

Well Name: POKER LAKE UNIT 29-20 BS	Well Location: T25S / R31E / SEC 29 / NENE /	County or Parish/State:
Well Number: 108H	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: 3001549183	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2652949

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 01/18/2022	Time Sundry Submitted: 08:12
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 & 660'FEL to 2608'FSL & 506'FEL, 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_108H_NOI_Attachments_20220118081205.pdf

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Conditions of Approval

Specialist Review

Conditions_of_Approval_20220119053739.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 08:12 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 MANAGEMENTFORM 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.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

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

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

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 recompleat 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 performed 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 recompleat 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 OFFICE 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 of this form to U.S. Department of the Interior, Bureau of Land 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: NENE / 533 FNL / 235 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107105 / LONG: -103.792466 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 2310 FNL / 660 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110387 / LONG: -103.798103 (TVD: 11558 feet, MD: 16167 feet)

PPP: SENE / 2310 FNL / 660 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102218 / LONG: -103.793861 (TVD: 11558 feet, MD: 12207 feet)

BHL: NENE / 50 FNL / 660 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.122991 / LONG: -103.793721 (TVD: 11558 feet, MD: 19764 feet)

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

XTO Energy Inc.
PLU 29-20 BS 108H
Projected TD: 23180' MD / 11505' TVD
SHL: 533' FNL & 235' FEL , Section 29, T25S, R31E
BHL: 2608' FSL & 506' FEL , 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	897'	Water
Top of Salt	1226'	Water
Base of Salt	3987'	Water
Delaware	4197'	Water
Brushy Canyon	6867'	Water/Oil/Gas
Bone Spring	8122'	Water
1st Bone Spring Ss	9122'	Water/Oil/Gas
2nd Bone Spring Ss	9887'	Water/Oil/Gas
3rd Bone Spring Ss	11062'	Water/Oil/Gas
Wolfcamp	11477'	Water/Oil/Gas
Wolfcamp X	11512'	Water/Oil/Gas
Target/Land Curve	11542'	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 @ 997' (229' 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 10885' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23180 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 10585 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 997'	9.625	40	J-55	BTC	New	1.28	5.70	15.80
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.18	2.65	1.73
8.75	4000' – 10885'	7.625	29.7	HC L-80	Flush Joint	New	1.58	1.84	1.99
6.75	0' – 10785'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.25	1.97
6.75	10785' - 11450'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.12	5.00
6.75	11450' - 23180'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.11	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 +/- 997'

Lead: 230 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 +/- 10885'

1st Stage

Optional Lead: 370 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 370 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6867

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: 770 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 (6867') 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 +/- 23180'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 10585 feet

Tail: 860 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 11085 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 4349 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 9.625, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

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

on each of the wells.

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

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 997'	12.25	FW/Native	8.7-9.2	35-40	NC
997' - 10885'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
10885' - 23180'	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 6880 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 30-015-49183	² Pool Code 98220	³ Pool Name Purple Sage; Wolfcamp (Gas)
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 29-20 BS	⁶ Well Number 108H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,356'

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
A	29	25 S	31 E		533	NORTH	235	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
I	18	25 S	31 E		2,608	SOUTH	506	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division. NOTE: DATA FURNISHED BY XTO ENERGY

¹⁶ SHL (NAD83 NME) Y = 403,121.3 X = 708,805.9 LAT. = 32.107105 °N LONG. = 103.792466 °W FTP (NAD83 NME) Y = 401,423.0 X = 709,073.9 LAT. = 32.102433 °N LONG. = 103.791628 °W SHL (NAD27 NME) Y = 403,063.4 X = 667,620.3 LAT. = 32.106980 °N LONG. = 103.791987 °W FTP (NAD27 NME) Y = 401,365.1 X = 667,888.2 LAT. = 32.102308 °N LONG. = 103.791150 °W LTP (NAD83 NME) Y = 411,458.4 X = 703,279.4 LAT. = 32.130097 °N LONG. = 103.810183 °W BHL (NAD83 NME) Y = 411,544.2 X = 703,229.9 LAT. = 32.130334 °N LONG. = 103.810342 °W LTP (NAD27 NME) Y = 411,400.2 X = 662,094.5 LAT. = 32.129973 °N LONG. = 103.809702 °W BHL (NAD27 NME) Y = 411,486.0 X = 662,044.9 LAT. = 32.130209 °N LONG. = 103.809861 °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. <i>Stephanie Rabadue</i> 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 Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number LM 2019082883
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Well Plan Report - PLU 29-20 BS 108H

Measured Depth:	23180.00 ft	Site:	PLU 29-20 Big Sinks
TVD RKB:	11505.00 ft		Pad D
Location		Slot:	23
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403060.00 ft		
Easting:	667618.60 ft		
RKB:	3370.00 ft		
Ground Level:	3340.00 ft		
North Reference:	Grid		
Convergence Angle:	0.29 Deg		

Plan Sections PLU 29-20 BS 108H									
Measured	TVD					Build	Turn	Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1500.00	0.00	0.00	1500.00	0.00	0.00	0.00	0.00	0.00	
2561.38	21.23	171.03	2537.26	-192.00	30.29	2.00	0.00	2.00	
6236.19	21.23	171.03	5962.74	-1506.30	237.63	0.00	0.00	0.00	
7297.57	0.00	0.00	7000.00	-1698.30	267.92	-2.00	0.00	2.00	
11085.56	0.00	0.00	10788.00	-1698.30	267.92	0.00	0.00	0.00	Slant KOP 12
12210.56	90.00	330.00	11504.20	-1078.05	-90.18	8.00	0.00	8.00	Slant FTP 12
23080.97	90.00	330.00	11505.00	8335.99	-5525.38	0.00	0.00	0.00	Slant LTP 12
23180.96	90.00	330.00	11505.00	8422.59	-5575.38	0.00	0.00	0.00	Slant BHL 12

Position Uncertainty PLU 29-20 BS 108H															
Measured			TVD Highside		Lateral		Vertical		Magnitude		Semi-major	Semi-minor	Semi-minor	Tool	
Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)		
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	171.000	1599.980	6.086	0.000	6.279	-0.000	2.939	0.000	0.000	6.577	5.767	132.791	MWD+IFR1+MS
1700.000	4.000	171.000	1699.838	6.796	0.000	6.605	-0.000	3.015	0.000	0.000	7.169	6.211	119.884	MWD+IFR1+MS
1800.000	6.000	171.000	1799.452	7.447	0.000	6.934	-0.000	3.098	0.000	0.000	7.781	6.586	112.571	MWD+IFR1+MS
1900.000	7.999	171.000	1898.702	8.052	0.000	7.265	-0.000	3.187	0.000	0.000	8.380	6.935	108.420	MWD+IFR1+MS
2000.000	10.000	171.000	1997.465	8.620	0.000	7.599	-0.000	3.288	0.000	0.000	8.960	7.274	105.861	MWD+IFR1+MS
2100.000	11.990	171.000	2095.623	9.157	0.000	7.937	-0.000	3.399	0.000	0.000	9.518	7.611	104.164	MWD+IFR1+MS
2200.000	14.000	171.000	2193.055	9.666	0.000	8.276	-0.000	3.524	0.000	0.000	10.057	7.948	102.984	MWD+IFR1+MS
2300.000	15.990	171.000	2289.643	10.149	0.000	8.618	-0.000	3.662	0.000	0.000	10.574	8.285	102.146	MWD+IFR1+MS
2400.000	18.000	171.000	2385.268	10.613	0.000	8.962	-0.000	3.817	0.000	0.000	11.078	8.625	101.509	MWD+IFR1+MS
2500.000	19.990	171.000	2479.816	11.061	0.000	9.311	-0.000	3.987	0.000	0.000	11.570	8.969	101.028	MWD+IFR1+MS
2561.300	21.220	171.000	2537.263	11.237	0.000	9.519	-0.000	4.068	0.000	0.000	11.784	9.180	100.936	MWD+IFR1+MS
2600.000	21.220	171.000	2573.264	11.350	0.000	9.648	-0.000	4.112	0.000	0.000	11.890	9.313	100.959	MWD+IFR1+MS
2700.000	21.220	171.000	2666.479	11.647	0.000	9.996	-0.000	4.240	0.000	0.000	12.168	9.665	101.187	MWD+IFR1+MS
2800.000	21.220	171.000	2759.694	11.961	0.000	10.357	-0.000	4.377	0.000	0.000	12.466	10.025	101.550	MWD+IFR1+MS
2900.000	21.220	171.000	2852.909	12.282	0.000	10.718	-0.000	4.521	0.000	0.000	12.769	10.385	101.894	MWD+IFR1+MS
3000.000	21.220	171.000	2946.124	12.609	0.000	11.085	-0.000	4.670	0.000	0.000	13.077	10.752	102.265	MWD+IFR1+MS
3100.000	21.220	171.000	3039.339	12.945	0.000	11.458	-0.000	4.824	0.000	0.000	13.392	11.124	102.624	MWD+IFR1+MS
3200.000	21.220	171.000	3132.554	13.285	0.000	11.828	-0.000	4.983	0.000	0.000	13.712	11.493	102.957	MWD+IFR1+MS
3300.000	21.220	171.000	3225.769	13.633	0.000	12.203	-0.000	5.146	0.000	0.000	14.038	11.867	103.287	MWD+IFR1+MS
3400.000	21.220	171.000	3318.984	13.985	0.000	12.583	-0.000	5.312	0.000	0.000	14.368	12.246	103.636	MWD+IFR1+MS
3500.000	21.220	171.000	3412.199	14.343	0.000	12.963	-0.000	5.484	0.000	0.000	14.704	12.625	103.959	MWD+IFR1+MS
3600.000	21.220	171.000	3505.414	14.704	0.000	13.344	-0.000	5.659	0.000	0.000	15.042	13.005	104.278	MWD+IFR1+MS
3700.000	21.220	171.000	3598.629	15.069	0.000	13.724	-0.000	5.837	0.000	0.000	15.383	13.385	104.593	MWD+IFR1+MS
3800.000	21.220	171.000	3691.844	15.439	0.000	14.109	-0.000	6.018	0.000	0.000	15.730	13.769	104.904	MWD+IFR1+MS
3900.000	21.220	171.000	3785.059	15.814	0.000	14.494	-0.000	6.202	0.000	0.000	16.081	14.153	105.178	MWD+IFR1+MS
4000.000	21.220	171.000	3878.274	16.191	0.000	14.883	-0.000	6.391	0.000	0.000	16.434	14.540	105.482	MWD+IFR1+MS
4100.000	21.220	171.000	3971.489	16.570	0.000	15.268	-0.000	6.581	0.000	0.000	16.789	14.925	105.748	MWD+IFR1+MS
4200.000	21.220	171.000	4064.704	16.953	0.000	15.659	-0.000	6.774	0.000	0.000	17.148	15.315	106.035	MWD+IFR1+MS
4300.000	21.220	171.000	4157.919	17.339	0.000	16.048	-0.000	6.970	0.000	0.000	17.508	15.703	106.294	MWD+IFR1+MS
4400.000	21.220	171.000	4251.134	17.727	0.000	16.439	-0.000	7.168	0.000	0.000	17.872	16.093	106.548	MWD+IFR1+MS
4500.000	21.220	171.000	4344.349	18.118	0.000	16.830	-0.000	7.369	0.000	0.000	18.237	16.484	106.798	MWD+IFR1+MS
4600.000	21.220	171.000	4437.564	18.511	0.000	17.224	-0.000	7.572	0.000	0.000	18.606	16.877	107.045	MWD+IFR1+MS
4700.000	21.220	171.000	4530.779	18.906	0.000	17.617	-0.000	7.778	0.000	0.000	18.975	17.270	107.280	MWD+IFR1+MS
4800.000	21.220	171.000	4623.994	19.302	0.000	18.010	-0.000	7.986	0.000	0.000	19.345	17.662	107.519	MWD+IFR1+MS
4900.000	21.220	171.000	4717.209	19.700	0.000	18.406	-0.000	8.196	0.000	0.000	19.719	18.057	107.747	MWD+IFR1+MS
5000.000	21.220	171.000	4810.424	20.102	0.000	18.801	-0.000	8.408	0.000	0.000	20.095	18.452	107.945	MWD+IFR1+MS
5100.000	21.220	171.000	4903.639	20.504	0.000	19.196	-0.000	8.623	0.000	0.000	20.472	18.847	108.139	MWD+IFR1+MS
5200.000	21.220	171.000	4996.854	20.909	0.000	19.594	-0.000	8.840	0.000	0.000	20.851	19.244	108.330	MWD+IFR1+MS
5300.000	21.220	171.000	5090.068	21.314	0.000	19.991	-0.000	9.059	0.000	0.000	21.231	19.640	108.518	MWD+IFR1+MS
5400.000	21.220	171.000	5183.283	21.720	0.000	20.387	-0.000	9.280	0.000	0.000	21.611	20.037	108.695	MWD+IFR1+MS
5500.000	21.220	171.000	5276.498	22.127	0.000	20.785	-0.000	9.502	0.000	0.000	21.994	20.435	108.870	MWD+IFR1+MS
5600.000	21.220	171.000	5369.713	22.538	0.000	21.184	-0.000	9.727	0.000	0.000	22.378	20.833	109.015	MWD+IFR1+MS
5700.000	21.220	171.000	5462.928	22.947	0.000	21.584	-0.000	9.954	0.000	0.000	22.763	21.233	109.184	MWD+IFR1+MS
5800.000	21.220	171.000	5556.143	23.359	0.000	21.981	-0.000	10.178	0.000	0.000	23.148	21.630	109.323	MWD+IFR1+MS
5900.000	21.220	171.000	5649.358	23.771	0.000	22.380	-0.000	10.412	0.000	0.000	23.535	22.029	109.454	MWD+IFR1+MS
6000.000	21.220	171.000	5742.573	24.185	0.000	22.781	-0.000	10.644	0.000	0.000	23.924	22.430	109.582	MWD+IFR1+MS
6100.000	21.220	171.000	5835.788	24.599	0.000	23.181	-0.000	10.881	0.000	0.000	24.314	22.831	109.708	MWD+IFR1+MS
6200.000	21.220	171.000	5929.003	25.015	0.000	23.582	-0.000	11.118	0.000	0.000	24.704	23.231	109.805	MWD+IFR1+MS
6236.100	21.220	171.000	5962.737	25.163	0.000	23.723	-0.000	11.203	0.000	0.000	24.842	23.375	109.792	MWD+IFR1+MS
6300.000	19.950	171.000	6022.471	25.473	0.000	23.975	-0.000	11.353	0.000	0.000	25.088	23.630	109.746	MWD+IFR1+MS
6400.000	17.950	171.000	6117.045	25.990	0.000	24.366	-0.000	11.602	0.000	0.000	25.527	24.026	109.059	MWD+IFR1+MS
6500.000	15.950	171.000	6212.696	26.503	0.000	24.755	-0.000	11.849	0.000	0.000	25.992	24.419	108.162	MWD+IFR1+MS
6600.000	13.950	171.000	6309.305	26.974	0.000	25.138	-0.000	12.083	0.000	0.000	26.454	24.805	107.332	MWD+IFR1+MS

6700.000	11.950	171.000	6406.756	27.405	0.000	25.513	-0.000	12.304	0.000	0.000	26.907	25.183	106.576	MWD+IFR1+MS
6800.000	9.951	171.000	6504.930	27.793	0.000	25.881	-0.000	12.522	0.000	0.000	27.352	25.553	105.910	MWD+IFR1+MS
6900.000	7.951	171.000	6603.707	28.138	0.000	26.240	-0.000	12.728	0.000	0.000	27.787	25.913	105.321	MWD+IFR1+MS
7000.000	5.951	171.000	6702.967	28.444	0.000	26.592	-0.000	12.927	0.000	0.000	28.214	26.266	104.797	MWD+IFR1+MS
7100.000	3.951	171.000	6802.589	28.706	0.000	26.936	-0.000	13.122	0.000	0.000	28.628	26.609	104.358	MWD+IFR1+MS
7200.000	1.951	171.000	6902.451	28.927	0.000	27.271	-0.000	13.312	0.000	0.000	29.031	26.942	103.973	MWD+IFR1+MS
7297.500	0.000	0.000	7000.000	29.192	0.000	27.377	0.000	13.491	0.000	0.000	29.310	27.251	104.072	MWD+IFR1+MS
7300.000	0.000	0.000	7002.432	29.199	0.000	27.384	0.000	13.498	0.000	0.000	29.317	27.258	104.072	MWD+IFR1+MS
7400.000	0.000	0.000	7102.432	29.475	0.000	27.691	0.000	13.682	0.000	0.000	29.594	27.564	104.241	MWD+IFR1+MS
7500.000	0.000	0.000	7202.432	29.757	0.000	28.005	0.000	13.874	0.000	0.000	29.880	27.875	104.540	MWD+IFR1+MS
7600.000	0.000	0.000	7302.432	30.040	0.000	28.320	0.000	14.068	0.000	0.000	30.166	28.186	104.836	MWD+IFR1+MS
7700.000	0.000	0.000	7402.432	30.325	0.000	28.634	0.000	14.265	0.000	0.000	30.454	28.496	105.120	MWD+IFR1+MS
7800.000	0.000	0.000	7502.432	30.610	0.000	28.950	0.000	14.467	0.000	0.000	30.743	28.809	105.422	MWD+IFR1+MS
7900.000	0.000	0.000	7602.432	30.900	0.000	29.268	0.000	14.670	0.000	0.000	31.036	29.123	105.708	MWD+IFR1+MS
8000.000	0.000	0.000	7702.432	31.188	0.000	29.585	0.000	14.880	0.000	0.000	31.328	29.437	106.008	MWD+IFR1+MS
8100.000	0.000	0.000	7802.432	31.480	0.000	29.905	0.000	15.090	0.000	0.000	31.623	29.753	106.300	MWD+IFR1+MS
8200.000	0.000	0.000	7902.432	31.765	0.000	30.224	0.000	15.304	0.000	0.000	31.912	30.068	106.656	MWD+IFR1+MS
8300.000	0.000	0.000	8002.432	32.062	0.000	30.545	0.000	15.524	0.000	0.000	32.213	30.386	106.921	MWD+IFR1+MS
8400.000	0.000	0.000	8102.432	32.357	0.000	30.867	0.000	15.745	0.000	0.000	32.512	30.705	107.225	MWD+IFR1+MS
8500.000	0.000	0.000	8202.432	32.650	0.000	31.190	0.000	15.972	0.000	0.000	32.808	31.023	107.558	MWD+IFR1+MS
8600.000	0.000	0.000	8302.432	32.939	0.000	31.512	0.000	16.202	0.000	0.000	33.102	31.341	107.926	MWD+IFR1+MS
8700.000	0.000	0.000	8402.432	33.242	0.000	31.828	0.000	16.435	0.000	0.000	33.407	31.654	108.113	MWD+IFR1+MS
8800.000	0.000	0.000	8502.432	33.541	0.000	32.156	0.000	16.670	0.000	0.000	33.711	31.978	108.453	MWD+IFR1+MS
8900.000	0.000	0.000	8602.432	33.853	0.000	32.481	0.000	16.912	0.000	0.000	34.025	32.300	108.637	MWD+IFR1+MS
9000.000	0.000	0.000	8702.432	34.147	0.000	32.802	0.000	17.155	0.000	0.000	34.323	32.618	108.973	MWD+IFR1+MS
9100.000	0.000	0.000	8802.432	34.453	0.000	33.136	0.000	17.401	0.000	0.000	34.633	32.947	109.314	MWD+IFR1+MS
9200.000	0.000	0.000	8902.432	34.756	0.000	33.466	0.000	17.652	0.000	0.000	34.941	33.274	109.653	MWD+IFR1+MS
9300.000	0.000	0.000	9002.432	35.057	0.000	33.793	0.000	17.908	0.000	0.000	35.246	33.597	109.992	MWD+IFR1+MS
9400.000	0.000	0.000	9102.432	35.369	0.000	34.117	0.000	18.163	0.000	0.000	35.561	33.918	110.173	MWD+IFR1+MS
9500.000	0.000	0.000	9202.432	35.679	0.000	34.453	0.000	18.426	0.000	0.000	35.875	34.249	110.512	MWD+IFR1+MS
9600.000	0.000	0.000	9302.432	35.986	0.000	34.771	0.000	18.690	0.000	0.000	36.184	34.564	110.689	MWD+IFR1+MS
9700.000	0.000	0.000	9402.432	36.290	0.000	35.100	0.000	18.958	0.000	0.000	36.493	34.889	111.027	MWD+IFR1+MS
9800.000	0.000	0.000	9502.432	36.606	0.000	35.440	0.000	19.230	0.000	0.000	36.813	35.225	111.366	MWD+IFR1+MS
9900.000	0.000	0.000	9602.432	36.919	0.000	35.763	0.000	19.504	0.000	0.000	37.128	35.546	111.538	MWD+IFR1+MS
10000.000	0.000	0.000	9702.432	37.229	0.000	36.097	0.000	19.784	0.000	0.000	37.443	35.875	111.876	MWD+IFR1+MS
10100.000	0.000	0.000	9802.432	37.537	0.000	36.428	0.000	20.065	0.000	0.000	37.755	36.202	112.218	MWD+IFR1+MS
10200.000	0.000	0.000	9902.432	37.855	0.000	36.770	0.000	20.349	0.000	0.000	38.077	36.539	112.556	MWD+IFR1+MS
10300.000	0.000	0.000	10002.432	38.171	0.000	37.094	0.000	20.640	0.000	0.000	38.396	36.862	112.718	MWD+IFR1+MS
10400.000	0.000	0.000	10102.432	38.484	0.000	37.430	0.000	20.931	0.000	0.000	38.713	37.193	113.058	MWD+IFR1+MS
10500.000	0.000	0.000	10202.432	38.794	0.000	37.762	0.000	21.227	0.000	0.000	39.028	37.521	113.396	MWD+IFR1+MS
10600.000	0.000	0.000	10302.432	39.115	0.000	38.105	0.000	21.527	0.000	0.000	39.353	37.859	113.733	MWD+IFR1+MS
10700.000	0.000	0.000	10402.432	39.433	0.000	38.445	0.000	21.829	0.000	0.000	39.676	38.194	114.074	MWD+IFR1+MS
10800.000	0.000	0.000	10502.432	39.749	0.000	38.769	0.000	22.134	0.000	0.000	39.994	38.516	114.225	MWD+IFR1+MS
10900.000	0.000	0.000	10602.432	40.062	0.000	39.115	0.000	22.443	0.000	0.000	40.314	38.856	114.751	MWD+IFR1+MS
11000.000	0.000	0.000	10702.432	40.386	0.000	39.446	0.000	22.755	0.000	0.000	40.640	39.184	114.898	MWD+IFR1+MS
11085.000	0.000	0.000	10788.000	40.657	0.000	39.737	0.000	23.026	0.000	0.000	40.915	39.471	115.186	MWD+IFR1+MS
11100.000	1.154	330.000	10802.431	39.887	0.000	40.500	0.000	23.072	0.000	0.000	40.964	39.522	115.192	MWD+IFR1+MS
11200.000	9.154	330.000	10901.946	39.485	0.000	40.804	0.000	23.394	0.000	0.000	41.405	40.020	108.545	MWD+IFR1+MS
11300.000	17.150	330.000	10999.243	39.321	0.000	41.091	0.000	23.787	0.000	0.000	42.309	40.644	90.928	MWD+IFR1+MS
11400.000	25.150	330.000	11092.428	38.722	0.000	41.347	0.000	24.302	0.000	0.000	43.263	41.028	81.945	MWD+IFR1+MS
11500.000	33.150	330.000	11179.688	37.778	0.000	41.571	0.000	24.984	0.000	0.000	44.113	41.304	77.657	MWD+IFR1+MS
11600.000	41.150	330.000	11259.324	36.615	0.000	41.755	0.000	25.853	0.000	0.000	44.809	41.511	75.500	MWD+IFR1+MS
11700.000	49.150	330.000	11329.787	35.378	0.000	41.909	0.000	26.911	0.000	0.000	45.334	41.675	74.350	MWD+IFR1+MS

11800.000	57.150	330.000	11389.704	34.242	0.000	42.025	0.000	28.139	0.000	0.000	45.700	41.791	73.841	MWD+IFR1+MS
11900.000	65.150	330.000	11437.909	33.390	0.000	42.097	0.000	29.504	0.000	0.000	45.924	41.857	73.744	MWD+IFR1+MS
12000.000	73.150	330.000	11473.465	32.996	0.000	42.133	0.000	30.964	0.000	0.000	46.044	41.880	73.936	MWD+IFR1+MS
12100.000	81.150	330.000	11495.679	33.180	0.000	42.138	0.000	32.465	0.000	0.000	46.082	41.874	74.166	MWD+IFR1+MS
12200.000	89.150	330.000	11504.119	34.004	0.000	42.097	0.000	33.971	0.000	0.000	46.088	41.820	74.415	MWD+IFR1+MS
12210.000	90.000	330.000	11504.197	33.985	0.000	42.096	0.000	33.985	0.000	0.000	46.089	41.819	74.396	MWD+IFR1+MS
12300.000	90.000	330.000	11504.197	34.191	0.000	42.044	0.000	34.191	0.000	0.000	46.089	41.759	74.501	MWD+IFR1+MS
12400.000	90.000	330.000	11504.197	34.424	0.000	42.008	0.000	34.424	0.000	0.000	46.097	41.714	74.656	MWD+IFR1+MS
12500.000	90.000	330.000	11504.197	34.670	0.000	41.977	0.000	34.670	0.000	0.000	46.104	41.671	74.860	MWD+IFR1+MS
12600.000	90.000	330.000	11504.197	34.943	0.000	41.961	0.000	34.943	0.000	0.000	46.119	41.642	75.111	MWD+IFR1+MS
12700.000	90.000	330.000	11504.197	35.228	0.000	41.959	0.000	35.228	0.000	0.000	46.133	41.627	75.373	MWD+IFR1+MS
12800.000	90.000	330.000	11504.197	35.525	0.000	41.970	0.000	35.525	0.000	0.000	46.145	41.625	75.648	MWD+IFR1+MS
12900.000	90.000	330.000	11504.197	35.833	0.000	41.997	0.000	35.833	0.000	0.000	46.167	41.637	75.971	MWD+IFR1+MS
13000.000	90.000	330.000	11504.197	36.152	0.000	42.025	0.000	36.152	0.000	0.000	46.176	41.650	76.311	MWD+IFR1+MS
13100.000	90.000	330.000	11504.197	36.497	0.000	42.072	0.000	36.497	0.000	0.000	46.205	41.678	76.736	MWD+IFR1+MS
13200.000	90.000	330.000	11504.197	36.851	0.000	42.129	0.000	36.851	0.000	0.000	46.223	41.718	77.150	MWD+IFR1+MS
13300.000	90.000	330.000	11504.197	37.216	0.000	42.202	0.000	37.216	0.000	0.000	46.251	41.772	77.620	MWD+IFR1+MS
13400.000	90.000	330.000	11504.197	37.603	0.000	42.279	0.000	37.603	0.000	0.000	46.277	41.827	78.148	MWD+IFR1+MS
13500.000	90.000	330.000	11504.197	37.987	0.000	42.377	0.000	37.987	0.000	0.000	46.303	41.905	78.681	MWD+IFR1+MS
13600.000	90.000	330.000	11504.197	38.393	0.000	42.483	0.000	38.393	0.000	0.000	46.338	41.985	79.308	MWD+IFR1+MS
13700.000	90.000	330.000	11504.197	38.807	0.000	42.592	0.000	38.807	0.000	0.000	46.373	42.066	80.002	MWD+IFR1+MS
13800.000	90.000	330.000	11504.197	39.243	0.000	42.726	0.000	39.243	0.000	0.000	46.419	42.169	80.744	MWD+IFR1+MS
13900.000	90.000	330.000	11504.197	39.674	0.000	42.860	0.000	39.674	0.000	0.000	46.455	42.273	81.538	MWD+IFR1+MS
14000.000	90.000	330.000	11504.197	40.125	0.000	43.018	0.000	40.125	0.000	0.000	46.501	42.398	82.397	MWD+IFR1+MS
14100.000	90.000	330.000	11504.197	40.583	0.000	43.183	0.000	40.583	0.000	0.000	46.560	42.523	83.365	MWD+IFR1+MS
14200.000	90.000	330.000	11504.197	41.049	0.000	43.348	0.000	41.049	0.000	0.000	46.609	42.646	84.409	MWD+IFR1+MS
14300.000	90.000	330.000	11504.197	41.533	0.000	43.537	0.000	41.533	0.000	0.000	46.670	42.789	85.538	MWD+IFR1+MS
14400.000	90.000	330.000	11504.197	42.024	0.000	43.731	0.000	42.024	0.000	0.000	46.745	42.929	86.786	MWD+IFR1+MS
14500.000	90.000	330.000	11504.197	42.521	0.000	43.935	0.000	42.521	0.000	0.000	46.812	43.077	88.126	MWD+IFR1+MS
14600.000	90.000	330.000	11504.197	43.023	0.000	44.152	0.000	43.023	0.000	0.000	46.894	43.232	89.585	MWD+IFR1+MS
14700.000	90.000	330.000	11504.197	43.532	0.000	44.381	0.000	43.532	0.000	0.000	46.980	43.392	91.165	MWD+IFR1+MS
14800.000	90.000	330.000	11504.197	44.057	0.000	44.616	0.000	44.057	0.000	0.000	47.083	43.545	92.859	MWD+IFR1+MS
14900.000	90.000	330.000	11504.197	44.587	0.000	44.862	0.000	44.587	0.000	0.000	47.192	43.702	94.674	MWD+IFR1+MS
15000.000	90.000	330.000	11504.197	45.122	0.000	45.118	0.000	45.122	0.000	0.000	47.309	43.862	96.611	MWD+IFR1+MS
15100.000	90.000	330.000	11504.197	45.662	0.000	45.388	0.000	45.662	0.000	0.000	47.446	44.022	98.648	MWD+IFR1+MS
15200.000	90.000	330.000	11504.197	46.217	0.000	45.665	0.000	46.217	0.000	0.000	47.582	44.181	100.822	MWD+IFR1+MS
15300.000	90.000	330.000	11504.197	46.776	0.000	45.951	0.000	46.776	0.000	0.000	47.748	44.329	102.988	MWD+IFR1+MS
15400.000	90.000	330.000	11504.197	47.339	0.000	46.243	0.000	47.339	0.000	0.000	47.917	44.474	105.258	MWD+IFR1+MS
15500.000	90.000	330.000	11504.197	47.906	0.000	46.548	0.000	47.906	0.000	0.000	48.108	44.617	107.525	MWD+IFR1+MS
15600.000	90.000	330.000	11504.197	48.487	0.000	46.863	0.000	48.487	0.000	0.000	48.311	44.755	109.803	MWD+IFR1+MS
15700.000	90.000	330.000	11504.197	49.071	0.000	47.179	0.000	49.071	0.000	0.000	48.528	44.878	112.025	MWD+IFR1+MS
15800.000	90.000	330.000	11504.197	49.659	0.000	47.516	0.000	49.659	0.000	0.000	48.768	45.008	114.213	MWD+IFR1+MS
15900.000	90.000	330.000	11504.197	50.249	0.000	47.853	0.000	50.249	0.000	0.000	49.020	45.122	116.287	MWD+IFR1+MS
16000.000	90.000	330.000	11504.197	50.843	0.000	48.203	0.000	50.843	0.000	0.000	49.294	45.234	118.238	MWD+IFR1+MS
16100.000	90.000	330.000	11504.197	51.449	0.000	48.551	0.000	51.449	0.000	0.000	49.570	45.330	120.099	MWD+IFR1+MS
16200.000	90.000	330.000	11504.197	52.058	0.000	48.918	0.000	52.058	0.000	0.000	49.869	45.432	121.875	MWD+IFR1+MS
16300.000	90.000	330.000	11504.197	52.669	0.000	49.288	0.000	52.669	0.000	0.000	50.184	45.526	123.443	MWD+IFR1+MS
16400.000	90.000	330.000	11504.197	53.282	0.000	49.667	0.000	53.282	0.000	0.000	50.510	45.615	124.931	MWD+IFR1+MS
16500.000	90.000	330.000	11504.197	53.907	0.000	50.051	0.000	53.907	0.000	0.000	50.840	45.698	126.388	MWD+IFR1+MS
16600.000	90.000	330.000	11504.197	54.534	0.000	50.440	0.000	54.534	0.000	0.000	51.190	45.778	127.603	MWD+IFR1+MS
16700.000	90.000	330.000	11504.197	55.163	0.000	50.842	0.000	55.163	0.000	0.000	51.547	45.858	128.852	MWD+IFR1+MS
16800.000	90.000	330.000	11504.197	55.794	0.000	51.248	0.000	55.794	0.000	0.000	51.916	45.932	129.934	MWD+IFR1+MS
16900.000	90.000	330.000	11504.197	56.436	0.000	51.662	0.000	56.436	0.000	0.000	52.299	46.009	130.909	MWD+IFR1+MS

17000.000	90.000	330.000	11504.197	57.070	0.000	52.075	0.000	57.070	0.000	0.000	52.681	46.073	131.833	MWD+IFR1+MS
17100.000	90.000	330.000	11504.197	57.715	0.000	52.504	0.000	57.715	0.000	0.000	53.080	46.146	132.707	MWD+IFR1+MS
17200.000	90.000	330.000	11504.197	58.370	0.000	52.933	0.000	58.370	0.000	0.000	53.483	46.213	133.497	MWD+IFR1+MS
17300.000	90.000	330.000	11504.197	59.017	0.000	53.372	0.000	59.017	0.000	0.000	53.898	46.281	134.212	MWD+IFR1+MS
17400.000	90.000	330.000	11504.197	59.674	0.000	53.816	0.000	59.674	0.000	0.000	54.320	46.350	134.893	MWD+IFR1+MS
17500.000	90.000	330.000	11504.197	60.332	0.000	54.261	0.000	60.332	0.000	0.000	54.745	46.410	-44.490	MWD+IFR1+MS
17600.000	90.000	330.000	11504.197	60.992	0.000	54.719	0.000	60.992	0.000	0.000	55.182	46.475	-43.867	MWD+IFR1+MS
17700.000	90.000	330.000	11504.197	61.652	0.000	55.178	0.000	61.652	0.000	0.000	55.624	46.540	-43.332	MWD+IFR1+MS
17800.000	90.000	330.000	11504.197	62.322	0.000	55.644	0.000	62.322	0.000	0.000	56.072	46.604	-42.817	MWD+IFR1+MS
17900.000	90.000	330.000	11504.197	62.992	0.000	56.117	0.000	62.992	0.000	0.000	56.530	46.673	-42.349	MWD+IFR1+MS
18000.000	90.000	330.000	11504.197	63.663	0.000	56.590	0.000	63.663	0.000	0.000	56.990	46.735	-41.924	MWD+IFR1+MS
18100.000	90.000	330.000	11504.197	64.335	0.000	57.076	0.000	64.335	0.000	0.000	57.460	46.801	-41.485	MWD+IFR1+MS
18200.000	90.000	330.000	11504.197	65.015	0.000	57.559	0.000	65.015	0.000	0.000	57.930	46.862	-41.085	MWD+IFR1+MS
18300.000	90.000	330.000	11504.197	65.696	0.000	58.044	0.000	65.696	0.000	0.000	58.405	46.924	-40.744	MWD+IFR1+MS
18400.000	90.000	330.000	11504.197	66.378	0.000	58.541	0.000	66.378	0.000	0.000	58.890	46.989	-40.388	MWD+IFR1+MS
18500.000	90.000	330.000	11504.197	67.060	0.000	59.043	0.000	67.060	0.000	0.000	59.380	47.053	-40.041	MWD+IFR1+MS
18600.000	90.000	330.000	11504.197	67.742	0.000	59.546	0.000	67.742	0.000	0.000	59.873	47.119	-39.743	MWD+IFR1+MS
18700.000	90.000	330.000	11504.197	68.432	0.000	60.053	0.000	68.432	0.000	0.000	60.371	47.184	-39.451	MWD+IFR1+MS
18800.000	90.000	330.000	11504.197	69.123	0.000	60.566	0.000	69.123	0.000	0.000	60.874	47.248	-39.165	MWD+IFR1+MS
18900.000	90.000	330.000	11504.197	69.814	0.000	61.079	0.000	69.814	0.000	0.000	61.380	47.313	-38.921	MWD+IFR1+MS
19000.000	90.000	330.000	11504.197	70.512	0.000	61.603	0.000	70.512	0.000	0.000	61.894	47.382	-38.662	MWD+IFR1+MS
19100.000	90.000	330.000	11504.197	71.204	0.000	62.126	0.000	71.204	0.000	0.000	62.409	47.446	-38.424	MWD+IFR1+MS
19200.000	90.000	330.000	11504.197	71.903	0.000	62.654	0.000	71.903	0.000	0.000	62.930	47.516	-38.206	MWD+IFR1+MS
19300.000	90.000	330.000	11504.197	72.602	0.000	63.181	0.000	72.602	0.000	0.000	63.451	47.581	-38.005	MWD+IFR1+MS
19400.000	90.000	330.000	11504.197	73.308	0.000	63.718	0.000	73.308	0.000	0.000	63.981	47.650	-37.790	MWD+IFR1+MS
19500.000	90.000	330.000	11504.197	74.007	0.000	64.256	0.000	74.007	0.000	0.000	64.512	47.720	-37.607	MWD+IFR1+MS
19600.000	90.000	330.000	11504.197	74.713	0.000	64.797	0.000	74.713	0.000	0.000	65.047	47.790	-37.424	MWD+IFR1+MS
19700.000	90.000	330.000	11504.197	75.419	0.000	65.342	0.000	75.419	0.000	0.000	65.586	47.859	-37.242	MWD+IFR1+MS
19800.000	90.000	330.000	11504.197	76.125	0.000	65.891	0.000	76.125	0.000	0.000	66.129	47.927	-37.061	MWD+IFR1+MS
19900.000	90.000	330.000	11504.197	76.837	0.000	66.438	0.000	76.837	0.000	0.000	66.671	48.000	-36.904	MWD+IFR1+MS
20000.000	90.000	330.000	11504.197	77.544	0.000	66.989	0.000	77.544	0.000	0.000	67.216	48.073	-36.747	MWD+IFR1+MS
20100.000	90.000	330.000	11504.197	78.256	0.000	67.549	0.000	78.256	0.000	0.000	67.771	48.146	-36.607	MWD+IFR1+MS
20200.000	90.000	330.000	11504.197	78.975	0.000	68.110	0.000	78.975	0.000	0.000	68.327	48.222	-36.463	MWD+IFR1+MS
20300.000	90.000	330.000	11504.197	79.687	0.000	68.678	0.000	79.687	0.000	0.000	68.891	48.291	-36.323	MWD+IFR1+MS
20400.000	90.000	330.000	11504.197	80.405	0.000	69.235	0.000	80.405	0.000	0.000	69.443	48.370	-36.184	MWD+IFR1+MS
20500.000	90.000	330.000	11504.197	81.123	0.000	69.807	0.000	81.123	0.000	0.000	70.012	48.439	-36.066	MWD+IFR1+MS
20600.000	90.000	330.000	11504.197	81.841	0.000	70.381	0.000	81.841	0.000	0.000	70.580	48.512	-35.945	MWD+IFR1+MS
20700.000	90.000	330.000	11504.197	82.559	0.000	70.954	0.000	82.559	0.000	0.000	71.150	48.587	-35.819	MWD+IFR1+MS
20800.000	90.000	330.000	11504.197	83.283	0.000	71.525	0.000	83.283	0.000	0.000	71.717	48.669	-35.711	MWD+IFR1+MS
20900.000	90.000	330.000	11504.197	84.000	0.000	72.102	0.000	84.000	0.000	0.000	72.291	48.745	-35.605	MWD+IFR1+MS
21000.000	90.000	330.000	11504.197	84.723	0.000	72.681	0.000	84.723	0.000	0.000	72.865	48.823	-35.495	MWD+IFR1+MS
21100.000	90.000	330.000	11504.197	85.452	0.000	73.267	0.000	85.452	0.000	0.000	73.448	48.902	-35.396	MWD+IFR1+MS
21200.000	90.000	330.000	11504.197	86.174	0.000	73.853	0.000	86.174	0.000	0.000	74.031	48.984	-35.294	MWD+IFR1+MS
21300.000	90.000	330.000	11504.197	86.902	0.000	74.441	0.000	86.902	0.000	0.000	74.616	49.056	-35.204	MWD+IFR1+MS
21400.000	90.000	330.000	11504.197	87.630	0.000	75.031	0.000	87.630	0.000	0.000	75.203	49.138	-35.117	MWD+IFR1+MS
21500.000	90.000	330.000	11504.197	88.357	0.000	75.622	0.000	88.357	0.000	0.000	75.790	49.223	-35.027	MWD+IFR1+MS
21600.000	90.000	330.000	11504.197	89.090	0.000	76.218	0.000	89.090	0.000	0.000	76.383	49.301	-34.939	MWD+IFR1+MS
21700.000	90.000	330.000	11504.197	89.816	0.000	76.811	0.000	89.816	0.000	0.000	76.974	49.386	-34.862	MWD+IFR1+MS
21800.000	90.000	330.000	11504.197	90.548	0.000	77.415	0.000	90.548	0.000	0.000	77.575	49.468	-34.780	MWD+IFR1+MS
21900.000	90.000	330.000	11504.197	91.280	0.000	78.015	0.000	91.280	0.000	0.000	78.172	49.550	-34.702	MWD+IFR1+MS
22000.000	90.000	330.000	11504.197	92.016	0.000	78.614	0.000	92.016	0.000	0.000	78.768	49.634	-34.620	MWD+IFR1+MS
22100.000	90.000	330.000	11504.197	92.747	0.000	79.216	0.000	92.747	0.000	0.000	79.368	49.716	-34.554	MWD+IFR1+MS
22200.000	90.000	330.000	11504.197	93.483	0.000	79.823	0.000	93.483	0.000	0.000	79.972	49.804	-34.477	MWD+IFR1+MS

22300.000	90.000	330.000	11504.197	94.218	0.000	80.427	0.000	94.218	0.000	0.000	80.574	49.898	-34.410	MWD+IFR1+MS
22400.000	90.000	330.000	11504.197	94.953	0.000	81.036	0.000	94.953	0.000	0.000	81.181	49.986	-34.345	MWD+IFR1+MS
22500.000	90.000	330.000	11504.197	95.692	0.000	81.651	0.000	95.692	0.000	0.000	81.794	50.068	-34.281	MWD+IFR1+MS
22600.000	90.000	330.000	11504.197	96.431	0.000	82.261	0.000	96.431	0.000	0.000	82.402	50.149	-34.220	MWD+IFR1+MS
22700.000	90.000	330.000	11504.197	97.170	0.000	82.877	0.000	97.170	0.000	0.000	83.016	50.243	-34.155	MWD+IFR1+MS
22800.000	90.000	330.000	11504.197	97.908	0.000	83.489	0.000	97.908	0.000	0.000	83.625	50.337	-34.093	MWD+IFR1+MS
22900.000	90.000	330.000	11504.197	98.646	0.000	84.107	0.000	98.646	0.000	0.000	84.241	50.432	-34.039	MWD+IFR1+MS
23000.000	90.000	330.000	11504.197	99.388	0.000	84.729	0.000	99.388	0.000	0.000	84.861	50.513	-33.979	MWD+IFR1+MS
23080.000	90.000	330.000	11505.000	99.990	0.000	85.228	0.000	99.990	0.000	0.000	85.358	50.596	-33.937	MWD+IFR1+MS
23100.000	90.000	330.000	11505.000	100.100	0.000	85.343	0.000	100.100	0.000	0.000	85.473	50.610	-33.923	MWD+IFR1+MS
23180.000	90.000	330.000	11505.000	100.698	0.000	85.847	0.000	100.698	0.000	0.000	85.976	50.687	-33.882	MWD+IFR1+MS

Plan Targets		PLU 29-20 BS 108H			
	Measured Depth	Grid Northing	Grid Easting	TVD MSL	Target Shape
Target Name	(ft)	(ft)	(ft)	(ft)	
Slant KOP 12	11085.57	401361.70	667886.52	7418.00	CIRCLE
Slant FTP 12	12211.11	401982.61	667528.04	8135.00	CIRCLE
Slant LTP 12	23080.97	411395.99	662093.22	8135.00	CIRCLE
Slant BHL 12	23180.97	411482.59	662043.22	8135.00	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 108H
SURFACE HOLE FOOTAGE:	0533' FNL & 0235' FEL
BOTTOM HOLE FOOTAGE:	2608' FSL & 0506' FEL 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 **1210** 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

- Shell 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 integrity 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 120996

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 120996
	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