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

Sundry Print Report

08/14/2022

Well Name: POKER LAKE 23 DTD FEDERAL COM	**Well Location:** T24S / R30E / SEC 23 / NENW /	**County or Parish/State:**
Well Number: 103H	**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: 3001549640	**Well Status:** Approved Application for Permit to Drill	**Operator:** XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2682431

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 07/15/2022

Time Sundry Submitted: 05:18

Date proposed operation will begin: 08/14/2022

Procedure Description: **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 SHL from 337’FNL & 1792’FWL to 262”FNL & 1792’FWL, Section 23-T24S-R30E for drilling efficiencies and operational safety. No Additional Surface Disturbance. Change BHL from 200’FNL & 2090’FWL to 200’FNL & 330’FWL, Section 2-T24S-R30E Change FTP fr/100’FSL & 2090’FWL to 100’FSL & 330’FWL Change LTP fr/330’FNL & 2090’FWL to 330’FNL & 330’FWL 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_103H_Attachments_20220715171532.pdf

Well Name: POKER LAKE 23 DTD FEDERAL COM

Well Location: T24S / R30E / SEC 23 / NENW /

County or Parish/State:

Well Number: 103H

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: 3001549640

Well Status: Approved Application for Permit to Drill

Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

Sec_23_24S_30E_NMP_2682431_Poker_Lake_Unit_23_DTD_Federal_Com_103H_Eddy_NMNM030452_COAs_20220810100908.pdf

Sec_23_24S_30E_NMP_2682431_Poker_Lake_Unit_23_DTD_Federal_Com_103H_Eddy_NMNM030452_XTO_13_22_44783_AM_20220810100908.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 15, 2022 05:15 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: 08/12/2022

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	[2] Pool Code	[3] Pool Name
30-015- 49640	98220	Purple Sage, Wolfcamp

[4] Property Code	[5] Property Name	[6] Well Number
332954	POKER LAKE 23 DTD FEDERAL COM	103H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC	3,432'

[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
C	23	24 S	30 E		262	NORTH	1,792	WEST	EDDY

[11] Bottom Hole Location If Different From Surface

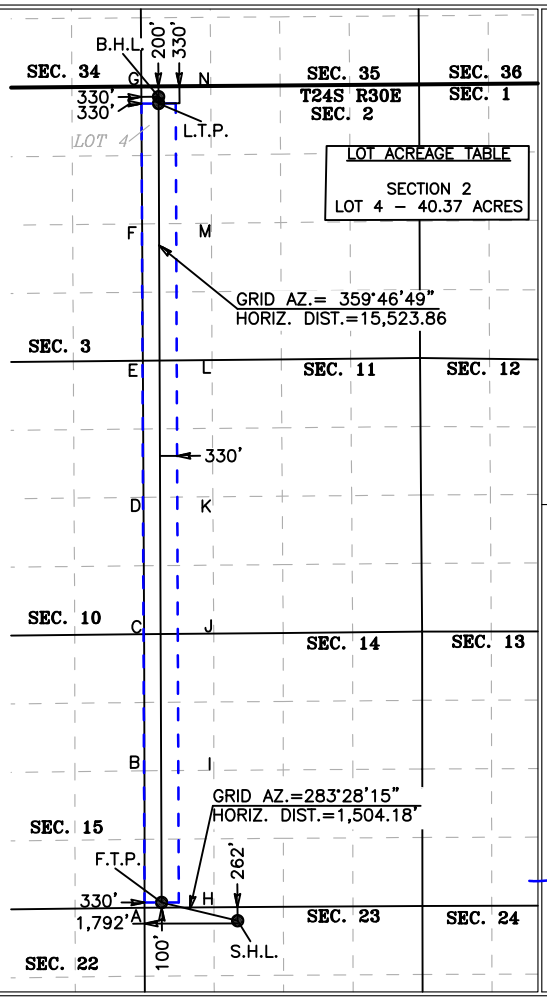
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	2	24 S	30 E		200	NORTH	330	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
960.6			

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)		LTP (NAD83 NME)	
Y =	440,427.6	Y =	456,171.7
X =	689,436.3	X =	687,914.6
LAT. =	32.209905 °N	LAT. =	32.253202 °N
LONG. =	103.854485 °W	LONG. =	103.859180 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	440,778.0	Y =	456,301.7
X =	687,973.5	X =	687,914.0
LAT. =	32.210886 °N	LAT. =	32.253559 °N
LONG. =	103.859210 °W	LONG. =	103.859181 °W
CORNER COORDINATES (NAD83 NME)			
A - Y =	440,675.5 N	X =	687,643.7 E
B - Y =	443,315.0 N	X =	687,640.1 E
C - Y =	445,948.5 N	X =	687,638.0 E
D - Y =	448,583.6 N	X =	687,624.1 E
E - Y =	451,217.2 N	X =	687,609.8 E
F - Y =	453,851.5 N	X =	687,596.7 E
G - Y =	456,499.4 N	X =	687,582.9 E
H - Y =	440,685.6 N	X =	688,981.2 E
I - Y =	443,323.9 N	X =	688,978.3 E
J - Y =	445,958.8 N	X =	688,976.1 E
K - Y =	448,594.8 N	X =	688,960.2 E
L - Y =	451,229.1 N	X =	688,944.0 E
M - Y =	453,865.0 N	X =	688,932.1 E
N - Y =	456,509.0 N	X =	688,919.8 E
SHL (NAD27 NME)		**LTP (NAD27 NME)**	
Y =	440,368.5	Y =	456,112.3
X =	648,252.5	X =	646,731.5
LAT. =	32.209781 °N	LAT. =	32.253078 °N
LONG. =	103.853999 °W	LONG. =	103.858692 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	440,718.9	Y =	456,242.3
X =	646,789.8	X =	646,730.8
LAT. =	32.210763 °N	LAT. =	32.253435 °N
LONG. =	103.858723 °W	LONG. =	103.858692 °W
CORNER COORDINATES (NAD27 NME)			
A - Y =	440,616.4 N	X =	646,459.9 E
B - Y =	443,255.9 N	X =	646,456.5 E
C - Y =	445,889.3 N	X =	646,454.4 E
D - Y =	448,524.3 N	X =	646,440.6 E
E - Y =	451,157.9 N	X =	646,426.4 E
F - Y =	453,792.1 N	X =	646,413.4 E
G - Y =	456,439.9 N	X =	646,399.8 E
H - Y =	440,626.6 N	X =	647,797.5 E
I - Y =	443,264.7 N	X =	647,794.7 E
J - Y =	445,899.6 N	X =	647,792.6 E
K - Y =	448,535.6 N	X =	647,776.7 E
L - Y =	451,169.8 N	X =	647,760.7 E
M - Y =	453,805.6 N	X =	647,748.8 E
N - Y =	456,449.5 N	X =	647,736.6 E



[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 — 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 NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number — AW — 2019051497

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

XTO Energy Inc.
PLU 23 Dog Town Draw 103H
Projected TD: 27600' MD / 11484' TVD
SHL: 262' FNL & 1792' FWL , Section 23, T24S, R30E
BHL: 200' FNL & 330' FWL , 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	538'	Water
Top of Salt	900'	Water
Base of Salt	3841'	Water
Delaware	4067'	Water
Brushy Canyon	6268'	Water/Oil/Gas
Bone Spring	7878'	Water
1st Bone Spring Ss	8879'	Water/Oil/Gas
2nd Bone Spring Ss	9635'	Water/Oil/Gas
3rd Bone Spring Ss	10807'	Water/Oil/Gas
Wolfcamp	11179'	Water/Oil/Gas
Wolfcamp X	11207'	Water/Oil/Gas
Wolfcamp Y	11285'	Water/Oil/Gas
Wolfcamp A	11338'	Water/Oil/Gas
Wolfcamp B	11779'	Water/Oil/Gas
Target/Land Curve	11484'	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 9.625 inch casing @ 638' (262' 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 7.625 inch casing at 10757' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 27600 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10457 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0’ – 638'	9.625	40	J-55	BTC	New	1.29	8.90	24.69
8.75	0’ – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.18	2.65	1.75
8.75	4000' – 10757'	7.625	29.7	HC L-80	Flush Joint	New	1.58	1.86	2.02
6.75	0’ – 10657'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.28	1.68
6.75	10657' - 27600'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.12	1.81

· 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
· 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 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: 11” 10M top flange x 9-5/8” bottom

B. Tubing Head: 11” 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: 9.625, 40 New BTC, J-55 casing to be set at +/- 638'

Lead: 110 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 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 +/- 10757'
1st Stage
Optional Lead: 340 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 410 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6268
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: 710 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 Brush Canyon (6268') 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-Flush, RY P-110 casing to be set at +/- 27600'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10457 feet
Tail: 1190 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10957 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 9.625 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 4341 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 nippling up on the 9.625, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling 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.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 638'	12.25	FW/Native	8.7-9.2	35-40	NC
638' - 10757'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
10757' - 27600'	6.75	OBM	11.5-12	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 9-5/8" 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 9.625 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 180 to 200 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 6867 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 103H

Measured Depth:	27599.00 ft	**Site:**	PLU 23 DTD PAD B
TVD RKB:	11484.00 ft		
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	440367.69 ft		
Easting:	648268.01 ft		
RKB:	3458.00 ft		
Ground Level:	3428.00 ft		
North Reference:	Grid		
Convergence Angle:	0.26 Deg		

Plan Sections PLU 23 Dog Town Draw 103H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1846.90	14.94	256.06	1838.47	-23.32	-93.97	2.00	0.00	2.00	
6942.16	14.94	256.06	6761.53	-339.68	-1368.72	0.00	0.00	0.00	
7689.06	0.00	0.00	7500.00	-363.00	-1462.68	-2.00	0.00	2.00	
10957.05	0.00	0.00	10768.00	-363.00	-1462.68	0.00	0.00	0.00	
12082.05	90.00	359.79	11484.20	353.20	-1465.31	8.00	0.00	8.00	PLU 23 DTD BHL 1
27599.85	90.00	359.79	11484.00	15870.89	-1522.28	0.00	0.00	0.00	PLU 23 DTD BHL 1

Planned Survey PLU 23 Dog Town Draw 103H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (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	1.999	256.000	1199.980	-0.420	-1.700
1300.000	4.000	256.000	1299.838	-1.680	-6.780
1400.000	6.000	256.000	1399.452	-3.780	-15.230
1500.000	7.999	256.000	1498.702	-6.710	-27.060
1600.000	10.000	256.000	1597.465	-10.480	-42.240
1700.000	11.990	256.000	1695.623	-15.080	-60.760
1800.000	14.000	256.000	1793.055	-20.490	-82.590
1846.800	14.930	256.000	1838.467	-23.320	-93.970
1900.000	14.930	256.000	1889.773	-26.610	-107.250
2000.000	14.930	256.000	1986.393	-32.820	-132.270
2100.000	14.930	256.000	2083.014	-39.030	-157.290
2200.000	14.930	256.000	2179.634	-45.240	-182.310
2300.000	14.930	256.000	2276.255	-51.450	-207.320
2400.000	14.930	256.000	2372.875	-57.660	-232.340
2500.000	14.930	256.000	2469.496	-63.870	-257.360
2600.000	14.930	256.000	2566.116	-70.080	-282.380
2700.000	14.930	256.000	2662.737	-76.280	-307.400
2800.000	14.930	256.000	2759.357	-82.490	-332.420
2900.000	14.930	256.000	2855.978	-88.700	-357.440
3000.000	14.930	256.000	2952.599	-94.910	-382.450
3100.000	14.930	256.000	3049.219	-101.120	-407.470
3200.000	14.930	256.000	3145.840	-107.330	-432.490
3300.000	14.930	256.000	3242.460	-113.540	-457.510
3400.000	14.930	256.000	3339.081	-119.750	-482.530
3500.000	14.930	256.000	3435.701	-125.960	-507.550
3600.000	14.930	256.000	3532.322	-132.160	-532.560
3700.000	14.930	256.000	3628.942	-138.370	-557.580
3800.000	14.930	256.000	3725.563	-144.580	-582.600
3900.000	14.930	256.000	3822.183	-150.790	-607.620
4000.000	14.930	256.000	3918.804	-157.000	-632.640
4100.000	14.930	256.000	4015.424	-163.210	-657.660
4200.000	14.930	256.000	4112.045	-169.420	-682.670
4300.000	14.930	256.000	4208.665	-175.630	-707.690

4400.000	14.930	256.000	4305.286	-181.840	-732.710
4500.000	14.930	256.000	4401.907	-188.050	-757.730
4600.000	14.930	256.000	4498.527	-194.250	-782.750
4700.000	14.930	256.000	4595.148	-200.460	-807.770
4800.000	14.930	256.000	4691.768	-206.670	-832.790
4900.000	14.930	256.000	4788.389	-212.880	-857.800
5000.000	14.930	256.000	4885.009	-219.090	-882.820
5100.000	14.930	256.000	4981.630	-225.300	-907.840
5200.000	14.930	256.000	5078.250	-231.510	-932.860
5300.000	14.930	256.000	5174.871	-237.720	-957.880
5400.000	14.930	256.000	5271.491	-243.930	-982.900
5500.000	14.930	256.000	5368.112	-250.130	-1007.910
5600.000	14.930	256.000	5464.732	-256.340	-1032.930
5700.000	14.930	256.000	5561.353	-262.550	-1057.950
5800.000	14.930	256.000	5657.973	-268.760	-1082.970
5900.000	14.930	256.000	5754.594	-274.970	-1107.990
6000.000	14.930	256.000	5851.215	-281.180	-1133.010
6100.000	14.930	256.000	5947.835	-287.390	-1158.030
6200.000	14.930	256.000	6044.456	-293.600	-1183.040
6300.000	14.930	256.000	6141.076	-299.810	-1208.060
6400.000	14.930	256.000	6237.697	-306.020	-1233.080
6500.000	14.930	256.000	6334.317	-312.220	-1258.100
6600.000	14.930	256.000	6430.938	-318.430	-1283.120
6700.000	14.930	256.000	6527.558	-324.640	-1308.140
6800.000	14.930	256.000	6624.179	-330.850	-1333.150
6900.000	14.930	256.000	6720.799	-337.060	-1358.170
6942.100	14.930	256.000	6761.533	-339.680	-1368.720
7000.000	13.780	256.000	6817.567	-343.130	-1382.640
7100.000	11.780	256.000	6915.084	-348.460	-1404.110
7200.000	9.781	256.000	7013.314	-352.970	-1422.270
7300.000	7.781	256.000	7112.137	-356.640	-1437.080
7400.000	5.781	256.000	7211.432	-359.490	-1448.540
7500.000	3.781	256.000	7311.079	-361.490	-1456.630
7600.000	1.781	256.000	7410.956	-362.660	-1461.340
7689.000	0.000	0.000	7500.000	-363.000	-1462.680
7700.000	0.000	0.000	7510.942	-363.000	-1462.680
7800.000	0.000	0.000	7610.942	-363.000	-1462.680
7900.000	0.000	0.000	7710.942	-363.000	-1462.680
8000.000	0.000	0.000	7810.942	-363.000	-1462.680
8100.000	0.000	0.000	7910.942	-363.000	-1462.680
8200.000	0.000	0.000	8010.942	-363.000	-1462.680
8300.000	0.000	0.000	8110.942	-363.000	-1462.680

8400.000	0.000	0.000	8210.942	-363.000	-1462.680
8500.000	0.000	0.000	8310.942	-363.000	-1462.680
8600.000	0.000	0.000	8410.942	-363.000	-1462.680
8700.000	0.000	0.000	8510.942	-363.000	-1462.680
8800.000	0.000	0.000	8610.942	-363.000	-1462.680
8900.000	0.000	0.000	8710.942	-363.000	-1462.680
9000.000	0.000	0.000	8810.942	-363.000	-1462.680
9100.000	0.000	0.000	8910.942	-363.000	-1462.680
9200.000	0.000	0.000	9010.942	-363.000	-1462.680
9300.000	0.000	0.000	9110.942	-363.000	-1462.680
9400.000	0.000	0.000	9210.942	-363.000	-1462.680
9500.000	0.000	0.000	9310.942	-363.000	-1462.680
9600.000	0.000	0.000	9410.942	-363.000	-1462.680
9700.000	0.000	0.000	9510.942	-363.000	-1462.680
9800.000	0.000	0.000	9610.942	-363.000	-1462.680
9900.000	0.000	0.000	9710.942	-363.000	-1462.680
10000.000	0.000	0.000	9810.942	-363.000	-1462.680
10100.000	0.000	0.000	9910.942	-363.000	-1462.680
10200.000	0.000	0.000	10010.942	-363.000	-1462.680
10300.000	0.000	0.000	10110.942	-363.000	-1462.680
10400.000	0.000	0.000	10210.942	-363.000	-1462.680
10500.000	0.000	0.000	10310.942	-363.000	-1462.680
10600.000	0.000	0.000	10410.942	-363.000	-1462.680
10700.000	0.000	0.000	10510.942	-363.000	-1462.680
10800.000	0.000	0.000	10610.942	-363.000	-1462.680
10900.000	0.000	0.000	10710.942	-363.000	-1462.680
10957.000	0.000	0.000	10768.000	-363.000	-1462.680
11000.000	3.435	359.700	10810.916	-361.710	-1462.690
11100.000	11.430	359.700	10909.995	-348.780	-1462.740
11200.000	19.430	359.700	11006.309	-322.190	-1462.830
11300.000	27.430	359.700	11097.986	-282.450	-1462.980
11400.000	35.430	359.700	11183.240	-230.340	-1463.170
11500.000	43.430	359.700	11260.411	-166.870	-1463.400
11600.000	51.430	359.700	11327.998	-93.280	-1463.670
11700.000	59.430	359.700	11384.686	-11.000	-1463.980
11800.000	67.430	359.700	11429.370	78.370	-1464.300
11900.000	75.430	359.700	11461.182	173.090	-1464.650
12000.000	83.430	359.700	11479.501	271.320	-1465.010
12082.000	90.000	359.700	11484.197	353.200	-1465.310
12100.000	90.000	359.700	11484.197	371.140	-1465.380
12200.000	90.000	359.700	11484.197	471.140	-1465.750
12300.000	90.000	359.700	11484.197	571.140	-1466.110

12400.000	90.000	359.700	11484.197	671.140	-1466.480
12500.000	90.000	359.700	11484.197	771.130	-1466.850
12600.000	90.000	359.700	11484.197	871.130	-1467.210
12700.000	90.000	359.700	11484.197	971.130	-1467.580
12800.000	90.000	359.700	11484.197	1071.130	-1467.950
12900.000	90.000	359.700	11484.197	1171.130	-1468.320
13000.000	90.000	359.700	11484.197	1271.130	-1468.680
13100.000	90.000	359.700	11484.197	1371.130	-1469.050
13200.000	90.000	359.700	11484.197	1471.130	-1469.420
13300.000	90.000	359.700	11484.197	1571.130	-1469.780
13400.000	90.000	359.700	11484.197	1671.130	-1470.150
13500.000	90.000	359.700	11484.197	1771.130	-1470.520
13600.000	90.000	359.700	11484.197	1871.130	-1470.890
13700.000	90.000	359.700	11484.197	1971.130	-1471.250
13800.000	90.000	359.700	11484.197	2071.130	-1471.620
13900.000	90.000	359.700	11484.197	2171.130	-1471.990
14000.000	90.000	359.700	11484.197	2271.120	-1472.350
14100.000	90.000	359.700	11484.197	2371.120	-1472.720
14200.000	90.000	359.700	11484.197	2471.120	-1473.090
14300.000	90.000	359.700	11484.197	2571.120	-1473.460
14400.000	90.000	359.700	11484.197	2671.120	-1473.820
14500.000	90.000	359.700	11484.197	2771.120	-1474.190
14600.000	90.000	359.700	11484.197	2871.120	-1474.560
14700.000	90.000	359.700	11484.197	2971.120	-1474.920
14800.000	90.000	359.700	11484.197	3071.120	-1475.290
14900.000	90.000	359.700	11484.197	3171.120	-1475.660
15000.000	90.000	359.700	11484.197	3271.120	-1476.030
15100.000	90.000	359.700	11484.197	3371.120	-1476.390
15200.000	90.000	359.700	11484.197	3471.120	-1476.760
15300.000	90.000	359.700	11484.197	3571.120	-1477.130
15400.000	90.000	359.700	11484.197	3671.120	-1477.490
15500.000	90.000	359.700	11484.197	3771.110	-1477.860
15600.000	90.000	359.700	11484.197	3871.110	-1478.230
15700.000	90.000	359.700	11484.197	3971.110	-1478.600
15800.000	90.000	359.700	11484.197	4071.110	-1478.960
15900.000	90.000	359.700	11484.197	4171.110	-1479.330
16000.000	90.000	359.700	11484.197	4271.110	-1479.700
16100.000	90.000	359.700	11484.197	4371.110	-1480.060
16200.000	90.000	359.700	11484.197	4471.110	-1480.430
16300.000	90.000	359.700	11484.197	4571.110	-1480.800
16400.000	90.000	359.700	11484.197	4671.110	-1481.170
16500.000	90.000	359.700	11484.197	4771.110	-1481.530

16600.000	90.000	359.700	11484.197	4871.110	-1481.900
16700.000	90.000	359.700	11484.197	4971.110	-1482.270
16800.000	90.000	359.700	11484.197	5071.110	-1482.630
16900.000	90.000	359.700	11484.197	5171.100	-1483.000
17000.000	90.000	359.700	11484.197	5271.100	-1483.370
17100.000	90.000	359.700	11484.197	5371.100	-1483.740
17200.000	90.000	359.700	11484.197	5471.100	-1484.100
17300.000	90.000	359.700	11484.197	5571.100	-1484.470
17400.000	90.000	359.700	11484.197	5671.100	-1484.840
17500.000	90.000	359.700	11484.197	5771.100	-1485.200
17600.000	90.000	359.700	11484.197	5871.100	-1485.570
17700.000	90.000	359.700	11484.197	5971.100	-1485.940
17800.000	90.000	359.700	11484.197	6071.100	-1486.310
17900.000	90.000	359.700	11484.197	6171.100	-1486.670
18000.000	90.000	359.700	11484.197	6271.100	-1487.040
18100.000	90.000	359.700	11484.197	6371.100	-1487.410
18200.000	90.000	359.700	11484.197	6471.100	-1487.770
18300.000	90.000	359.700	11484.197	6571.100	-1488.140
18400.000	90.000	359.700	11484.197	6671.090	-1488.510
18500.000	90.000	359.700	11484.197	6771.090	-1488.880
18600.000	90.000	359.700	11484.197	6871.090	-1489.240
18700.000	90.000	359.700	11484.197	6971.090	-1489.610
18800.000	90.000	359.700	11484.197	7071.090	-1489.980
18900.000	90.000	359.700	11484.197	7171.090	-1490.340
19000.000	90.000	359.700	11484.197	7271.090	-1490.710
19100.000	90.000	359.700	11484.197	7371.090	-1491.080
19200.000	90.000	359.700	11484.197	7471.090	-1491.450
19300.000	90.000	359.700	11484.197	7571.090	-1491.810
19400.000	90.000	359.700	11484.197	7671.090	-1492.180
19500.000	90.000	359.700	11484.197	7771.090	-1492.550
19600.000	90.000	359.700	11484.197	7871.090	-1492.910
19700.000	90.000	359.700	11484.197	7971.090	-1493.280
19800.000	90.000	359.700	11484.197	8071.090	-1493.650
19900.000	90.000	359.700	11484.197	8171.080	-1494.020
20000.000	90.000	359.700	11484.197	8271.080	-1494.380
20100.000	90.000	359.700	11484.197	8371.080	-1494.750
20200.000	90.000	359.700	11484.197	8471.080	-1495.120
20300.000	90.000	359.700	11484.197	8571.080	-1495.480
20400.000	90.000	359.700	11484.197	8671.080	-1495.850
20500.000	90.000	359.700	11484.197	8771.080	-1496.220
20600.000	90.000	359.700	11484.197	8871.080	-1496.590
20700.000	90.000	359.700	11484.197	8971.080	-1496.950

20800.000	90.000	359.700	11484.197	9071.080	-1497.320
20900.000	90.000	359.700	11484.197	9171.080	-1497.690
21000.000	90.000	359.700	11484.197	9271.080	-1498.050
21100.000	90.000	359.700	11484.197	9371.080	-1498.420
21200.000	90.000	359.700	11484.197	9471.080	-1498.790
21300.000	90.000	359.700	11484.197	9571.080	-1499.160
21400.000	90.000	359.700	11484.197	9671.070	-1499.520
21500.000	90.000	359.700	11484.197	9771.070	-1499.890
21600.000	90.000	359.700	11484.197	9871.070	-1500.260
21700.000	90.000	359.700	11484.197	9971.070	-1500.620
21800.000	90.000	359.700	11484.197	10071.070	-1500.990
21900.000	90.000	359.700	11484.197	10171.070	-1501.360
22000.000	90.000	359.700	11484.197	10271.070	-1501.730
22100.000	90.000	359.700	11484.197	10371.070	-1502.090
22200.000	90.000	359.700	11484.197	10471.070	-1502.460
22300.000	90.000	359.700	11484.197	10571.070	-1502.830
22400.000	90.000	359.700	11484.197	10671.070	-1503.190
22500.000	90.000	359.700	11484.197	10771.070	-1503.560
22600.000	90.000	359.700	11484.197	10871.070	-1503.930
22700.000	90.000	359.700	11484.197	10971.070	-1504.300
22800.000	90.000	359.700	11484.197	11071.070	-1504.660
22900.000	90.000	359.700	11484.197	11171.060	-1505.030
23000.000	90.000	359.700	11484.197	11271.060	-1505.400
23100.000	90.000	359.700	11484.197	11371.060	-1505.760
23200.000	90.000	359.700	11484.197	11471.060	-1506.130
23300.000	90.000	359.700	11484.197	11571.060	-1506.500
23400.000	90.000	359.700	11484.197	11671.060	-1506.870
23500.000	90.000	359.700	11484.197	11771.060	-1507.230
23600.000	90.000	359.700	11484.197	11871.060	-1507.600
23700.000	90.000	359.700	11484.197	11971.060	-1507.970
23800.000	90.000	359.700	11484.197	12071.060	-1508.330
23900.000	90.000	359.700	11484.197	12171.060	-1508.700
24000.000	90.000	359.700	11484.197	12271.060	-1509.070
24100.000	90.000	359.700	11484.197	12371.060	-1509.440
24200.000	90.000	359.700	11484.197	12471.060	-1509.800
24300.000	90.000	359.700	11484.197	12571.060	-1510.170
24400.000	90.000	359.700	11484.197	12671.050	-1510.540
24500.000	90.000	359.700	11484.197	12771.050	-1510.900
24600.000	90.000	359.700	11484.197	12871.050	-1511.270
24700.000	90.000	359.700	11484.197	12971.050	-1511.640
24800.000	90.000	359.700	11484.197	13071.050	-1512.010
24900.000	90.000	359.700	11484.197	13171.050	-1512.370

25000.000	90.000	359.700	11484.197	13271.050	-1512.740
25100.000	90.000	359.700	11484.197	13371.050	-1513.110
25200.000	90.000	359.700	11484.197	13471.050	-1513.470
25300.000	90.000	359.700	11484.197	13571.050	-1513.840
25400.000	90.000	359.700	11484.197	13671.050	-1514.210
25500.000	90.000	359.700	11484.197	13771.050	-1514.580
25600.000	90.000	359.700	11484.197	13871.050	-1514.940
25700.000	90.000	359.700	11484.197	13971.050	-1515.310
25800.000	90.000	359.700	11484.197	14071.040	-1515.680
25900.000	90.000	359.700	11484.197	14171.040	-1516.040
26000.000	90.000	359.700	11484.197	14271.040	-1516.410
26100.000	90.000	359.700	11484.197	14371.040	-1516.780
26200.000	90.000	359.700	11484.197	14471.040	-1517.150
26300.000	90.000	359.700	11484.197	14571.040	-1517.510
26400.000	90.000	359.700	11484.197	14671.040	-1517.880
26500.000	90.000	359.700	11484.197	14771.040	-1518.250
26600.000	90.000	359.700	11484.197	14871.040	-1518.610
26700.000	90.000	359.700	11484.197	14971.040	-1518.980
26800.000	90.000	359.700	11484.197	15071.040	-1519.350
26900.000	90.000	359.700	11484.197	15171.040	-1519.720
27000.000	90.000	359.700	11484.197	15271.040	-1520.080
27100.000	90.000	359.700	11484.197	15371.040	-1520.450
27200.000	90.000	359.700	11484.197	15471.040	-1520.820
27300.000	90.000	359.700	11484.197	15571.030	-1521.180
27400.000	90.000	359.700	11484.197	15671.030	-1521.550
27500.000	90.000	359.700	11484.197	15771.030	-1521.920
27599.000	90.000	359.700	11484.000	15870.890	-1522.280

Plan Targets	PLU 23 Dog Town Draw 103H				
Target Name	**Measured Depth (ft)**	**Grid Northing (ft)**	**Grid Easting (ft)**	**TVD MSL (ft)**	**Target Shape**
PLU 23 DTD FTP 1	12084.64	440720.98	646805.33	8026.00	CIRCLE
PLU 23 DTD LTP 1	27469.63	456108.35	646746.61	8026.00	CIRCLE
PLU 23 DTD BHL 1	27599.86	456238.58	646745.73	8026.00	CIRCLE

Sec 23-24S-30E-NMP 2682431 Poker Lake Unit 23 DTD Federal Com 103H Eddy NMNM030452 XTO 13-22 44783 AM

Poker Lake Unit 23 DTD Federal Com 103H

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	24.68	8.43	1.86	638	14	3.19	15.62	25,520
"B"			BTC				**0**				**0**
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,500		Tail Cmt	does not	circ to sfc.		Totals:	638			25,520

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	240	381	200	91	9.20	1239	2M	0.81

Site plat (pipe racks S or E) as per O.O.1.III.D.4.i. not found.

7 5/8	casing inside the	9 5/8		Design Factors				Int 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	RY P 110	Flush Joint	4.70	2.52	1.42	4,000	4	2.20	4.32	118,800
"B"	**29.70**	**HCL 80**	Flush Joint	∞	**2.73**	**1.04**	**6,757**	**3**	**1.60**	4.66	**200,683**
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	10,757			319,483
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			638			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	750	1495	1086	38	10.20	4299	5M	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	3.01	1.67	1.9	10,657	2	2.94	2.58	213,140
"B"	**20.00**	**RY P 110**	Semi-Flush	∞	**1.67**	**1.9**	**16,943**	**2**	**2.94**	2.58	**338,860**
w/8.4#/g mud, 30min Sfc Csg Test psig:	2,345						Totals:	27,600			552,000
The cement volume(s) are intended to achieve a top of				10400	ft from surface or a			357			overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
6 3/4	0.0835	1210	1851	1440	29	12.00			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 103H
LOCATION:	Sec 23-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Updated COAs per Sundry **2682431**; 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 intergrity 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 intergrity 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 134389

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 134389
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Adhere to previous NMOCD Conditions of Approval	8/18/2022