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: 124H	**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: 3001549116	**Well Status:** Approved Application for Permit to Drill	**Operator:** XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2652927

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 01/18/2022

Time Sundry Submitted: 07:49

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 & 2010'FWL to 2666'FNL & 1300'FWL, Section 18-25S-31E 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_124H_NOI_Attachments_20220118074938.pdf

Well Name: POKER LAKE UNIT 29-20 BS

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

County or Parish/State:

Well Number: 124H

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: 3001549116

Well Status: Approved Application for Permit to Drill

Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Specialist Review

Conditions_of_Approval_20220119063452.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 07:49 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 / 2634 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107084 / LONG: -103.800215 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 2310 FSL / 2010 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110381 / LONG: -103.802384 (TVD: 12411 feet, MD: 15684 feet)

PPP: NENW / 2310 FNL / 2010 FWL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107084 / LONG: -103.8000215 (TVD: 12411 feet, MD: 14364 feet)

PPP: SENW / 2310 FNL / 2010 FWL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102207 / LONG: -103.802394 (TVD: 12411 feet, MD: 13044 feet)

BHL: NENW / 50 FNL / 2010 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.123002 / LONG: -103.802205 (TVD: 12441 feet, MD: 20609 feet)

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

XTO Energy Inc.
PLU 29-20 BS 124H
Projected TD: 23237' MD / 11495' TVD
SHL: 537' FNL & 2634' FEL , Section 29, T25S, R31E
BHL: 2666' FNL & 1300' 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
Target/Land Curve	11519'	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 10946' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23237 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 10646 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	1.27	5.47	15.16
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.18	2.65	1.72
8.75	4000' – 10946'	7.625	29.7	HC L-80	Flush Joint	New	1.58	1.83	1.97
6.75	0' – 10846'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.24	1.97
6.75	10846' - 11500'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.11	5.01
6.75	11500' - 23237'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.12	5.73

· 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 +/- 10946'
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: 410 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 +/- 23237'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10646 feet
Tail: 860 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 11146 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 4345 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' - 10946'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
10946' - 23237'	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 6874 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- 49116	98220	Purple Sage; Wolfcamp (Gas)

[4] Property Code	[5] Property Name	[6] Well Number
	POKER LAKE UNIT 29-20 BS	124H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,368'

[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	2,634	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
2	18	25 S	31 E		2,666	NORTH	1,300	WEST	EDDY

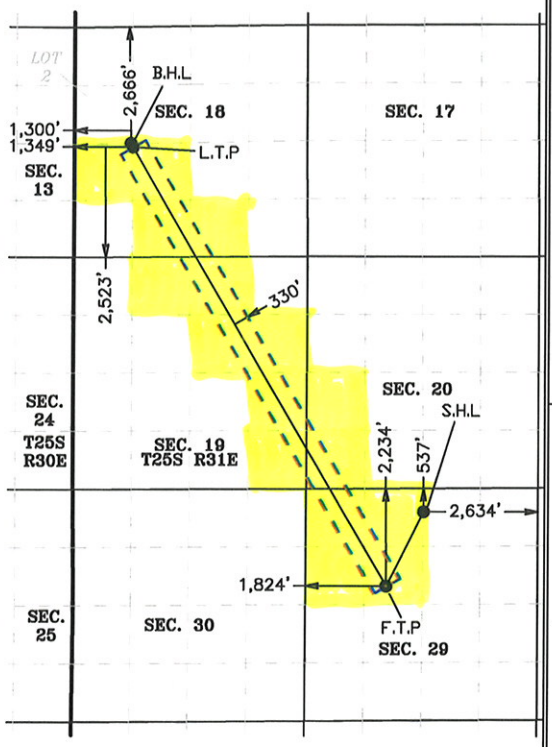
[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
40			

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

LOT ACREAGE TABLE
SECTION 18
LOT 2 – 40.46 ACRES

SHL (NAD83 NME)		LTP (NAD83 NME)	
Y =	403,101.6	Y =	411,434.6
X =	706,406.6	X =	699,760.4
LAT. =	32.107084 °N	LAT. =	32.130078 °N
LONG. =	103.800215 °W	LONG. =	103.821551 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	401,399.3	Y =	411,520.5
X =	705,554.8	X =	699,710.8
LAT. =	32.102416 °N	LAT. =	32.130315 °N
LONG. =	103.802993 °W	LONG. =	103.821710 °W
SHL (NAD27 NME)		**LTP (NAD27 NME)**	
Y =	403,043.7	Y =	411,376.4
X =	665,221.0	X =	658,575.4
LAT. =	32.106959 °N	LAT. =	32.129954 °N
LONG. =	103.799736 °W	LONG. =	103.821070 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	401,341.4	Y =	411,462.3
X =	664,369.1	X =	658,525.8
LAT. =	32.102291 °N	LAT. =	32.130191 °N
LONG. =	103.802514 °W	LONG. =	103.821229 °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 11/01/2021
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 NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number LM/AI 2019082887

P:\PROJECTS\2019\2019082887-XTO-POKER_LAKE_UNIT_29-20_BS_124H-EDDY\DWG\2019082887-XTO-POKER_LAKE_UNIT_29-20_BS_124H_C-102_UPDATED.dwg, Letter

Well Plan Report - PLU 29-20 BS 124H

Measured Depth:	23237.00 ft	**Site:**	PLU 29-20 Big Sinks Pad B
TVD RKB:	11495.00 ft	**Slot:**	21
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403040.70 ft		
Easting:	665219.40 ft		
RKB:	3370.00 ft		
Ground Level:	3340.00 ft		
North Reference:	Grid		
Convergence Angle:	0.28 Deg		

Plan Sections PLU 29-20 BS 124H

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	
2697.74	23.95	206.58	2663.15	-220.67	-110.43	2.00	0.00	2.00	
6170.57	23.95	206.58	5836.85	-1481.61	-741.45	0.00	0.00	0.00	
7368.31	0.00	0.00	7000.00	-1702.28	-851.88	-2.00	0.00	2.00	
11146.31	0.00	0.00	10778.00	-1702.28	-851.88	0.00	0.00	0.00	Slant KOP 21
12260.17	90.00	330.00	11487.11	-1088.17	-1206.43	8.08	0.00	8.08	Slant FTP 21
23137.66	90.00	330.00	11495.00	8332.01	-6645.18	0.00	0.00	0.00	Slant LTP 21
23237.66	90.00	330.00	11495.00	8418.61	-6695.18	0.00	0.00	0.00	Slant BHL 21

Position Uncertainty PLU 29-20 BS 124H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Highside Bias (ft)	Lateral Error (ft)	Lateral Bias (ft)	Vertical Error (ft)	Vertical 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	206.500	1599.980	6.519	-0.000	5.811	0.000	2.939	0.000	0.000	6.603	5.719	134.658	MWD+IFR1+MS
1700.000	4.000	206.500	1699.838	7.186	-0.000	6.163	0.000	3.015	0.000	0.000	7.296	6.047	133.417	MWD+IFR1+MS
1800.000	6.000	206.500	1799.452	7.803	-0.000	6.515	0.000	3.098	0.000	0.000	7.943	6.378	132.811	MWD+IFR1+MS
1900.000	7.999	206.500	1898.702	8.381	-0.000	6.868	0.000	3.187	0.000	0.000	8.554	6.711	132.481	MWD+IFR1+MS
2000.000	10.000	206.500	1997.465	8.925	-0.000	7.222	0.000	3.288	0.000	0.000	9.135	7.047	132.266	MWD+IFR1+MS
2100.000	11.990	206.500	2095.623	9.442	-0.000	7.577	0.000	3.399	0.000	0.000	9.692	7.385	132.145	MWD+IFR1+MS
2200.000	14.000	206.500	2193.055	9.933	-0.000	7.932	0.000	3.524	0.000	0.000	10.227	7.725	132.061	MWD+IFR1+MS
2300.000	15.990	206.500	2289.643	10.403	-0.000	8.289	0.000	3.662	0.000	0.000	10.744	8.069	132.024	MWD+IFR1+MS
2400.000	18.000	206.500	2385.268	10.852	-0.000	8.648	0.000	3.817	0.000	0.000	11.244	8.414	132.018	MWD+IFR1+MS
2500.000	19.990	206.500	2479.816	11.283	-0.000	9.007	0.000	3.987	0.000	0.000	11.727	8.762	132.025	MWD+IFR1+MS
2600.000	22.000	206.500	2573.169	11.697	-0.000	9.371	0.000	4.176	0.000	0.000	12.199	9.115	132.075	MWD+IFR1+MS
2697.700	23.950	206.500	2663.152	12.081	-0.000	9.727	0.000	4.374	0.000	0.000	12.640	9.462	132.099	MWD+IFR1+MS
2700.000	23.950	206.500	2665.215	12.087	-0.000	9.736	0.000	4.370	0.000	0.000	12.649	9.472	132.101	MWD+IFR1+MS
2800.000	23.950	206.500	2756.602	12.380	-0.000	10.095	0.000	4.506	0.000	0.000	12.916	9.837	132.215	MWD+IFR1+MS
2900.000	23.950	206.500	2847.988	12.690	-0.000	10.470	0.000	4.653	0.000	0.000	13.203	10.211	132.543	MWD+IFR1+MS
3000.000	23.950	206.500	2939.375	13.010	-0.000	10.851	0.000	4.807	0.000	0.000	13.499	10.591	132.872	MWD+IFR1+MS
3100.000	23.950	206.500	3030.761	13.336	-0.000	11.232	0.000	4.968	0.000	0.000	13.800	10.971	133.200	MWD+IFR1+MS
3200.000	23.950	206.500	3122.148	13.672	-0.000	11.618	0.000	5.134	0.000	0.000	14.108	11.356	133.528	MWD+IFR1+MS
3300.000	23.950	206.500	3213.534	14.015	-0.000	12.005	0.000	5.306	0.000	0.000	14.422	11.743	133.815	MWD+IFR1+MS
3400.000	23.950	206.500	3304.921	14.365	-0.000	12.395	0.000	5.483	0.000	0.000	14.743	12.134	134.101	MWD+IFR1+MS
3500.000	23.950	206.500	3396.308	14.720	-0.000	12.786	0.000	5.664	0.000	0.000	15.068	12.524	134.388	MWD+IFR1+MS
3600.000	23.950	206.500	3487.694	15.080	-0.000	13.180	0.000	5.850	0.000	0.000	15.397	12.917	134.714	MWD+IFR1+MS
3700.000	23.950	206.500	3579.081	15.445	-0.000	13.576	0.000	6.040	0.000	0.000	15.732	13.312	-44.959	MWD+IFR1+MS
3800.000	23.950	206.500	3670.467	15.816	-0.000	13.974	0.000	6.233	0.000	0.000	16.071	13.709	-44.674	MWD+IFR1+MS
3900.000	23.950	206.500	3761.854	16.193	-0.000	14.373	0.000	6.430	0.000	0.000	16.415	14.109	-44.390	MWD+IFR1+MS
4000.000	23.950	206.500	3853.240	16.573	-0.000	14.775	0.000	6.630	0.000	0.000	16.763	14.509	-44.065	MWD+IFR1+MS
4100.000	23.950	206.500	3944.627	16.957	-0.000	15.177	0.000	6.834	0.000	0.000	17.114	14.910	-43.782	MWD+IFR1+MS
4200.000	23.950	206.500	4036.014	17.343	-0.000	15.578	0.000	7.041	0.000	0.000	17.466	15.311	-43.499	MWD+IFR1+MS
4300.000	23.950	206.500	4127.400	17.734	-0.000	15.982	0.000	7.251	0.000	0.000	17.824	15.714	-43.217	MWD+IFR1+MS
4400.000	23.950	206.500	4218.787	18.129	-0.000	16.388	0.000	7.463	0.000	0.000	18.185	16.119	-42.937	MWD+IFR1+MS
4500.000	23.950	206.500	4310.173	18.525	-0.000	16.793	0.000	7.677	0.000	0.000	18.547	16.523	-42.657	MWD+IFR1+MS
4600.000	23.950	206.500	4401.560	18.925	-0.000	17.200	0.000	7.895	0.000	0.000	18.913	16.929	-42.378	MWD+IFR1+MS
4700.000	23.950	206.500	4492.946	19.329	-0.000	17.608	0.000	8.114	0.000	0.000	19.283	17.337	-42.101	MWD+IFR1+MS
4800.000	23.950	206.500	4584.333	19.733	-0.000	18.016	0.000	8.337	0.000	0.000	19.653	17.744	-41.824	MWD+IFR1+MS
4900.000	23.950	206.500	4675.720	20.140	-0.000	18.424	0.000	8.561	0.000	0.000	20.026	18.151	-41.588	MWD+IFR1+MS
5000.000	23.950	206.500	4767.106	20.551	-0.000	18.835	0.000	8.788	0.000	0.000	20.402	18.562	-41.315	MWD+IFR1+MS
5100.000	23.950	206.500	4858.493	20.962	-0.000	19.244	0.000	9.017	0.000	0.000	20.778	18.970	-41.082	MWD+IFR1+MS
5200.000	23.950	206.500	4949.879	21.376	-0.000	19.655	0.000	9.248	0.000	0.000	21.159	19.381	-40.811	MWD+IFR1+MS
5300.000	23.950	206.500	5041.266	21.792	-0.000	20.067	0.000	9.481	0.000	0.000	21.540	19.792	-40.580	MWD+IFR1+MS
5400.000	23.950	206.500	5132.652	22.208	-0.000	20.477	0.000	9.716	0.000	0.000	21.922	20.202	-40.352	MWD+IFR1+MS
5500.000	23.950	206.500	5224.039	22.626	-0.000	20.891	0.000	9.953	0.000	0.000	22.307	20.615	-40.086	MWD+IFR1+MS
5600.000	23.950	206.500	5315.426	23.046	-0.000	21.302	0.000	10.188	0.000	0.000	22.692	21.025	-39.862	MWD+IFR1+MS
5700.000	23.950	206.500	5406.812	23.469	-0.000	21.717	0.000	10.431	0.000	0.000	23.081	21.440	-39.637	MWD+IFR1+MS
5800.000	23.950	206.500	5498.199	23.892	-0.000	22.130	0.000	10.672	0.000	0.000	23.470	21.853	-39.416	MWD+IFR1+MS
5900.000	23.950	206.500	5589.585	24.316	-0.000	22.543	0.000	10.918	0.000	0.000	23.860	22.265	-39.197	MWD+IFR1+MS
6000.000	23.950	206.500	5680.972	24.742	-0.000	22.957	0.000	11.162	0.000	0.000	24.252	22.679	-39.016	MWD+IFR1+MS
6100.000	23.950	206.500	5772.358	25.169	-0.000	23.372	0.000	11.415	0.000	0.000	24.645	23.094	-38.800	MWD+IFR1+MS
6170.500	23.950	206.500	5836.848	25.469	-0.000	23.663	0.000	11.589	0.000	0.000	24.920	23.386	-38.725	MWD+IFR1+MS
6200.000	23.360	206.500	5863.806	25.619	-0.000	23.783	0.000	11.662	0.000	0.000	25.033	23.507	-38.684	MWD+IFR1+MS
6300.000	21.360	206.500	5956.278	26.151	-0.000	24.189	0.000	11.921	0.000	0.000	25.454	23.916	-38.954	MWD+IFR1+MS
6400.000	19.360	206.500	6050.022	26.700	-0.000	24.591	0.000	12.186	0.000	0.000	25.926	24.320	-39.569	MWD+IFR1+MS
6500.000	17.360	206.500	6144.924	27.208	-0.000	24.989	0.000	12.434	0.000	0.000	26.394	24.717	-40.095	MWD+IFR1+MS
6600.000	15.360	206.500	6240.867	27.675	-0.000	25.379	0.000	12.673	0.000	0.000	26.856	25.107	-40.632	MWD+IFR1+MS

6700.000	13.360	206.500	6337.735	28.099	-0.000	25.760	0.000	12.896	0.000	0.000	27.310	25.489	-41.146	MWD+IFR1+MS
6800.000	11.360	206.500	6435.410	28.479	-0.000	26.133	0.000	13.111	0.000	0.000	27.756	25.862	-41.607	MWD+IFR1+MS
6900.000	9.366	206.500	6533.772	28.816	-0.000	26.498	0.000	13.315	0.000	0.000	28.192	26.226	-41.997	MWD+IFR1+MS
7000.000	7.366	206.500	6632.703	29.110	-0.000	26.854	0.000	13.513	0.000	0.000	28.618	26.580	-42.373	MWD+IFR1+MS
7100.000	5.366	206.500	6732.082	29.361	-0.000	27.201	0.000	13.704	0.000	0.000	29.033	26.926	-42.690	MWD+IFR1+MS
7200.000	3.366	206.500	6831.786	29.569	-0.000	27.539	0.000	13.889	0.000	0.000	29.436	27.262	-42.930	MWD+IFR1+MS
7300.000	1.366	206.500	6931.696	29.734	-0.000	27.868	0.000	14.068	0.000	0.000	29.827	27.587	-43.149	MWD+IFR1+MS
7368.300	0.000	0.000	7000.000	28.853	0.000	29.005	0.000	14.188	0.000	0.000	30.017	27.799	-43.033	MWD+IFR1+MS
7400.000	0.000	0.000	7031.690	28.943	0.000	29.095	0.000	14.244	0.000	0.000	30.103	27.893	-43.031	MWD+IFR1+MS
7500.000	0.000	0.000	7131.690	29.223	0.000	29.385	0.000	14.422	0.000	0.000	30.375	28.193	-42.869	MWD+IFR1+MS
7600.000	0.000	0.000	7231.690	29.509	0.000	29.680	0.000	14.605	0.000	0.000	30.657	28.493	-42.736	MWD+IFR1+MS
7700.000	0.000	0.000	7331.690	29.798	0.000	29.977	0.000	14.792	0.000	0.000	30.940	28.796	-42.604	MWD+IFR1+MS
7800.000	0.000	0.000	7431.690	30.087	0.000	30.274	0.000	14.983	0.000	0.000	31.224	29.099	-42.472	MWD+IFR1+MS
7900.000	0.000	0.000	7531.690	30.378	0.000	30.573	0.000	15.176	0.000	0.000	31.511	29.404	-42.340	MWD+IFR1+MS
8000.000	0.000	0.000	7631.690	30.669	0.000	30.872	0.000	15.375	0.000	0.000	31.798	29.709	-42.208	MWD+IFR1+MS
8100.000	0.000	0.000	7731.690	30.963	0.000	31.174	0.000	15.576	0.000	0.000	32.087	30.016	-42.077	MWD+IFR1+MS
8200.000	0.000	0.000	7831.690	31.257	0.000	31.477	0.000	15.780	0.000	0.000	32.377	30.324	-41.924	MWD+IFR1+MS
8300.000	0.000	0.000	7931.690	31.553	0.000	31.780	0.000	15.987	0.000	0.000	32.669	30.632	-41.793	MWD+IFR1+MS
8400.000	0.000	0.000	8031.690	31.843	0.000	32.078	0.000	16.199	0.000	0.000	32.955	30.935	-41.663	MWD+IFR1+MS
8500.000	0.000	0.000	8131.690	32.140	0.000	32.388	0.000	16.416	0.000	0.000	33.251	31.247	-41.444	MWD+IFR1+MS
8600.000	0.000	0.000	8231.690	32.450	0.000	32.696	0.000	16.634	0.000	0.000	33.551	31.565	-41.446	MWD+IFR1+MS
8700.000	0.000	0.000	8331.690	32.741	0.000	33.000	0.000	16.858	0.000	0.000	33.842	31.871	-41.229	MWD+IFR1+MS
8800.000	0.000	0.000	8431.690	33.045	0.000	33.302	0.000	17.085	0.000	0.000	34.136	32.182	-41.231	MWD+IFR1+MS
8900.000	0.000	0.000	8531.690	33.347	0.000	33.615	0.000	17.315	0.000	0.000	34.437	32.498	-41.015	MWD+IFR1+MS
9000.000	0.000	0.000	8631.690	33.660	0.000	33.926	0.000	17.550	0.000	0.000	34.741	32.819	-41.017	MWD+IFR1+MS
9100.000	0.000	0.000	8731.690	33.956	0.000	34.249	0.000	17.788	0.000	0.000	35.044	33.134	-40.583	MWD+IFR1+MS
9200.000	0.000	0.000	8831.690	34.264	0.000	34.554	0.000	18.028	0.000	0.000	35.343	33.449	-40.586	MWD+IFR1+MS
9300.000	0.000	0.000	8931.690	34.569	0.000	34.871	0.000	18.273	0.000	0.000	35.648	33.767	-40.372	MWD+IFR1+MS
9400.000	0.000	0.000	9031.690	34.886	0.000	35.185	0.000	18.520	0.000	0.000	35.956	34.091	-40.375	MWD+IFR1+MS
9500.000	0.000	0.000	9131.690	35.185	0.000	35.496	0.000	18.772	0.000	0.000	36.255	34.403	-40.162	MWD+IFR1+MS
9600.000	0.000	0.000	9231.690	35.496	0.000	35.819	0.000	19.029	0.000	0.000	36.566	34.727	-39.949	MWD+IFR1+MS
9700.000	0.000	0.000	9331.690	35.819	0.000	36.139	0.000	19.287	0.000	0.000	36.880	35.056	-39.952	MWD+IFR1+MS
9800.000	0.000	0.000	9431.690	36.125	0.000	36.455	0.000	19.552	0.000	0.000	37.185	35.373	-39.740	MWD+IFR1+MS
9900.000	0.000	0.000	9531.690	36.442	0.000	36.770	0.000	19.817	0.000	0.000	37.494	35.696	-39.743	MWD+IFR1+MS
10000.000	0.000	0.000	9631.690	36.756	0.000	37.094	0.000	20.087	0.000	0.000	37.807	36.022	-39.533	MWD+IFR1+MS
10100.000	0.000	0.000	9731.690	37.068	0.000	37.403	0.000	20.362	0.000	0.000	38.111	36.340	-39.535	MWD+IFR1+MS
10200.000	0.000	0.000	9831.690	37.376	0.000	37.723	0.000	20.637	0.000	0.000	38.420	36.660	-39.326	MWD+IFR1+MS
10300.000	0.000	0.000	9931.690	37.696	0.000	38.053	0.000	20.919	0.000	0.000	38.739	36.991	-39.117	MWD+IFR1+MS
10400.000	0.000	0.000	10031.690	38.013	0.000	38.367	0.000	21.204	0.000	0.000	39.048	37.313	-39.119	MWD+IFR1+MS
10500.000	0.000	0.000	10131.690	38.328	0.000	38.691	0.000	21.492	0.000	0.000	39.362	37.638	-38.913	MWD+IFR1+MS
10600.000	0.000	0.000	10231.690	38.652	0.000	39.013	0.000	21.783	0.000	0.000	39.679	37.968	-38.916	MWD+IFR1+MS
10700.000	0.000	0.000	10331.690	38.974	0.000	39.345	0.000	22.077	0.000	0.000	40.001	38.301	-38.709	MWD+IFR1+MS
10800.000	0.000	0.000	10431.690	39.294	0.000	39.661	0.000	22.376	0.000	0.000	40.313	38.625	-38.713	MWD+IFR1+MS
10900.000	0.000	0.000	10531.690	39.611	0.000	39.987	0.000	22.678	0.000	0.000	40.630	38.952	-38.508	MWD+IFR1+MS
11000.000	0.000	0.000	10631.690	39.937	0.000	40.311	0.000	22.983	0.000	0.000	40.949	39.284	-38.510	MWD+IFR1+MS
11100.000	0.000	0.000	10731.690	40.249	0.000	40.645	0.000	23.292	0.000	0.000	41.268	39.610	-38.098	MWD+IFR1+MS
11146.000	0.000	0.000	10778.000	40.398	0.000	40.792	0.000	23.435	0.000	0.000	41.412	39.762	-38.087	MWD+IFR1+MS
11200.000	4.338	330.000	10831.638	39.662	0.000	41.543	0.000	23.603	0.000	0.000	41.576	39.956	-38.211	MWD+IFR1+MS
11300.000	12.410	330.000	10930.489	39.641	0.000	41.850	0.000	23.940	0.000	0.000	41.914	40.856	-44.346	MWD+IFR1+MS
11400.000	20.490	330.000	11026.312	39.580	0.000	42.123	0.000	24.382	0.000	0.000	42.436	41.835	103.667	MWD+IFR1+MS
11500.000	28.570	330.000	11117.206	39.106	0.000	42.380	0.000	24.976	0.000	0.000	43.337	42.260	79.405	MWD+IFR1+MS
11600.000	36.650	330.000	11201.364	38.304	0.000	42.609	0.000	25.757	0.000	0.000	44.194	42.520	73.241	MWD+IFR1+MS
11700.000	44.730	330.000	11277.117	37.280	0.000	42.803	0.000	26.734	0.000	0.000	44.876	42.722	71.066	MWD+IFR1+MS

11800.000	52.810	330.000	11342.960	36.185	0.000	42.966	0.000	27.900	0.000	0.000	45.388	42.883	70.334	MWD+IFR1+MS
11900.000	60.890	330.000	11397.586	35.176	0.000	43.095	0.000	29.228	0.000	0.000	45.733	43.006	70.295	MWD+IFR1+MS
12000.000	68.970	330.000	11439.911	34.421	0.000	43.189	0.000	30.676	0.000	0.000	45.941	43.086	70.774	MWD+IFR1+MS
12100.000	77.050	330.000	11469.093	34.071	0.000	43.253	0.000	32.187	0.000	0.000	46.052	43.130	71.652	MWD+IFR1+MS
12200.000	85.130	330.000	11484.555	34.247	0.000	43.281	0.000	33.719	0.000	0.000	46.092	43.134	72.664	MWD+IFR1+MS
12260.000	90.000	330.000	11487.106	34.161	0.000	43.280	0.000	34.161	0.000	0.000	46.109	43.116	73.316	MWD+IFR1+MS
12300.000	90.000	330.000	11487.106	34.278	0.000	43.278	0.000	34.278	0.000	0.000	46.121	43.103	73.726	MWD+IFR1+MS
12400.000	90.000	330.000	11487.106	34.525	0.000	43.281	0.000	34.525	0.000	0.000	46.161	43.072	74.848	MWD+IFR1+MS
12500.000	90.000	330.000	11487.106	34.785	0.000	43.286	0.000	34.785	0.000	0.000	46.190	43.040	75.957	MWD+IFR1+MS
12600.000	90.000	330.000	11487.106	35.071	0.000	43.315	0.000	35.071	0.000	0.000	46.231	43.031	77.051	MWD+IFR1+MS
12700.000	90.000	330.000	11487.106	35.355	0.000	43.351	0.000	35.355	0.000	0.000	46.283	43.022	78.221	MWD+IFR1+MS
12800.000	90.000	330.000	11487.106	35.665	0.000	43.397	0.000	35.665	0.000	0.000	46.326	43.022	79.346	MWD+IFR1+MS
12900.000	90.000	330.000	11487.106	35.986	0.000	43.458	0.000	35.986	0.000	0.000	46.380	43.033	80.515	MWD+IFR1+MS
13000.000	90.000	330.000	11487.106	36.332	0.000	43.535	0.000	36.332	0.000	0.000	46.447	43.055	81.723	MWD+IFR1+MS
13100.000	90.000	330.000	11487.106	36.688	0.000	43.613	0.000	36.688	0.000	0.000	46.504	43.074	82.944	MWD+IFR1+MS
13200.000	90.000	330.000	11487.106	37.041	0.000	43.706	0.000	37.041	0.000	0.000	46.574	43.103	84.208	MWD+IFR1+MS
13300.000	90.000	330.000	11487.106	37.430	0.000	43.811	0.000	37.430	0.000	0.000	46.647	43.140	85.493	MWD+IFR1+MS
13400.000	90.000	330.000	11487.106	37.815	0.000	43.931	0.000	37.815	0.000	0.000	46.733	43.186	86.819	MWD+IFR1+MS
13500.000	90.000	330.000	11487.106	38.223	0.000	44.064	0.000	38.223	0.000	0.000	46.822	43.240	88.177	MWD+IFR1+MS
13600.000	90.000	330.000	11487.106	38.626	0.000	44.200	0.000	38.626	0.000	0.000	46.915	43.290	89.568	MWD+IFR1+MS
13700.000	90.000	330.000	11487.106	39.051	0.000	44.348	0.000	39.051	0.000	0.000	47.012	43.346	90.994	MWD+IFR1+MS
13800.000	90.000	330.000	11487.106	39.497	0.000	44.510	0.000	39.497	0.000	0.000	47.123	43.410	92.448	MWD+IFR1+MS
13900.000	90.000	330.000	11487.106	39.937	0.000	44.685	0.000	39.937	0.000	0.000	47.240	43.479	93.935	MWD+IFR1+MS
14000.000	90.000	330.000	11487.106	40.398	0.000	44.865	0.000	40.398	0.000	0.000	47.372	43.542	95.426	MWD+IFR1+MS
14100.000	90.000	330.000	11487.106	40.866	0.000	45.063	0.000	40.866	0.000	0.000	47.500	43.621	96.973	MWD+IFR1+MS
14200.000	90.000	330.000	11487.106	41.340	0.000	45.268	0.000	41.340	0.000	0.000	47.654	43.693	98.488	MWD+IFR1+MS
14300.000	90.000	330.000	11487.106	41.833	0.000	45.475	0.000	41.833	0.000	0.000	47.804	43.758	100.016	MWD+IFR1+MS
14400.000	90.000	330.000	11487.106	42.320	0.000	45.703	0.000	42.320	0.000	0.000	47.971	43.838	101.553	MWD+IFR1+MS
14500.000	90.000	330.000	11487.106	42.825	0.000	45.942	0.000	42.825	0.000	0.000	48.146	43.920	103.103	MWD+IFR1+MS
14600.000	90.000	330.000	11487.106	43.336	0.000	46.183	0.000	43.336	0.000	0.000	48.327	43.994	104.624	MWD+IFR1+MS
14700.000	90.000	330.000	11487.106	43.863	0.000	46.437	0.000	43.863	0.000	0.000	48.525	44.071	106.101	MWD+IFR1+MS
14800.000	90.000	330.000	11487.106	44.385	0.000	46.694	0.000	44.385	0.000	0.000	48.731	44.139	107.535	MWD+IFR1+MS
14900.000	90.000	330.000	11487.106	44.922	0.000	46.970	0.000	44.922	0.000	0.000	48.946	44.219	109.005	MWD+IFR1+MS
15000.000	90.000	330.000	11487.106	45.464	0.000	47.250	0.000	45.464	0.000	0.000	49.176	44.291	110.369	MWD+IFR1+MS
15100.000	90.000	330.000	11487.106	46.022	0.000	47.540	0.000	46.022	0.000	0.000	49.416	44.363	111.722	MWD+IFR1+MS
15200.000	90.000	330.000	11487.106	46.573	0.000	47.840	0.000	46.573	0.000	0.000	49.662	44.437	113.044	MWD+IFR1+MS
15300.000	90.000	330.000	11487.106	47.138	0.000	48.152	0.000	47.138	0.000	0.000	49.926	44.513	114.308	MWD+IFR1+MS
15400.000	90.000	330.000	11487.106	47.707	0.000	48.462	0.000	47.707	0.000	0.000	50.188	44.578	115.539	MWD+IFR1+MS
15500.000	90.000	330.000	11487.106	48.280	0.000	48.796	0.000	48.280	0.000	0.000	50.476	44.656	116.708	MWD+IFR1+MS
15600.000	90.000	330.000	11487.106	48.867	0.000	49.127	0.000	48.867	0.000	0.000	50.762	44.724	117.843	MWD+IFR1+MS
15700.000	90.000	330.000	11487.106	49.447	0.000	49.463	0.000	49.447	0.000	0.000	51.062	44.785	118.876	MWD+IFR1+MS
15800.000	90.000	330.000	11487.106	50.040	0.000	49.814	0.000	50.040	0.000	0.000	51.371	44.856	119.918	MWD+IFR1+MS
15900.000	90.000	330.000	11487.106	50.636	0.000	50.170	0.000	50.636	0.000	0.000	51.693	44.920	120.860	MWD+IFR1+MS
16000.000	90.000	330.000	11487.106	51.245	0.000	50.541	0.000	51.245	0.000	0.000	52.025	44.993	121.815	MWD+IFR1+MS
16100.000	90.000	330.000	11487.106	51.846	0.000	50.912	0.000	51.846	0.000	0.000	52.361	45.059	122.705	MWD+IFR1+MS
16200.000	90.000	330.000	11487.106	52.460	0.000	51.285	0.000	52.460	0.000	0.000	52.702	45.117	123.539	MWD+IFR1+MS
16300.000	90.000	330.000	11487.106	53.075	0.000	51.676	0.000	53.075	0.000	0.000	53.060	45.185	124.351	MWD+IFR1+MS
16400.000	90.000	330.000	11487.106	53.703	0.000	52.066	0.000	53.703	0.000	0.000	53.420	45.247	125.106	MWD+IFR1+MS
16500.000	90.000	330.000	11487.106	54.323	0.000	52.466	0.000	54.323	0.000	0.000	53.794	45.312	125.813	MWD+IFR1+MS
16600.000	90.000	330.000	11487.106	54.955	0.000	52.872	0.000	54.955	0.000	0.000	54.169	45.373	126.534	MWD+IFR1+MS
16700.000	90.000	330.000	11487.106	55.588	0.000	53.287	0.000	55.588	0.000	0.000	54.556	45.438	127.206	MWD+IFR1+MS
16800.000	90.000	330.000	11487.106	56.223	0.000	53.705	0.000	56.223	0.000	0.000	54.952	45.501	127.803	MWD+IFR1+MS
16900.000	90.000	330.000	11487.106	56.868	0.000	54.127	0.000	56.868	0.000	0.000	55.348	45.559	128.417	MWD+IFR1+MS

17000.000	90.000	330.000	11487.106	57.507	0.000	54.558	0.000	57.507	0.000	0.000	55.755	45.622	128.988	MWD+IFR1+MS
17100.000	90.000	330.000	11487.106	58.155	0.000	54.997	0.000	58.155	0.000	0.000	56.173	45.690	129.521	MWD+IFR1+MS
17200.000	90.000	330.000	11487.106	58.805	0.000	55.442	0.000	58.805	0.000	0.000	56.592	45.753	130.069	MWD+IFR1+MS
17300.000	90.000	330.000	11487.106	59.464	0.000	55.888	0.000	59.464	0.000	0.000	57.019	45.814	130.557	MWD+IFR1+MS
17400.000	90.000	330.000	11487.106	60.125	0.000	56.342	0.000	60.125	0.000	0.000	57.455	45.879	131.011	MWD+IFR1+MS
17500.000	90.000	330.000	11487.106	60.778	0.000	56.801	0.000	60.778	0.000	0.000	57.892	45.940	131.482	MWD+IFR1+MS
17600.000	90.000	330.000	11487.106	61.441	0.000	57.268	0.000	61.441	0.000	0.000	58.340	46.005	131.922	MWD+IFR1+MS
17700.000	90.000	330.000	11487.106	62.113	0.000	57.735	0.000	62.113	0.000	0.000	58.792	46.070	132.312	MWD+IFR1+MS
17800.000	90.000	330.000	11487.106	62.777	0.000	58.207	0.000	62.777	0.000	0.000	59.245	46.130	132.717	MWD+IFR1+MS
17900.000	90.000	330.000	11487.106	63.451	0.000	58.686	0.000	63.451	0.000	0.000	59.707	46.195	133.097	MWD+IFR1+MS
18000.000	90.000	330.000	11487.106	64.125	0.000	59.170	0.000	64.125	0.000	0.000	60.174	46.261	133.471	MWD+IFR1+MS
18100.000	90.000	330.000	11487.106	64.800	0.000	59.662	0.000	64.800	0.000	0.000	60.650	46.331	133.822	MWD+IFR1+MS
18200.000	90.000	330.000	11487.106	65.483	0.000	60.152	0.000	65.483	0.000	0.000	61.126	46.396	134.150	MWD+IFR1+MS
18300.000	90.000	330.000	11487.106	66.166	0.000	60.649	0.000	66.166	0.000	0.000	61.608	46.459	134.475	MWD+IFR1+MS
18400.000	90.000	330.000	11487.106	66.851	0.000	61.149	0.000	66.851	0.000	0.000	62.093	46.524	134.797	MWD+IFR1+MS
18500.000	90.000	330.000	11487.106	67.535	0.000	61.657	0.000	67.535	0.000	0.000	62.586	46.594	-44.902	MWD+IFR1+MS
18600.000	90.000	330.000	11487.106	68.220	0.000	62.169	0.000	68.220	0.000	0.000	63.084	46.663	-44.603	MWD+IFR1+MS
18700.000	90.000	330.000	11487.106	68.913	0.000	62.682	0.000	68.913	0.000	0.000	63.585	46.733	-44.337	MWD+IFR1+MS
18800.000	90.000	330.000	11487.106	69.606	0.000	63.197	0.000	69.606	0.000	0.000	64.086	46.797	-44.058	MWD+IFR1+MS
18900.000	90.000	330.000	11487.106	70.299	0.000	63.720	0.000	70.299	0.000	0.000	64.595	46.866	-43.796	MWD+IFR1+MS
19000.000	90.000	330.000	11487.106	70.993	0.000	64.243	0.000	70.993	0.000	0.000	65.106	46.949	-43.549	MWD+IFR1+MS
19100.000	90.000	330.000	11487.106	71.694	0.000	64.768	0.000	71.694	0.000	0.000	65.619	47.012	-43.304	MWD+IFR1+MS
19200.000	90.000	330.000	11487.106	72.395	0.000	65.303	0.000	72.395	0.000	0.000	66.143	47.075	-43.074	MWD+IFR1+MS
19300.000	90.000	330.000	11487.106	73.096	0.000	65.835	0.000	73.096	0.000	0.000	66.664	47.158	-42.856	MWD+IFR1+MS
19400.000	90.000	330.000	11487.106	73.797	0.000	66.372	0.000	73.797	0.000	0.000	67.189	47.229	-42.627	MWD+IFR1+MS
19500.000	90.000	330.000	11487.106	74.498	0.000	66.920	0.000	74.498	0.000	0.000	67.726	47.299	-42.412	MWD+IFR1+MS
19600.000	90.000	330.000	11487.106	75.206	0.000	67.465	0.000	75.206	0.000	0.000	68.262	47.374	-42.220	MWD+IFR1+MS
19700.000	90.000	330.000	11487.106	75.914	0.000	68.009	0.000	75.914	0.000	0.000	68.795	47.448	-42.016	MWD+IFR1+MS
19800.000	90.000	330.000	11487.106	76.622	0.000	68.562	0.000	76.622	0.000	0.000	69.338	47.520	-41.825	MWD+IFR1+MS
19900.000	90.000	330.000	11487.106	77.337	0.000	69.118	0.000	77.337	0.000	0.000	69.885	47.603	-41.644	MWD+IFR1+MS
20000.000	90.000	330.000	11487.106	78.045	0.000	69.674	0.000	78.045	0.000	0.000	70.432	47.668	-41.464	MWD+IFR1+MS
20100.000	90.000	330.000	11487.106	78.759	0.000	70.239	0.000	78.759	0.000	0.000	70.987	47.748	-41.283	MWD+IFR1+MS
20200.000	90.000	330.000	11487.106	79.473	0.000	70.798	0.000	79.473	0.000	0.000	71.537	47.828	-41.111	MWD+IFR1+MS
20300.000	90.000	330.000	11487.106	80.194	0.000	71.367	0.000	80.194	0.000	0.000	72.097	47.906	-40.950	MWD+IFR1+MS
20400.000	90.000	330.000	11487.106	80.907	0.000	71.931	0.000	80.907	0.000	0.000	72.653	47.985	-40.797	MWD+IFR1+MS
20500.000	90.000	330.000	11487.106	81.627	0.000	72.507	0.000	81.627	0.000	0.000	73.220	48.061	-40.636	MWD+IFR1+MS
20600.000	90.000	330.000	11487.106	82.347	0.000	73.078	0.000	82.347	0.000	0.000	73.783	48.136	-40.483	MWD+IFR1+MS
20700.000	90.000	330.000	11487.106	83.066	0.000	73.652	0.000	83.066	0.000	0.000	74.348	48.222	-40.336	MWD+IFR1+MS
20800.000	90.000	330.000	11487.106	83.791	0.000	74.232	0.000	83.791	0.000	0.000	74.920	48.301	-40.191	MWD+IFR1+MS
20900.000	90.000	330.000	11487.106	84.516	0.000	74.809	0.000	84.516	0.000	0.000	75.491	48.385	-40.061	MWD+IFR1+MS
21000.000	90.000	330.000	11487.106	85.241	0.000	75.396	0.000	85.241	0.000	0.000	76.069	48.461	-39.915	MWD+IFR1+MS
21100.000	90.000	330.000	11487.106	85.965	0.000	75.982	0.000	85.965	0.000	0.000	76.648	48.549	-39.792	MWD+IFR1+MS
21200.000	90.000	330.000	11487.106	86.689	0.000	76.566	0.000	86.689	0.000	0.000	77.225	48.635	-39.659	MWD+IFR1+MS
21300.000	90.000	330.000	11487.106	87.419	0.000	77.153	0.000	87.419	0.000	0.000	77.806	48.716	-39.542	MWD+IFR1+MS
21400.000	90.000	330.000	11487.106	88.148	0.000	77.746	0.000	88.148	0.000	0.000	78.391	48.804	-39.415	MWD+IFR1+MS
21500.000	90.000	330.000	11487.106	88.876	0.000	78.339	0.000	88.876	0.000	0.000	78.978	48.883	-39.297	MWD+IFR1+MS
21600.000	90.000	330.000	11487.106	89.605	0.000	78.935	0.000	89.605	0.000	0.000	79.567	48.971	-39.184	MWD+IFR1+MS
21700.000	90.000	330.000	11487.106	90.338	0.000	79.531	0.000	90.338	0.000	0.000	80.156	49.062	-39.068	MWD+IFR1+MS
21800.000	90.000	330.000	11487.106	91.071	0.000	80.127	0.000	91.071	0.000	0.000	80.746	49.143	-38.960	MWD+IFR1+MS
21900.000	90.000	330.000	11487.106	91.804	0.000	80.730	0.000	91.804	0.000	0.000	81.343	49.238	-38.850	MWD+IFR1+MS
22000.000	90.000	330.000	11487.106	92.536	0.000	81.334	0.000	92.536	0.000	0.000	81.941	49.323	-38.748	MWD+IFR1+MS
22100.000	90.000	330.000	11487.106	93.274	0.000	81.938	0.000	93.274	0.000	0.000	82.538	49.411	-38.643	MWD+IFR1+MS
22200.000	90.000	330.000	11487.106	94.011	0.000	82.544	0.000	94.011	0.000	0.000	83.138	49.508	-38.543	MWD+IFR1+MS

22300.000	90.000	330.000	11487.106	94.747	0.000	83.149	0.000	94.747	0.000	0.000	83.737	49.590	-38.443	MWD+IFR1+MS
22400.000	90.000	330.000	11487.106	95.483	0.000	83.761	0.000	95.483	0.000	0.000	84.344	49.691	-38.347	MWD+IFR1+MS
22500.000	90.000	330.000	11487.106	96.219	0.000	84.373	0.000	96.219	0.000	0.000	84.950	49.775	-38.252	MWD+IFR1+MS
22600.000	90.000	330.000	11487.106	96.959	0.000	84.986	0.000	96.959	0.000	0.000	85.557	49.869	-38.160	MWD+IFR1+MS
22700.000	90.000	330.000	11487.106	97.699	0.000	85.595	0.000	97.699	0.000	0.000	86.161	49.963	-38.072	MWD+IFR1+MS
22800.000	90.000	330.000	11487.106	98.438	0.000	86.215	0.000	98.438	0.000	0.000	86.775	50.061	-37.985	MWD+IFR1+MS
22900.000	90.000	330.000	11487.106	99.177	0.000	86.830	0.000	99.177	0.000	0.000	87.385	50.158	-37.900	MWD+IFR1+MS
23000.000	90.000	330.000	11487.106	99.920	0.000	87.450	0.000	99.920	0.000	0.000	88.001	50.248	-37.817	MWD+IFR1+MS
23100.000	90.000	330.000	11487.106	100.648	0.000	88.070	0.000	100.648	0.000	0.000	88.615	50.342	-37.731	MWD+IFR1+MS
23137.000	90.000	330.000	11495.000	100.896	0.000	88.304	0.000	100.896	0.000	0.000	88.847	50.390	-37.704	MWD+IFR1+MS
23200.000	90.000	330.000	11495.000	101.390	0.000	88.689	0.000	101.390	0.000	0.000	89.230	50.449	-37.659	MWD+IFR1+MS
23237.000	90.000	330.000	11495.000	101.637	0.000	88.920	0.000	101.637	0.000	0.000	89.458	50.490	-37.628	MWD+IFR1+MS

Plan Targets	PLU 29-20 BS 124H				
	Measured Depth	**Grid Northing**	**Grid Easting**	**TVD MSL**	**Target Shape**
Target Name	**(ft)**	**(ft)**	**(ft)**	**(ft)**	
Slant KOP 21	11146.31	401338.42	664367.52	7408.00	CIRCLE
Slant FTP 21	12271.14	401959.33	664009.04	8125.00	CIRCLE
Slant LTP 21	23138.48	411372.71	658574.22	8125.00	CIRCLE
Slant BHL 21	23237.66	411459.31	658524.22	8125.00	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 124H**
SURFACE HOLE FOOTAGE:	**0537' FNL & 2634' FEL**
BOTTOM HOLE FOOTAGE	**2666' FNL & 1300' 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 120997

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 120997
	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