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

Sundry Print Report

02/02/2022

Well Name: POKER LAKE UNIT 29-20 BS	**Well Location:** T25S / R31E / SEC 29 / NWNE /	**County or Parish/State:**
Well Number: 103H	**Type of Well:** CONVENTIONAL GAS WELL	**Allottee or Tribe Name:**
Lease Number: NMLC062140A	**Unit or CA Name:** POKER LAKE	**Unit or CA Number:** NMNM071016X
US Well Number: 3001549123	**Well Status:** Approved Application for Permit to Drill	**Operator:** XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2652946

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 01/18/2022

Time Sundry Submitted: 08:10

Date proposed operation will begin: 02/01/2022

Procedure Description: **Spacing, Casing/Cement, Drilling Variance Changes XTO Permian Operating, LLC requests permission to make the following changes to the original APD: No Additional Surface Disturbance Change BHL fr/50'FNL & 1590'FWL to 2671'FNL & 1886'FWL, Section 18-25-S31E Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

01.18.22_PLU_29_20BS_103H_NOI_Attachments_20220118081034.pdf

Well Name: POKER LAKE UNIT 29-20 BS

Well Location: T25S / R31E / SEC 29 / NWNE /

County or Parish/State:

Well Number: 103H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMLC062140A

Unit or CA Name: POKER LAKE

Unit or CA Number: NMNM071016X

US Well Number: 3001549123

Well Status: Approved Application for Permit to Drill

Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Specialist Review

Conditions_of_Appoval_20220119054954.pdf

Operator Certification

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 submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: STEPHANIE RABADUE

Signed on: JAN 18, 2022 08:10 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Coordinator

Street Address: 500 W. Illinois St, Ste 100

City: Midland **State:** TX

Phone: (432) 620-6714

Email address: STEPHANIE.RABADUE@EXXONMOBIL.COM

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: JENNIFER SANCHEZ

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5756270237

BLM POC Email Address: j1sanchez@blm.gov

Disposition: Approved

Disposition Date: 01/19/2022

Signature: Jennifer Sanchez

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

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

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)*

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

Directional Plan

Location of Well

0. SHL: NWNE / 537 FNL / 2604 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107084 / LONG: -103.800118 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 537 FSL / 1590 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110381 / LONG: -103.802384 (TVD: 11541 feet, MD: 14887 feet)

PPP: NENW / 537 FNL / 2604 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.107084 / LONG: -103.800118 (TVD: 11541 feet, MD: 13567 feet)

PPP: SENW / 2310 FNL / 1590 FWL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102205 / LONG: -103.80375 (TVD: 11541 feet, MD: 12247 feet)

BHL: NENW / 50 FNL / 1590 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.123007 / LONG: -103.803561 (TVD: 11541 feet, MD: 19815 feet)

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

XTO Energy Inc.
PLU 29-20 BS 103H
Projected TD: 23423' MD / 11750' TVD
SHL: 537' FNL & 2604' FEL , Section 29, T25S, R31E
BHL: 2671' FNL & 1886' FWL , Section 18, T25S, R31E
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	939'	Water
Top of Salt	1269'	Water
Base of Salt	3989'	Water
Delaware	4199'	Water
Brushy Canyon	6459'	Water/Oil/Gas
Bone Spring	8104'	Water
1st Bone Spring Ss	9094'	Water/Oil/Gas
2nd Bone Spring Ss	9869'	Water/Oil/Gas
3rd Bone Spring Ss	10999'	Water/Oil/Gas
Wolfcamp	11464'	Water/Oil/Gas
Wolfcamp X	11489'	Water/Oil/Gas
Wolfcamp Y	11559'	Water/Oil/Gas
Wolfcamp A	11609'	Water/Oil/Gas
Target/Land Curve	11789'	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 @ 1039' (230' 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 11131' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23423 MD/TD and 5.5 x 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 10831 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1039'	9.625	40	J-55	BTC	New	1.25	5.47	15.16
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.13	2.65	1.69
8.75	4000' – 11131'	7.625	29.7	HC L-80	Flush Joint	New	1.55	1.80	1.92
6.75	0' – 11031'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.20	1.95
6.75	11031' - 11700'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.08	5.01
6.75	11700' - 23423'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.07	5.74

· 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” SOW 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 +/- 1039'

Lead: 240 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 +/- 11131'
1st Stage
Optional Lead: 350 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6459
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: 730 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 (6459') 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 +/- 23423'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10831 feet
Tail: 860 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 11331 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 4442 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' - 1039'	12.25	FW/Native	8.7-9.2	35-40	NC
1039' - 11131'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
11131' - 23423'	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 7027 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.

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

PRE-COMPLETION

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- 49183	98220	Purple Sage; Wolfcamp (Gas)

[4] Property Code	[5] Property Name	[6] Well Number
	POKER LAKE UNIT 29-20 BS	103H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,369'

[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	29	25 S	31 E		537	NORTH	2,604	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
F	18	25 S	31 E		2,671	NORTH	1,886	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

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. NOTE: DATA FURNISHED BY XTO ENERGY

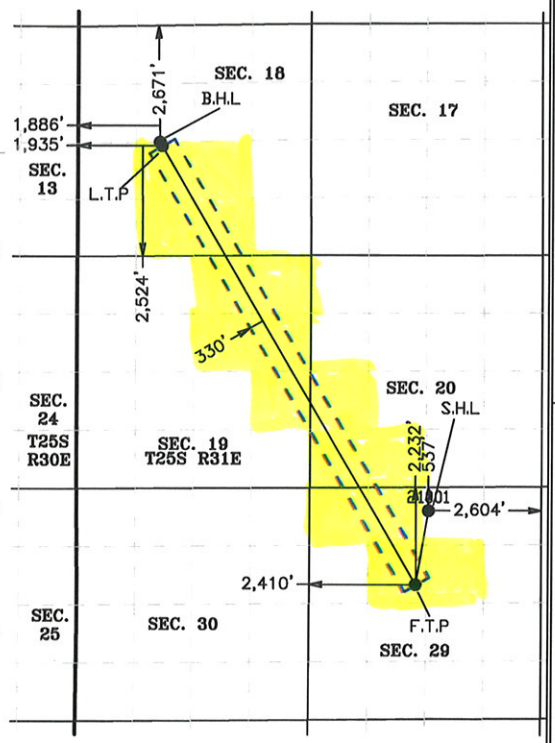
16

SHL (NAD83 NME)		LTP (NAD83 NME)	
Y =	403,101.7	Y =	411,440.2
X =	706,436.6	X =	700,346.5
LAT. =	32.107083 °N	LAT. =	32.130086 °N
LONG. =	103.800118 °W	LONG. =	103.819658 °W

FTP (NAD83 NME)		BHL (NAD83 NME)	
Y =	401,404.3	Y =	411,525.5
X =	706,141.2	X =	700,297.2
LAT. =	32.102422 °N	LAT. =	32.130321 °N
LONG. =	103.801099 °W	LONG. =	103.819816 °W

SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	403,043.8	Y =	411,382.0
X =	665,251.0	X =	659,161.5
LAT. =	32.106959 °N	LAT. =	32.129962 °N
LONG. =	103.799639 °W	LONG. =	103.819177 °W

FTP (NAD27 NME)		BHL (NAD27 NME)	
Y =	401,346.4	Y =	411,467.3
X =	664,955.6	X =	659,112.3
LAT. =	32.102297 °N	LAT. =	32.130197 °N
LONG. =	103.800621 °W	LONG. =	103.819335 °W



[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.

Stephanie Rabadue 11/04/2021
Signature Date

Stephanie Rabadue
Printed Name

stephanie.rabadue@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.

10-26-2021
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP 23786
Certificate Number LM/AI 2019082878

P:\PROJECTS\2019\2019082878-XTO-POKER_LAKE_UNIT_29-20_BS_103H-EDDY\DWG\2019082878-XTO-POKER_LAKE_UNIT_29-20_BS_103H_C-102_UPDATED.dwg, Letter

Well Plan Report - PLU 29-20 BS 103H

Measured Depth:	23423.00 ft	**Site:**	PLU 29-20 Big Sinks Pad B
TVD RKB:	11750.00 ft	**Slot:**	22
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403040.70 ft		
Easting:	665249.40 ft		
RKB:	3370.00 ft		
Ground Level:	3340.00 ft		
North Reference:	Grid		
Convergence Angle:	0.28 Deg		

Plan Sections PLU 29-20 BS 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	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	
2563.98	21.28	189.87	2539.69	-192.43	-33.49	2.00	0.00	2.00	
6234.88	21.28	189.87	5960.31	-1504.94	-261.94	0.00	0.00	0.00	
7298.86	0.00	0.00	7000.00	-1697.37	-295.43	-2.00	0.00	2.00	
11331.86	0.00	0.00	11033.00	-1697.37	-295.43	0.00	0.00	0.00	Slant KOP 19
12445.72	90.00	330.00	11742.11	-1083.26	-649.98	8.08	0.00	8.08	Slant FTP 19
23323.22	90.00	330.00	11750.00	8336.92	-6088.73	0.00	0.00	0.00	Slant LTP 19
23423.22	90.00	330.00	11750.00	8423.52	-6138.73	0.00	0.00	0.00	Slant BHL 19

Position Uncertainty PLU 29-20 BS 103H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Lateral Bias (ft)	Lateral Error (ft)	Vertical Bias (ft)	Vertical Error (ft)	Magnitude Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.297	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.468	0.000	0.468	0.000	2.299	0.000	0.000	0.556	0.358	135.000	MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.983	0.000	0.983	0.000	2.307	0.000	0.000	1.191	0.717	135.000	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.403	0.000	1.403	0.000	2.321	0.000	0.000	1.668	1.075	135.000	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.797	0.000	1.797	0.000	2.340	0.000	0.000	2.099	1.434	135.000	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.179	0.000	2.179	0.000	2.364	0.000	0.000	2.507	1.792	135.000	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.554	0.000	2.554	0.000	2.393	0.000	0.000	2.902	2.151	135.000	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.925	0.000	2.925	0.000	2.428	0.000	0.000	3.288	2.509	135.000	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.292	0.000	3.292	0.000	2.467	0.000	0.000	3.669	2.867	135.000	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.659	0.000	3.659	0.000	2.511	0.000	0.000	4.046	3.226	135.000	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.024	0.000	4.024	0.000	2.559	0.000	0.000	4.420	3.584	135.000	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.387	0.000	4.387	0.000	2.613	0.000	0.000	4.791	3.943	135.000	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.751	0.000	4.751	0.000	2.670	0.000	0.000	5.161	4.302	135.000	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.113	0.000	5.113	0.000	2.731	0.000	0.000	5.529	4.660	135.000	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.474	0.000	5.474	0.000	2.797	0.000	0.000	5.896	5.018	135.000	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.836	0.000	5.836	0.000	2.866	0.000	0.000	6.262	5.377	135.000	MWD+IFR1+MS

1600.000	1.999	189.800	1599.980	6.340	-0.000	6.010	0.000	2.939	0.000	0.000	6.595	5.732	133.409	MWD+IFR1+MS
1700.000	4.000	189.800	1699.838	7.023	-0.000	6.349	0.000	3.015	0.000	0.000	7.259	6.091	126.770	MWD+IFR1+MS
1800.000	6.000	189.800	1799.452	7.653	-0.000	6.690	0.000	3.098	0.000	0.000	7.897	6.433	123.463	MWD+IFR1+MS
1900.000	7.999	189.800	1898.702	8.241	-0.000	7.034	0.000	3.187	0.000	0.000	8.503	6.771	121.553	MWD+IFR1+MS
2000.000	10.000	189.800	1997.465	8.796	-0.000	7.379	0.000	3.288	0.000	0.000	9.084	7.108	120.307	MWD+IFR1+MS
2100.000	11.990	189.800	2095.623	9.320	-0.000	7.725	0.000	3.399	0.000	0.000	9.640	7.446	119.467	MWD+IFR1+MS
2200.000	14.000	189.800	2193.055	9.818	-0.000	8.074	0.000	3.524	0.000	0.000	10.175	7.785	118.866	MWD+IFR1+MS
2300.000	15.990	189.800	2289.643	10.290	-0.000	8.424	0.000	3.662	0.000	0.000	10.689	8.125	118.471	MWD+IFR1+MS
2400.000	18.000	189.800	2385.268	10.749	-0.000	8.777	0.000	3.817	0.000	0.000	11.193	8.471	118.113	MWD+IFR1+MS
2500.000	19.990	189.800	2479.816	11.184	-0.000	9.132	0.000	3.987	0.000	0.000	11.676	8.817	117.911	MWD+IFR1+MS
2563.900	21.270	189.800	2539.688	11.369	-0.000	9.354	0.000	4.073	0.000	0.000	11.904	9.040	117.865	MWD+IFR1+MS
2600.000	21.270	189.800	2573.252	11.476	-0.000	9.477	0.000	4.113	0.000	0.000	12.005	9.167	117.859	MWD+IFR1+MS
2700.000	21.270	189.800	2666.434	11.770	-0.000	9.829	0.000	4.241	0.000	0.000	12.279	9.525	118.046	MWD+IFR1+MS
2800.000	21.270	189.800	2759.616	12.078	-0.000	10.194	0.000	4.379	0.000	0.000	12.570	9.889	118.382	MWD+IFR1+MS
2900.000	21.270	189.800	2852.798	12.397	-0.000	10.564	0.000	4.523	0.000	0.000	12.870	10.259	118.721	MWD+IFR1+MS
3000.000	21.270	189.800	2945.980	12.721	-0.000	10.936	0.000	4.672	0.000	0.000	13.175	10.631	119.057	MWD+IFR1+MS
3100.000	21.270	189.800	3039.162	13.055	-0.000	11.313	0.000	4.826	0.000	0.000	13.489	11.007	119.392	MWD+IFR1+MS
3200.000	21.270	189.800	3132.344	13.393	-0.000	11.691	0.000	4.985	0.000	0.000	13.806	11.384	119.724	MWD+IFR1+MS
3300.000	21.270	189.800	3225.526	13.735	-0.000	12.070	0.000	5.148	0.000	0.000	14.126	11.762	120.054	MWD+IFR1+MS
3400.000	21.270	189.800	3318.708	14.085	-0.000	12.453	0.000	5.315	0.000	0.000	14.454	12.144	120.382	MWD+IFR1+MS
3500.000	21.270	189.800	3411.890	14.441	-0.000	12.833	0.000	5.486	0.000	0.000	14.786	12.525	120.630	MWD+IFR1+MS
3600.000	21.270	189.800	3505.072	14.801	-0.000	13.220	0.000	5.661	0.000	0.000	15.123	12.911	120.953	MWD+IFR1+MS
3700.000	21.270	189.800	3598.254	15.164	-0.000	13.604	0.000	5.840	0.000	0.000	15.461	13.294	121.236	MWD+IFR1+MS
3800.000	21.270	189.800	3691.436	15.532	-0.000	13.992	0.000	6.022	0.000	0.000	15.805	13.682	121.513	MWD+IFR1+MS
3900.000	21.270	189.800	3784.619	15.903	-0.000	14.382	0.000	6.206	0.000	0.000	16.152	14.071	121.832	MWD+IFR1+MS
4000.000	21.270	189.800	3877.801	16.278	-0.000	14.773	0.000	6.395	0.000	0.000	16.503	14.462	122.107	MWD+IFR1+MS
4100.000	21.270	189.800	3970.983	16.656	-0.000	15.164	0.000	6.585	0.000	0.000	16.856	14.852	122.379	MWD+IFR1+MS
4200.000	21.270	189.800	4064.165	17.038	-0.000	15.554	0.000	6.779	0.000	0.000	17.212	15.243	122.607	MWD+IFR1+MS
4300.000	21.270	189.800	4157.347	17.422	-0.000	15.948	0.000	6.975	0.000	0.000	17.571	15.635	122.878	MWD+IFR1+MS
4400.000	21.270	189.800	4250.529	17.807	-0.000	16.341	0.000	7.174	0.000	0.000	17.931	16.027	123.141	MWD+IFR1+MS
4500.000	21.270	189.800	4343.711	18.199	-0.000	16.734	0.000	7.374	0.000	0.000	18.296	16.421	123.324	MWD+IFR1+MS
4600.000	21.270	189.800	4436.893	18.589	-0.000	17.129	0.000	7.578	0.000	0.000	18.661	16.816	123.582	MWD+IFR1+MS
4700.000	21.270	189.800	4530.075	18.983	-0.000	17.527	0.000	7.784	0.000	0.000	19.029	17.213	123.841	MWD+IFR1+MS
4800.000	21.270	189.800	4623.257	19.379	-0.000	17.922	0.000	7.992	0.000	0.000	19.400	17.608	124.016	MWD+IFR1+MS
4900.000	21.270	189.800	4716.439	19.777	-0.000	18.319	0.000	8.202	0.000	0.000	19.771	18.005	124.228	MWD+IFR1+MS
5000.000	21.270	189.800	4809.621	20.175	-0.000	18.716	0.000	8.415	0.000	0.000	20.144	18.401	124.441	MWD+IFR1+MS
5100.000	21.270	189.800	4902.803	20.577	-0.000	19.115	0.000	8.630	0.000	0.000	20.520	18.800	124.649	MWD+IFR1+MS
5200.000	21.270	189.800	4995.985	20.979	-0.000	19.513	0.000	8.847	0.000	0.000	20.896	19.198	124.856	MWD+IFR1+MS
5300.000	21.270	189.800	5089.167	21.383	-0.000	19.912	0.000	9.066	0.000	0.000	21.274	19.596	125.021	MWD+IFR1+MS
5400.000	21.270	189.800	5182.349	21.790	-0.000	20.312	0.000	9.287	0.000	0.000	21.655	19.997	125.184	MWD+IFR1+MS
5500.000	21.270	189.800	5275.531	22.196	-0.000	20.711	0.000	9.510	0.000	0.000	22.036	20.397	125.345	MWD+IFR1+MS
5600.000	21.270	189.800	5368.713	22.604	-0.000	21.110	0.000	9.735	0.000	0.000	22.417	20.796	125.506	MWD+IFR1+MS
5700.000	21.270	189.800	5461.895	23.013	-0.000	21.511	0.000	9.962	0.000	0.000	22.801	21.197	125.664	MWD+IFR1+MS
5800.000	21.270	189.800	5555.077	23.425	-0.000	21.912	0.000	10.188	0.000	0.000	23.187	21.598	125.783	MWD+IFR1+MS
5900.000	21.270	189.800	5648.259	23.837	-0.000	22.314	0.000	10.421	0.000	0.000	23.573	22.000	125.937	MWD+IFR1+MS
6000.000	21.270	189.800	5741.442	24.249	-0.000	22.714	0.000	10.654	0.000	0.000	23.959	22.400	126.051	MWD+IFR1+MS
6100.000	21.270	189.800	5834.624	24.663	-0.000	23.117	0.000	10.890	0.000	0.000	24.347	22.804	126.203	MWD+IFR1+MS
6200.000	21.270	189.800	5927.806	25.079	-0.000	23.518	0.000	11.127	0.000	0.000	24.737	23.206	126.279	MWD+IFR1+MS
6234.800	21.270	189.800	5960.312	25.221	-0.000	23.656	0.000	11.207	0.000	0.000	24.868	23.345	126.283	MWD+IFR1+MS
6300.000	19.970	189.800	6021.251	25.539	-0.000	23.913	0.000	11.362	0.000	0.000	25.121	23.606	126.205	MWD+IFR1+MS
6400.000	17.970	189.800	6115.811	26.056	-0.000	24.305	0.000	11.615	0.000	0.000	25.560	24.002	125.632	MWD+IFR1+MS
6500.000	15.970	189.800	6211.448	26.570	-0.000	24.696	0.000	11.857	0.000	0.000	26.027	24.394	124.873	MWD+IFR1+MS
6600.000	13.970	189.800	6308.046	27.040	-0.000	25.079	0.000	12.091	0.000	0.000	26.487	24.779	124.213	MWD+IFR1+MS

6700.000	11.970	189.800	6405.487	27.470	-0.000	25.455	0.000	12.317	0.000	0.000	26.942	25.157	123.579	MWD+IFR1+MS
6800.000	9.977	189.800	6503.652	27.858	-0.000	25.824	0.000	12.530	0.000	0.000	27.387	25.526	123.016	MWD+IFR1+MS
6900.000	7.977	189.800	6602.422	28.206	-0.000	26.185	0.000	12.740	0.000	0.000	27.824	25.887	122.516	MWD+IFR1+MS
7000.000	5.977	189.800	6701.677	28.509	-0.000	26.538	0.000	12.938	0.000	0.000	28.249	26.239	122.087	MWD+IFR1+MS
7100.000	3.977	189.800	6801.295	28.771	-0.000	26.882	0.000	13.130	0.000	0.000	28.663	26.582	121.720	MWD+IFR1+MS
7200.000	1.977	189.800	6901.154	28.990	-0.000	27.218	0.000	13.319	0.000	0.000	29.066	26.916	121.426	MWD+IFR1+MS
7298.800	0.000	0.000	7000.000	28.785	0.000	27.824	0.000	13.506	0.000	0.000	29.349	27.230	121.508	MWD+IFR1+MS
7300.000	0.000	0.000	7001.135	28.789	0.000	27.828	0.000	13.506	0.000	0.000	29.352	27.233	121.508	MWD+IFR1+MS
7400.000	0.000	0.000	7101.135	29.067	0.000	28.130	0.000	13.693	0.000	0.000	29.628	27.538	121.675	MWD+IFR1+MS
7500.000	0.000	0.000	7201.135	29.353	0.000	28.439	0.000	13.882	0.000	0.000	29.916	27.846	121.900	MWD+IFR1+MS
7600.000	0.000	0.000	7301.135	29.641	0.000	28.747	0.000	14.078	0.000	0.000	30.206	28.153	122.081	MWD+IFR1+MS
7700.000	0.000	0.000	7401.135	29.930	0.000	29.059	0.000	14.272	0.000	0.000	30.497	28.463	122.305	MWD+IFR1+MS
7800.000	0.000	0.000	7501.135	30.219	0.000	29.370	0.000	14.474	0.000	0.000	30.788	28.773	122.529	MWD+IFR1+MS
7900.000	0.000	0.000	7601.135	30.511	0.000	29.683	0.000	14.680	0.000	0.000	31.081	29.085	122.752	MWD+IFR1+MS
8000.000	0.000	0.000	7701.135	30.804	0.000	29.997	0.000	14.886	0.000	0.000	31.376	29.398	122.952	MWD+IFR1+MS
8100.000	0.000	0.000	7801.135	31.098	0.000	30.310	0.000	15.100	0.000	0.000	31.672	29.710	123.152	MWD+IFR1+MS
8200.000	0.000	0.000	7901.135	31.394	0.000	30.627	0.000	15.313	0.000	0.000	31.970	30.025	123.374	MWD+IFR1+MS
8300.000	0.000	0.000	8001.135	31.686	0.000	30.943	0.000	15.531	0.000	0.000	32.265	30.339	123.661	MWD+IFR1+MS
8400.000	0.000	0.000	8101.135	31.984	0.000	31.260	0.000	15.754	0.000	0.000	32.565	30.655	123.860	MWD+IFR1+MS
8500.000	0.000	0.000	8201.135	32.280	0.000	31.578	0.000	15.981	0.000	0.000	32.864	30.970	124.124	MWD+IFR1+MS
8600.000	0.000	0.000	8301.135	32.588	0.000	31.890	0.000	16.208	0.000	0.000	33.169	31.286	124.124	MWD+IFR1+MS
8700.000	0.000	0.000	8401.135	32.879	0.000	32.218	0.000	16.441	0.000	0.000	33.468	31.606	124.607	MWD+IFR1+MS
8800.000	0.000	0.000	8501.135	33.181	0.000	32.527	0.000	16.679	0.000	0.000	33.768	31.917	124.647	MWD+IFR1+MS
8900.000	0.000	0.000	8601.135	33.496	0.000	32.848	0.000	16.917	0.000	0.000	34.081	32.241	124.688	MWD+IFR1+MS
9000.000	0.000	0.000	8701.135	33.793	0.000	33.181	0.000	17.161	0.000	0.000	34.387	32.566	125.170	MWD+IFR1+MS
9100.000	0.000	0.000	8801.135	34.103	0.000	33.496	0.000	17.410	0.000	0.000	34.694	32.884	125.209	MWD+IFR1+MS
9200.000	0.000	0.000	8901.135	34.409	0.000	33.823	0.000	17.658	0.000	0.000	35.003	33.208	125.469	MWD+IFR1+MS
9300.000	0.000	0.000	9001.135	34.713	0.000	34.147	0.000	17.914	0.000	0.000	35.310	33.529	125.728	MWD+IFR1+MS
9400.000	0.000	0.000	9101.135	35.029	0.000	34.467	0.000	18.171	0.000	0.000	35.624	33.852	125.765	MWD+IFR1+MS
9500.000	0.000	0.000	9201.135	35.341	0.000	34.799	0.000	18.431	0.000	0.000	35.939	34.182	126.021	MWD+IFR1+MS
9600.000	0.000	0.000	9301.135	35.651	0.000	35.128	0.000	18.695	0.000	0.000	36.252	34.508	126.277	MWD+IFR1+MS
9700.000	0.000	0.000	9401.135	35.958	0.000	35.454	0.000	18.963	0.000	0.000	36.562	34.831	126.533	MWD+IFR1+MS
9800.000	0.000	0.000	9501.135	36.277	0.000	35.777	0.000	19.235	0.000	0.000	36.879	35.156	126.567	MWD+IFR1+MS
9900.000	0.000	0.000	9601.135	36.592	0.000	36.111	0.000	19.509	0.000	0.000	37.197	35.488	126.821	MWD+IFR1+MS
10000.000	0.000	0.000	9701.135	36.905	0.000	36.442	0.000	19.789	0.000	0.000	37.513	35.816	127.074	MWD+IFR1+MS
10100.000	0.000	0.000	9801.135	37.216	0.000	36.770	0.000	20.070	0.000	0.000	37.826	36.141	127.326	MWD+IFR1+MS
10200.000	0.000	0.000	9901.135	37.537	0.000	37.094	0.000	20.354	0.000	0.000	38.145	36.468	127.356	MWD+IFR1+MS
10300.000	0.000	0.000	10001.135	37.855	0.000	37.430	0.000	20.645	0.000	0.000	38.467	36.801	127.606	MWD+IFR1+MS
10400.000	0.000	0.000	10101.135	38.171	0.000	37.762	0.000	20.936	0.000	0.000	38.785	37.131	127.856	MWD+IFR1+MS
10500.000	0.000	0.000	10201.135	38.484	0.000	38.092	0.000	21.232	0.000	0.000	39.101	37.458	128.104	MWD+IFR1+MS
10600.000	0.000	0.000	10301.135	38.807	0.000	38.419	0.000	21.531	0.000	0.000	39.423	37.787	128.131	MWD+IFR1+MS
10700.000	0.000	0.000	10401.135	39.128	0.000	38.756	0.000	21.833	0.000	0.000	39.747	38.121	128.378	MWD+IFR1+MS
10800.000	0.000	0.000	10501.135	39.446	0.000	39.090	0.000	22.138	0.000	0.000	40.068	38.452	128.624	MWD+IFR1+MS
10900.000	0.000	0.000	10601.135	39.762	0.000	39.421	0.000	22.448	0.000	0.000	40.386	38.781	128.869	MWD+IFR1+MS
11000.000	0.000	0.000	10701.135	40.087	0.000	39.749	0.000	22.760	0.000	0.000	40.710	39.111	128.891	MWD+IFR1+MS
11100.000	0.000	0.000	10801.135	40.410	0.000	40.087	0.000	23.076	0.000	0.000	41.036	39.447	129.134	MWD+IFR1+MS
11200.000	0.000	0.000	10901.135	40.731	0.000	40.423	0.000	23.394	0.000	0.000	41.359	39.780	129.376	MWD+IFR1+MS
11300.000	0.000	0.000	11001.135	41.061	0.000	40.755	0.000	23.717	0.000	0.000	41.687	40.115	129.397	MWD+IFR1+MS
11331.000	0.000	0.000	11033.000	41.158	0.000	40.866	0.000	23.820	0.000	0.000	41.788	40.222	129.615	MWD+IFR1+MS
11400.000	5.505	330.000	11101.030	40.166	0.000	41.816	0.000	24.042	0.000	0.000	42.007	40.489	129.009	MWD+IFR1+MS
11500.000	13.580	330.000	11199.564	40.054	0.000	42.115	0.000	24.397	0.000	0.000	42.483	41.331	115.412	MWD+IFR1+MS
11600.000	21.660	330.000	11294.791	39.789	0.000	42.393	0.000	24.862	0.000	0.000	43.271	42.008	93.328	MWD+IFR1+MS
11700.000	29.740	330.000	11384.820	39.121	0.000	42.637	0.000	25.475	0.000	0.000	44.157	42.381	82.132	MWD+IFR1+MS

11800.000	37.820	330.000	11467.863	38.154	0.000	42.852	0.000	26.270	0.000	0.000	44.940	42.642	77.369	MWD+IFR1+MS
11900.000	45.900	330.000	11542.273	37.013	0.000	43.040	0.000	27.253	0.000	0.000	45.561	42.850	75.104	MWD+IFR1+MS
12000.000	53.980	330.000	11606.572	35.856	0.000	43.183	0.000	28.417	0.000	0.000	46.012	42.999	74.104	MWD+IFR1+MS
12100.000	62.060	330.000	11659.483	34.860	0.000	43.293	0.000	29.730	0.000	0.000	46.317	43.102	73.855	MWD+IFR1+MS
12200.000	70.140	330.000	11699.955	34.199	0.000	43.362	0.000	31.158	0.000	0.000	46.492	43.157	74.084	MWD+IFR1+MS
12300.000	78.220	330.000	11727.185	34.013	0.000	43.399	0.000	32.634	0.000	0.000	46.569	43.178	74.529	MWD+IFR1+MS
12400.000	86.300	330.000	11740.632	34.434	0.000	43.401	0.000	34.147	0.000	0.000	46.598	43.158	75.115	MWD+IFR1+MS
12445.000	90.000	330.000	11742.106	34.380	0.000	43.390	0.000	34.380	0.000	0.000	46.604	43.140	75.319	MWD+IFR1+MS
12500.000	90.000	330.000	11742.106	34.511	0.000	43.374	0.000	34.511	0.000	0.000	46.620	43.111	75.609	MWD+IFR1+MS
12600.000	90.000	330.000	11742.106	34.742	0.000	43.352	0.000	34.742	0.000	0.000	46.641	43.065	76.138	MWD+IFR1+MS
12700.000	90.000	330.000	11742.106	34.986	0.000	43.342	0.000	34.986	0.000	0.000	46.661	43.032	76.683	MWD+IFR1+MS
12800.000	90.000	330.000	11742.106	35.242	0.000	43.348	0.000	35.242	0.000	0.000	46.691	43.011	77.275	MWD+IFR1+MS
12900.000	90.000	330.000	11742.106	35.511	0.000	43.359	0.000	35.511	0.000	0.000	46.719	42.992	77.913	MWD+IFR1+MS
13000.000	90.000	330.000	11742.106	35.805	0.000	43.390	0.000	35.805	0.000	0.000	46.747	42.996	78.532	MWD+IFR1+MS
13100.000	90.000	330.000	11742.106	36.097	0.000	43.428	0.000	36.097	0.000	0.000	46.785	43.002	79.236	MWD+IFR1+MS
13200.000	90.000	330.000	11742.106	36.414	0.000	43.479	0.000	36.414	0.000	0.000	46.823	43.019	79.960	MWD+IFR1+MS
13300.000	90.000	330.000	11742.106	36.756	0.000	43.543	0.000	36.756	0.000	0.000	46.861	43.047	80.714	MWD+IFR1+MS
13400.000	90.000	330.000	11742.106	37.094	0.000	43.613	0.000	37.094	0.000	0.000	46.909	43.076	81.550	MWD+IFR1+MS
13500.000	90.000	330.000	11742.106	37.457	0.000	43.695	0.000	37.457	0.000	0.000	46.958	43.116	82.416	MWD+IFR1+MS
13600.000	90.000	330.000	11742.106	37.829	0.000	43.799	0.000	37.829	0.000	0.000	47.007	43.178	83.304	MWD+IFR1+MS
13700.000	90.000	330.000	11742.106	38.210	0.000	43.901	0.000	38.210	0.000	0.000	47.068	43.227	84.292	MWD+IFR1+MS
13800.000	90.000	330.000	11742.106	38.613	0.000	44.023	0.000	38.613	0.000	0.000	47.131	43.298	85.308	MWD+IFR1+MS
13900.000	90.000	330.000	11742.106	39.013	0.000	44.149	0.000	39.013	0.000	0.000	47.195	43.366	86.392	MWD+IFR1+MS
14000.000	90.000	330.000	11742.106	39.433	0.000	44.295	0.000	39.433	0.000	0.000	47.261	43.455	87.523	MWD+IFR1+MS
14100.000	90.000	330.000	11742.106	39.862	0.000	44.448	0.000	39.862	0.000	0.000	47.341	43.541	88.732	MWD+IFR1+MS
14200.000	90.000	330.000	11742.106	40.311	0.000	44.604	0.000	40.311	0.000	0.000	47.424	43.623	90.006	MWD+IFR1+MS
14300.000	90.000	330.000	11742.106	40.755	0.000	44.783	0.000	40.755	0.000	0.000	47.520	43.724	91.343	MWD+IFR1+MS
14400.000	90.000	330.000	11742.106	41.219	0.000	44.965	0.000	41.219	0.000	0.000	47.621	43.820	92.739	MWD+IFR1+MS
14500.000	90.000	330.000	11742.106	41.689	0.000	45.167	0.000	41.689	0.000	0.000	47.727	43.933	94.212	MWD+IFR1+MS
14600.000	90.000	330.000	11742.106	42.166	0.000	45.363	0.000	42.166	0.000	0.000	47.838	44.029	95.727	MWD+IFR1+MS
14700.000	90.000	330.000	11742.106	42.661	0.000	45.582	0.000	42.661	0.000	0.000	47.966	44.140	97.304	MWD+IFR1+MS
14800.000	90.000	330.000	11742.106	43.151	0.000	45.812	0.000	43.151	0.000	0.000	48.100	44.254	98.940	MWD+IFR1+MS
14900.000	90.000	330.000	11742.106	43.658	0.000	46.047	0.000	43.658	0.000	0.000	48.251	44.361	100.577	MWD+IFR1+MS
15000.000	90.000	330.000	11742.106	44.181	0.000	46.290	0.000	44.181	0.000	0.000	48.400	44.469	102.286	MWD+IFR1+MS
15100.000	90.000	330.000	11742.106	44.699	0.000	46.548	0.000	44.699	0.000	0.000	48.577	44.579	103.962	MWD+IFR1+MS
15200.000	90.000	330.000	11742.106	45.233	0.000	46.815	0.000	45.233	0.000	0.000	48.752	44.690	105.699	MWD+IFR1+MS
15300.000	90.000	330.000	11742.106	45.771	0.000	47.085	0.000	45.771	0.000	0.000	48.946	44.792	107.363	MWD+IFR1+MS
15400.000	90.000	330.000	11742.106	46.314	0.000	47.367	0.000	46.314	0.000	0.000	49.149	44.893	109.039	MWD+IFR1+MS
15500.000	90.000	330.000	11742.106	46.861	0.000	47.658	0.000	46.861	0.000	0.000	49.361	44.994	110.709	MWD+IFR1+MS
15600.000	90.000	330.000	11742.106	47.424	0.000	47.962	0.000	47.424	0.000	0.000	49.592	45.095	112.319	MWD+IFR1+MS
15700.000	90.000	330.000	11742.106	47.990	0.000	48.267	0.000	47.990	0.000	0.000	49.832	45.186	113.859	MWD+IFR1+MS
15800.000	90.000	330.000	11742.106	48.559	0.000	48.589	0.000	48.559	0.000	0.000	50.083	45.285	115.418	MWD+IFR1+MS
15900.000	90.000	330.000	11742.106	49.132	0.000	48.915	0.000	49.132	0.000	0.000	50.350	45.375	116.847	MWD+IFR1+MS
16000.000	90.000	330.000	11742.106	49.709	0.000	49.250	0.000	49.709	0.000	0.000	50.627	45.464	118.238	MWD+IFR1+MS
16100.000	90.000	330.000	11742.106	50.299	0.000	49.587	0.000	50.299	0.000	0.000	50.910	45.543	119.543	MWD+IFR1+MS
16200.000	90.000	330.000	11742.106	50.892	0.000	49.939	0.000	50.892	0.000	0.000	51.206	45.628	120.854	MWD+IFR1+MS
16300.000	90.000	330.000	11742.106	51.488	0.000	50.295	0.000	51.488	0.000	0.000	51.515	45.707	122.031	MWD+IFR1+MS
16400.000	90.000	330.000	11742.106	52.096	0.000	50.662	0.000	52.096	0.000	0.000	51.840	45.788	123.123	MWD+IFR1+MS
16500.000	90.000	330.000	11742.106	52.697	0.000	51.035	0.000	52.697	0.000	0.000	52.167	45.865	124.222	MWD+IFR1+MS
16600.000	90.000	330.000	11742.106	53.310	0.000	51.418	0.000	53.310	0.000	0.000	52.509	45.944	125.239	MWD+IFR1+MS
16700.000	90.000	330.000	11742.106	53.935	0.000	51.801	0.000	53.935	0.000	0.000	52.856	46.014	126.179	MWD+IFR1+MS
16800.000	90.000	330.000	11742.106	54.553	0.000	52.196	0.000	54.553	0.000	0.000	53.217	46.086	127.050	MWD+IFR1+MS
16900.000	90.000	330.000	11742.106	55.172	0.000	52.597	0.000	55.172	0.000	0.000	53.585	46.159	127.888	MWD+IFR1+MS

17000.000	90.000	330.000	11742.106	55.803	0.000	53.005	0.000	55.803	0.000	0.000	53.960	46.231	128.698	MWD+IFR1+MS
17100.000	90.000	330.000	11742.106	56.436	0.000	53.420	0.000	56.436	0.000	0.000	54.343	46.301	129.480	MWD+IFR1+MS
17200.000	90.000	330.000	11742.106	57.079	0.000	53.838	0.000	57.079	0.000	0.000	54.735	46.369	130.167	MWD+IFR1+MS
17300.000	90.000	330.000	11742.106	57.715	0.000	54.263	0.000	57.715	0.000	0.000	55.133	46.436	130.834	MWD+IFR1+MS
17400.000	90.000	330.000	11742.106	58.361	0.000	54.697	0.000	58.361	0.000	0.000	55.544	46.507	131.450	MWD+IFR1+MS
17500.000	90.000	330.000	11742.106	59.008	0.000	55.137	0.000	59.008	0.000	0.000	55.960	46.577	132.047	MWD+IFR1+MS
17600.000	90.000	330.000	11742.106	59.657	0.000	55.577	0.000	59.657	0.000	0.000	56.379	46.642	132.598	MWD+IFR1+MS
17700.000	90.000	330.000	11742.106	60.316	0.000	56.023	0.000	60.316	0.000	0.000	56.803	46.705	133.135	MWD+IFR1+MS
17800.000	90.000	330.000	11742.106	60.967	0.000	56.479	0.000	60.967	0.000	0.000	57.239	46.773	133.631	MWD+IFR1+MS
17900.000	90.000	330.000	11742.106	61.628	0.000	56.939	0.000	61.628	0.000	0.000	57.680	46.840	134.115	MWD+IFR1+MS
18000.000	90.000	330.000	11742.106	62.290	0.000	57.406	0.000	62.290	0.000	0.000	58.126	46.908	134.587	MWD+IFR1+MS
18100.000	90.000	330.000	11742.106	62.960	0.000	57.874	0.000	62.960	0.000	0.000	58.578	46.974	135.000	MWD+IFR1+MS
18200.000	90.000	330.000	11742.106	63.624	0.000	58.348	0.000	63.624	0.000	0.000	59.036	47.040	-44.595	MWD+IFR1+MS
18300.000	90.000	330.000	11742.106	64.296	0.000	58.827	0.000	64.296	0.000	0.000	59.498	47.106	-44.198	MWD+IFR1+MS
18400.000	90.000	330.000	11742.106	64.969	0.000	59.313	0.000	64.969	0.000	0.000	59.970	47.177	-43.829	MWD+IFR1+MS
18500.000	90.000	330.000	11742.106	65.651	0.000	59.799	0.000	65.651	0.000	0.000	60.442	47.241	-43.488	MWD+IFR1+MS
18600.000	90.000	330.000	11742.106	66.325	0.000	60.296	0.000	66.325	0.000	0.000	60.923	47.311	-43.132	MWD+IFR1+MS
18700.000	90.000	330.000	11742.106	67.007	0.000	60.794	0.000	67.007	0.000	0.000	61.409	47.381	-42.820	MWD+IFR1+MS
18800.000	90.000	330.000	11742.106	67.690	0.000	61.297	0.000	67.690	0.000	0.000	61.899	47.450	-42.513	MWD+IFR1+MS
18900.000	90.000	330.000	11742.106	68.374	0.000	61.798	0.000	68.374	0.000	0.000	62.389	47.515	-42.227	MWD+IFR1+MS
19000.000	90.000	330.000	11742.106	69.065	0.000	62.313	0.000	69.065	0.000	0.000	62.891	47.589	-41.944	MWD+IFR1+MS
19100.000	90.000	330.000	11742.106	69.750	0.000	62.825	0.000	69.750	0.000	0.000	63.393	47.659	-41.681	MWD+IFR1+MS
19200.000	90.000	330.000	11742.106	70.441	0.000	63.343	0.000	70.441	0.000	0.000	63.899	47.728	-41.420	MWD+IFR1+MS
19300.000	90.000	330.000	11742.106	71.141	0.000	63.865	0.000	71.141	0.000	0.000	64.409	47.796	-41.162	MWD+IFR1+MS
19400.000	90.000	330.000	11742.106	71.833	0.000	64.387	0.000	71.833	0.000	0.000	64.922	47.866	-40.936	MWD+IFR1+MS
19500.000	90.000	330.000	11742.106	72.533	0.000	64.919	0.000	72.533	0.000	0.000	65.444	47.939	-40.697	MWD+IFR1+MS
19600.000	90.000	330.000	11742.106	73.226	0.000	65.448	0.000	73.226	0.000	0.000	65.963	48.019	-40.485	MWD+IFR1+MS
19700.000	90.000	330.000	11742.106	73.932	0.000	65.986	0.000	73.932	0.000	0.000	66.493	48.091	-40.278	MWD+IFR1+MS
19800.000	90.000	330.000	11742.106	74.632	0.000	66.520	0.000	74.632	0.000	0.000	67.018	48.162	-40.082	MWD+IFR1+MS
19900.000	90.000	330.000	11742.106	75.333	0.000	67.067	0.000	75.333	0.000	0.000	67.556	48.230	-39.877	MWD+IFR1+MS
20000.000	90.000	330.000	11742.106	76.039	0.000	67.605	0.000	76.039	0.000	0.000	68.086	48.315	-39.692	MWD+IFR1+MS
20100.000	90.000	330.000	11742.106	76.746	0.000	68.157	0.000	76.746	0.000	0.000	68.631	48.382	-39.513	MWD+IFR1+MS
20200.000	90.000	330.000	11742.106	77.453	0.000	68.712	0.000	77.453	0.000	0.000	69.179	48.460	-39.345	MWD+IFR1+MS
20300.000	90.000	330.000	11742.106	78.166	0.000	69.267	0.000	78.166	0.000	0.000	69.724	48.534	-39.163	MWD+IFR1+MS
20400.000	90.000	330.000	11742.106	78.880	0.000	69.818	0.000	78.880	0.000	0.000	70.268	48.615	-39.002	MWD+IFR1+MS
20500.000	90.000	330.000	11742.106	79.593	0.000	70.379	0.000	79.593	0.000	0.000	70.822	48.695	-38.854	MWD+IFR1+MS
20600.000	90.000	330.000	11742.106	80.306	0.000	70.946	0.000	80.306	0.000	0.000	71.384	48.768	-38.708	MWD+IFR1+MS
20700.000	90.000	330.000	11742.106	81.019	0.000	71.508	0.000	81.019	0.000	0.000	71.938	48.856	-38.555	MWD+IFR1+MS
20800.000	90.000	330.000	11742.106	81.737	0.000	72.083	0.000	81.737	0.000	0.000	72.507	48.926	-38.409	MWD+IFR1+MS
20900.000	90.000	330.000	11742.106	82.456	0.000	72.649	0.000	82.456	0.000	0.000	73.067	49.013	-38.275	MWD+IFR1+MS
21000.000	90.000	330.000	11742.106	83.175	0.000	73.222	0.000	83.175	0.000	0.000	73.634	49.092	-38.143	MWD+IFR1+MS
21100.000	90.000	330.000	11742.106	83.893	0.000	73.796	0.000	83.893	0.000	0.000	74.201	49.176	-38.009	MWD+IFR1+MS
21200.000	90.000	330.000	11742.106	84.617	0.000	74.377	0.000	84.617	0.000	0.000	74.777	49.259	-37.885	MWD+IFR1+MS
21300.000	90.000	330.000	11742.106	85.340	0.000	74.954	0.000	85.340	0.000	0.000	75.348	49.342	-37.768	MWD+IFR1+MS
21400.000	90.000	330.000	11742.106	86.064	0.000	75.538	0.000	86.064	0.000	0.000	75.927	49.418	-37.651	MWD+IFR1+MS
21500.000	90.000	330.000	11742.106	86.787	0.000	76.123	0.000	86.787	0.000	0.000	76.507	49.504	-37.541	MWD+IFR1+MS
21600.000	90.000	330.000	11742.106	87.510	0.000	76.707	0.000	87.510	0.000	0.000	77.085	49.587	-37.419	MWD+IFR1+MS
21700.000	90.000	330.000	11742.106	88.238	0.000	77.301	0.000	88.238	0.000	0.000	77.674	49.676	-37.315	MWD+IFR1+MS
21800.000	90.000	330.000	11742.106	88.966	0.000	77.888	0.000	88.966	0.000	0.000	78.256	49.759	-37.209	MWD+IFR1+MS
21900.000	90.000	330.000	11742.106	89.694	0.000	78.483	0.000	89.694	0.000	0.000	78.847	49.841	-37.111	MWD+IFR1+MS
22000.000	90.000	330.000	11742.106	90.427	0.000	79.078	0.000	90.427	0.000	0.000	79.437	49.927	-37.010	MWD+IFR1+MS
22100.000	90.000	330.000	11742.106	91.154	0.000	79.675	0.000	91.154	0.000	0.000	80.030	50.023	-36.913	MWD+IFR1+MS
22200.000	90.000	330.000	11742.106	91.886	0.000	80.278	0.000	91.886	0.000	0.000	80.628	50.112	-36.818	MWD+IFR1+MS

22300.000	90.000	330.000	11742.106	92.617	0.000	80.876	0.000	92.617	0.000	0.000	81.221	50.201	-36.727	MWD+IFR1+MS
22400.000	90.000	330.000	11742.106	93.354	0.000	81.480	0.000	93.354	0.000	0.000	81.821	50.283	-36.637	MWD+IFR1+MS
22500.000	90.000	330.000	11742.106	94.085	0.000	82.085	0.000	94.085	0.000	0.000	82.422	50.375	-36.551	MWD+IFR1+MS
22600.000	90.000	330.000	11742.106	94.821	0.000	82.691	0.000	94.821	0.000	0.000	83.023	50.470	-36.462	MWD+IFR1+MS
22700.000	90.000	330.000	11742.106	95.556	0.000	83.298	0.000	95.556	0.000	0.000	83.627	50.562	-36.387	MWD+IFR1+MS
22800.000	90.000	330.000	11742.106	96.291	0.000	83.906	0.000	96.291	0.000	0.000	84.231	50.657	-36.309	MWD+IFR1+MS
22900.000	90.000	330.000	11742.106	97.031	0.000	84.519	0.000	97.031	0.000	0.000	84.841	50.745	-36.231	MWD+IFR1+MS
23000.000	90.000	330.000	11742.106	97.770	0.000	85.132	0.000	97.770	0.000	0.000	85.450	50.837	-36.151	MWD+IFR1+MS
23100.000	90.000	330.000	11742.106	98.509	0.000	85.746	0.000	98.509	0.000	0.000	86.060	50.938	-36.074	MWD+IFR1+MS
23200.000	90.000	330.000	11742.106	99.247	0.000	86.361	0.000	99.247	0.000	0.000	86.672	51.029	-36.004	MWD+IFR1+MS
23300.000	90.000	330.000	11742.106	99.985	0.000	86.976	0.000	99.985	0.000	0.000	87.283	51.124	-35.931	MWD+IFR1+MS
23323.000	90.000	330.000	11750.000	100.150	0.000	87.122	0.000	100.150	0.000	0.000	87.429	51.159	-35.918	MWD+IFR1+MS
23400.000	90.000	330.000	11750.000	100.698	0.000	87.594	0.000	100.698	0.000	0.000	87.898	51.234	-35.866	MWD+IFR1+MS
23423.000	90.000	330.000	11750.000	100.896	0.000	87.738	0.000	100.896	0.000	0.000	88.040	51.263	-35.848	MWD+IFR1+MS

Plan Targets	PLU 29-20 BS 103H				
	Measured Depth	**Grid Northing**	**Grid Easting**	**TVD MSL**	**Target Shape**
Target Name	**(ft)**	**(ft)**	**(ft)**	**(ft)**	
Slant KOP 19	11331.86	401343.33	664953.97	7663.00	CIRCLE
Slant FTP 19	12456.14	401964.24	664595.49	8380.00	CIRCLE
Slant LTP 19	23324.52	411377.62	659160.67	8380.00	CIRCLE
Slant BHL 19	23423.21	411464.22	659110.67	8380.00	CIRCLE

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**XTO Permian Operating, LLC**
LEASE NO.:	**NMLC-062140A**
WELL NAME & NO.:	**Poker Lake Unit 29-20 BS 103H**
SURFACE HOLE FOOTAGE:	**0537' FNL & 2604' FEL**
BOTTOM HOLE FOOTAGE	**2671' FNL & 1886' FWL Sec. 18, T.25 S., R.31 E.**
LOCATION:	**Section 29, T.25 S., R.31 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

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

Medium Cave/Karst
Possibility of water flows in the Salado and Castile.
Possibility of lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressure may be encountered in the 3rd Bone Spring and all subsequent formations.

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 **1230** 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.

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

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

    - Cement as proposed. Report Echo meter results on subsequent sundry. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

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.

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

C. PRESSURE CONTROL

1. 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.

BOP Break Testing Variance

- Shelll testing is not approved for any portion of the hole with a MASP of 5000 psi or greater.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOP Break Testing operations.
- A full BOP test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOP test will be required.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

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

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 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.

3. 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.

4. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

5. 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.

6. 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.

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.

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. 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).

c. 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.

d. The results of the test shall be reported to the appropriate BLM office.

e. 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.

f. 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.

g. 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.

JAM 01192022

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 120988

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 120988
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
kpickford	• NSP Will require administrative order for non-standard spacing unit	7/5/2022
kpickford	Adhere to previous NMOCD Conditions of Approval	7/5/2022