005.920	-714.800
21600.000	90.000	359.700	9839.197	12105.920	-715.200
21700.000	90.000	359.700	9839.197	12205.920	-715.590
21800.000	90.000	359.700	9839.197	12305.910	-715.980
21900.000	90.000	359.700	9839.197	12405.910	-716.370
22000.000	90.000	359.700	9839.197	12505.910	-716.760
22100.000	90.000	359.700	9839.197	12605.910	-717.150
22200.000	90.000	359.700	9839.197	12705.910	-717.540
22300.000	90.000	359.700	9839.197	12805.910	-717.930
22400.000	90.000	359.700	9839.197	12905.910	-718.320
22500.000	90.000	359.700	9839.197	13005.910	-718.710
22600.000	90.000	359.700	9839.197	13105.910	-719.100
22700.000	90.000	359.700	9839.197	13205.910	-719.500
22800.000	90.000	359.700	9839.197	13305.910	-719.890
22900.000	90.000	359.700	9839.197	13405.910	-720.280
23000.000	90.000	359.700	9839.197	13505.910	-720.670
23100.000	90.000	359.700	9839.197	13605.900	-721.060
23200.000	90.000	359.700	9839.197	13705.900	-721.450
23300.000	90.000	359.700	9839.197	13805.900	-721.840
23400.000	90.000	359.700	9839.197	13905.900	-722.230
23500.000	90.000	359.700	9839.197	14005.900	-722.620
23600.000	90.000	359.700	9839.197	14105.900	-723.010
23700.000	90.000	359.700	9839.197	14205.900	-723.400
23800.000	90.000	359.700	9839.197	14305.900	-723.800
23900.000	90.000	359.700	9839.197	14405.900	-724.190
24000.000	90.000	359.700	9839.197	14505.900	-724.580
24100.000	90.000	359.700	9839.197	14605.900	-724.970
24200.000	90.000	359.700	9839.197	14705.900	-725.360
24300.000	90.000	359.700	9839.197	14805.900	-725.750
24400.000	90.000	359.700	9839.197	14905.890	-726.140
24500.000	90.000	359.700	9839.197	15005.890	-726.530
24600.000	90.000	359.700	9839.197	15105.890	-726.920
24700.000	90.000	359.700	9839.197	15205.890	-727.310
24800.000	90.000	359.700	9839.197	15305.890	-727.700
24900.000	90.000	359.700	9839.197	15405.890	-728.100
25000.000	90.000	359.700	9839.197	15505.890	-728.490

25100.000	90.000	359.700	9839.197	15605.890	-728.880
25200.000	90.000	359.700	9839.197	15705.890	-729.270
25300.000	90.000	359.700	9839.197	15805.890	-729.660
25400.000	90.000	359.700	9839.197	15905.890	-730.050
25500.000	90.000	359.700	9839.197	16005.890	-730.440
25600.000	90.000	359.700	9839.197	16105.890	-730.830
25700.000	90.000	359.700	9839.197	16205.880	-731.220
25800.000	90.000	359.700	9839.197	16305.880	-731.610
25900.000	90.000	359.700	9839.197	16405.880	-732.000
25949.000	90.000	359.700	9839.000	16454.960	-732.200

Plan Targets		PLU 23 Dog Town Draw 157H			
	Measured Depth	Grid Northing	Grid Easting	TVD MSL	Target Shape
Target Name	(ft)	(ft)	(ft)	(ft)	
PLU 23 DTD FTP 10	10426.83	440736.28	649421.58	6377.00	CIRCLE
PLU 23 DTD LTP 10	25819.21	456128.73	649357.92	6377.00	CIRCLE
PLU 23 DTD BHL 10	25949.08	456258.60	649357.64	6377.00	CIRCLE

Sec 23-24S-30E-NMP 2682465 Poker Lake Unit 23 DTD Federal Com 157H Eddy NMNM068905 XTO 13-22 44783 AM

Poker Lake Unit 23 DTD Federal Com 157H

9 5/8	surface csg in a	12 1/4	inch hole.	Design Factors					Surface		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J 55	BTC	25.69	8.77	10.46	613	14	17.88	16.25	24,520
"B"			BTC				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				Tail Cmt	does not	circ to sfc.	Totals:	613			24,520
Comparison of Proposed to Minimum Required Cement Volumes											
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
12 1/4	0.3132	530	835	192	335	9.20	221	2M			0.81
Site plat (pipe racks S or E) as per O.O.I.III D 4.1. not found.											

Proposed

7 5/8		casing inside the		9 5/8		Design Factors				Int 1		
Segment	#/ft	Grade		Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	RY P 110		Flush Joint	26.35	14.16	2.11	713	25	3.75	24.22	21,176
"B"	29.70	HCL 80		Flush Joint	∞	15.30	1.54	8,272	18	2.73	26.16	245,678
w/8.4#/g mud, 30min Sfc Csg Test psig:								Totals:	8,985			266,855
The cement volume(s) are intended to achieve a top of						0	ft from surface or a		613			overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE				Min Dist Hole-Cplg
8 3/4	0.1005	1830	3976	908	338	10.20	2522	3M				0.56

Tail cmt

5 1/2		casing inside the		7 5/8		Design Factors				Prod 1		
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight	
"A"	20.00	RY P 110	Semi-Premiur	3.61	2.48	2.82	8,885	3	5.01	4.40	177,700	
"B"	20.00	RY P 110	Semi-Flush	∞	2.48	2.82	17,064	3	5.01	4.40	341,280	
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,955							Totals:	25,949				
The cement volume(s) are intended to achieve a top of					8600	ft from surface or a		385	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			
6 3/4	0.0835	3700	5658	1453	289	9.70			0.23			
Class 'C' tail cmt yld > 1.35												

#N/A

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

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating
WELL NAME & NO.:	Poker Lake Unit 23 DTD Federal Com 157H
LOCATION:	Sec 23-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

Updated COAs per Sundry 2682465; approved through engineering on August 08, 2022.

COA

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

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 Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately 620 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 **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 to surface. If cement does not circulate, contact the appropriate BLM office.
3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. 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 209947

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 209947
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Initial COA's still apply with the additional COA that if a bradenhead squeeze is used during the cementing of the intermediate casing, then a CBL will be required to verify the integrity of the cement behind the intermediate casing.	9/27/2023