

Well Name: POKER LAKE UNIT 29-20 BS	Well Location: T25S / R31E / SEC 29 / NENE /	County or Parish/State:
Well Number: 107H	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: 3001549119	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2652938

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 01/18/2022	Time Sundry Submitted: 08:03
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 & 330'FEL to 2609'FSL & 1093'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_107H_NOI_Attachments_20220118080344.pdf

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Conditions of Approval

Specialist Review

Conditions_of_Approval_20220119061103.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 08:03 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	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ 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 / 265 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107105 / LONG: -103.792563 (TVD: 0 feet, MD: 0 feet)

PPP: NESE / 2310 FNL / 330 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110387 / LONG: -103.798103 (TVD: 11531 feet, MD: 17451 feet)

PPP: SENE / 2310 FNL / 330 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.10222 / LONG: -103.792795 (TVD: 11531 feet, MD: 12171 feet)

BHL: NENE / 50 FNL / 330 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.12299 / LONG: -103.792655 (TVD: 11531 feet, MD: 19727 feet)

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

XTO Energy Inc.
PLU 29-20 BS 107H
Projected TD: 23448' MD / 11770' TVD
SHL: 533' FNL & 265' FEL , Section 29, T25S, R31E
BHL: 2609' FSL & 1093' 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
Wolfcamp Y	11667'	Water/Oil/Gas
Wolfcamp A	11697'	Water/Oil/Gas
Target/Land Curve	11807'	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 11152' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23448 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 10852 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	1.25	5.70	15.80
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.13	2.65	1.68
8.75	4000' – 11152'	7.625	29.7	HC L-80	Flush Joint	New	1.55	1.80	1.91
6.75	0' – 11052'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.20	1.94
6.75	11052' - 11750'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.07	5.00
6.75	11750' - 23448'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.07	5.77

- 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 +/- 11152'

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: 390 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 +/- 23448'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 10852 feet

Tail: 860 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 11352 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 4449 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' - 11152'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
11152' - 23448'	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 7038 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- 49119	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 107H
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	265	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		2,609	SOUTH	1,093	EAST	EDDY

¹² Dedicated Acres 6.00	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

SHL (NAD83 NME) Y = 403,121.2 X = 708,775.9 LAT. = 32.107105 °N LONG. = 103.792563 °W FTP (NAD83 NME) Y = 401,420.1 X = 708,487.4 LAT. = 32.102433 °N LONG. = 103.793522 °W SHL (NAD27 NME) Y = 403,063.3 X = 667,590.3 LAT. = 32.106981 °N LONG. = 103.792084 °W FTP (NAD27 NME) Y = 401,362.2 X = 667,301.7 LAT. = 32.102308 °N LONG. = 103.793044 °W LTP (NAD83 NME) Y = 411,454.7 X = 702,693.3 LAT. = 32.130095 °N LONG. = 103.812076 °W BHL (NAD83 NME) Y = 411,541.3 X = 702,643.4 LAT. = 32.130334 °N LONG. = 103.812237 °W LTP (NAD27 NME) Y = 411,396.5 X = 661,508.4 LAT. = 32.129970 °N LONG. = 103.811596 °W BHL (NAD27 NME) Y = 411,483.1 X = 661,458.4 LAT. = 32.130209 °N LONG. = 103.811756 °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  L.M./AI 2019082882
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Well Plan Report - PLU 29-20 BS 107H

Measured Depth:	23448.00 ft	Site:	PLU 29-20 Big Sinks Pad D
TVD RKB:	11770.00 ft	Slot:	22
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403060.00 ft		
Easting:	667588.60 ft		
RKB:	3370.00 ft		
Ground Level:	3340.00 ft		
North Reference:	Grid		
Convergence Angle:	0.29 Deg		

Plan Sections PLU 29-20 BS 107H									
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	
2565.80	21.32	189.63	2541.38	-193.22	-32.78	2.00	0.00	2.00	
6233.97	21.32	189.63	5958.62	-1507.85	-255.84	0.00	0.00	0.00	
7299.77	0.00	0.00	7000.00	-1701.07	-288.63	-2.00	0.00	2.00	
11352.77	0.00	0.00	11053.00	-1701.07	-288.63	0.00	0.00	0.00	Slant KOP 13
12477.77	90.00	330.00	11769.20	-1080.82	-646.73	8.00	0.00	8.00	Slant FTP 13
23348.17	90.00	330.00	11770.00	8333.22	-6081.93	0.00	0.00	0.00	Slant LTP 13
23448.17	90.00	330.00	11770.00	8419.82	-6131.93	0.00	0.00	0.00	Slant BHL 13

Position Uncertainty PLU 29-20 BS 107H														
Measured	TVD Highside			Lateral		Vertical		Magnitude	Semi-major	Semi-minor	Semi-minor	Tool		
Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias		Error	Error	Azimuth	Used		
(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	MWD+IFR1+MS	
100.000	0.000	0.000	100.000	0.468	0.000	0.468	0.000	2.299	0.000	0.000	0.556	0.358	135.000	MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.983	0.000	0.983	0.000	2.307	0.000	0.000	1.191	0.717	135.000	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.403	0.000	1.403	0.000	2.321	0.000	0.000	1.668	1.075	135.000	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.797	0.000	1.797	0.000	2.340	0.000	0.000	2.099	1.434	135.000	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.179	0.000	2.179	0.000	2.364	0.000	0.000	2.507	1.792	135.000	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.554	0.000	2.554	0.000	2.393	0.000	0.000	2.902	2.151	135.000	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.925	0.000	2.925	0.000	2.428	0.000	0.000	3.288	2.509	135.000	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.292	0.000	3.292	0.000	2.467	0.000	0.000	3.669	2.867	135.000	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.659	0.000	3.659	0.000	2.511	0.000	0.000	4.046	3.226	135.000	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.024	0.000	4.024	0.000	2.559	0.000	0.000	4.420	3.584	135.000	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.387	0.000	4.387	0.000	2.613	0.000	0.000	4.791	3.943	135.000	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.751	0.000	4.751	0.000	2.670	0.000	0.000	5.161	4.302	135.000	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.113	0.000	5.113	0.000	2.731	0.000	0.000	5.529	4.660	135.000	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.474	0.000	5.474	0.000	2.797	0.000	0.000	5.896	5.018	135.000	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.836	0.000	5.836	0.000	2.866	0.000	0.000	6.262	5.377	135.000	MWD+IFR1+MS

1600.000	1.999	189.600	1599.980	6.337	-0.000	6.012	0.000	2.939	0.000	0.000	6.594	5.732	133.381	MWD+IFR1+MS
1700.000	4.000	189.600	1699.838	7.020	-0.000	6.351	0.000	3.015	0.000	0.000	7.259	6.092	126.679	MWD+IFR1+MS
1800.000	6.000	189.600	1799.452	7.651	-0.000	6.693	0.000	3.098	0.000	0.000	7.896	6.435	123.336	MWD+IFR1+MS
1900.000	7.999	189.600	1898.702	8.240	-0.000	7.036	0.000	3.187	0.000	0.000	8.503	6.772	121.378	MWD+IFR1+MS
2000.000	10.000	189.600	1997.465	8.794	-0.000	7.380	0.000	3.288	0.000	0.000	9.082	7.109	120.129	MWD+IFR1+MS
2100.000	11.990	189.600	2095.623	9.319	-0.000	7.727	0.000	3.399	0.000	0.000	9.639	7.447	119.286	MWD+IFR1+MS
2200.000	14.000	189.600	2193.055	9.817	-0.000	8.075	0.000	3.524	0.000	0.000	10.174	7.787	118.670	MWD+IFR1+MS
2300.000	15.990	189.600	2289.643	10.293	-0.000	8.425	0.000	3.662	0.000	0.000	10.691	8.128	118.241	MWD+IFR1+MS
2400.000	18.000	189.600	2385.268	10.747	-0.000	8.777	0.000	3.817	0.000	0.000	11.190	8.471	117.920	MWD+IFR1+MS
2500.000	19.990	189.600	2479.816	11.185	-0.000	9.133	0.000	3.987	0.000	0.000	11.677	8.819	117.688	MWD+IFR1+MS
2565.700	21.310	189.600	2541.382	11.378	-0.000	9.361	0.000	4.077	0.000	0.000	11.913	9.048	117.642	MWD+IFR1+MS
2600.000	21.310	189.600	2573.244	11.477	-0.000	9.478	0.000	4.116	0.000	0.000	12.006	9.168	117.662	MWD+IFR1+MS
2700.000	21.310	189.600	2666.403	11.770	-0.000	9.828	0.000	4.244	0.000	0.000	12.280	9.524	117.830	MWD+IFR1+MS
2800.000	21.310	189.600	2759.562	12.079	-0.000	10.197	0.000	4.381	0.000	0.000	12.572	9.892	118.210	MWD+IFR1+MS
2900.000	21.310	189.600	2852.721	12.397	-0.000	10.563	0.000	4.524	0.000	0.000	12.871	10.258	118.510	MWD+IFR1+MS
3000.000	21.310	189.600	2945.880	12.725	-0.000	10.940	0.000	4.673	0.000	0.000	13.180	10.634	118.847	MWD+IFR1+MS
3100.000	21.310	189.600	3039.039	13.055	-0.000	11.313	0.000	4.828	0.000	0.000	13.489	11.006	119.182	MWD+IFR1+MS
3200.000	21.310	189.600	3132.198	13.393	-0.000	11.691	0.000	4.987	0.000	0.000	13.806	11.384	119.515	MWD+IFR1+MS
3300.000	21.310	189.600	3225.358	13.739	-0.000	12.069	0.000	5.150	0.000	0.000	14.129	11.763	119.805	MWD+IFR1+MS
3400.000	21.310	189.600	3318.517	14.088	-0.000	12.452	0.000	5.318	0.000	0.000	14.457	12.145	120.138	MWD+IFR1+MS
3500.000	21.310	189.600	3411.676	14.445	-0.000	12.836	0.000	5.489	0.000	0.000	14.790	12.528	120.423	MWD+IFR1+MS
3600.000	21.310	189.600	3504.835	14.801	-0.000	13.220	0.000	5.664	0.000	0.000	15.123	12.911	120.751	MWD+IFR1+MS
3700.000	21.310	189.600	3597.994	15.167	-0.000	13.607	0.000	5.843	0.000	0.000	15.465	13.298	121.035	MWD+IFR1+MS
3800.000	21.310	189.600	3691.153	15.535	-0.000	13.995	0.000	6.024	0.000	0.000	15.809	13.685	121.312	MWD+IFR1+MS
3900.000	21.310	189.600	3784.312	15.906	-0.000	14.382	0.000	6.210	0.000	0.000	16.155	14.072	121.591	MWD+IFR1+MS
4000.000	21.310	189.600	3877.471	16.281	-0.000	14.773	0.000	6.398	0.000	0.000	16.506	14.462	121.867	MWD+IFR1+MS
4100.000	21.310	189.600	3970.630	16.659	-0.000	15.164	0.000	6.589	0.000	0.000	16.859	14.852	122.144	MWD+IFR1+MS
4200.000	21.310	189.600	4063.789	17.041	-0.000	15.554	0.000	6.782	0.000	0.000	17.215	15.243	122.374	MWD+IFR1+MS
4300.000	21.310	189.600	4156.948	17.425	-0.000	15.948	0.000	6.979	0.000	0.000	17.573	15.636	122.642	MWD+IFR1+MS
4400.000	21.310	189.600	4250.107	17.813	-0.000	16.341	0.000	7.177	0.000	0.000	17.935	16.029	122.870	MWD+IFR1+MS
4500.000	21.310	189.600	4343.266	18.202	-0.000	16.737	0.000	7.378	0.000	0.000	18.299	16.424	123.135	MWD+IFR1+MS
4600.000	21.310	189.600	4436.425	18.592	-0.000	17.133	0.000	7.582	0.000	0.000	18.664	16.819	123.394	MWD+IFR1+MS
4700.000	21.310	189.600	4529.584	18.986	-0.000	17.528	0.000	7.788	0.000	0.000	19.031	17.214	123.613	MWD+IFR1+MS
4800.000	21.310	189.600	4622.743	19.383	-0.000	17.925	0.000	7.997	0.000	0.000	19.403	17.611	123.833	MWD+IFR1+MS
4900.000	21.310	189.600	4715.902	19.780	-0.000	18.320	0.000	8.207	0.000	0.000	19.773	18.006	124.007	MWD+IFR1+MS
5000.000	21.310	189.600	4809.061	20.179	-0.000	18.719	0.000	8.420	0.000	0.000	20.147	18.404	124.258	MWD+IFR1+MS
5100.000	21.310	189.600	4902.220	20.580	-0.000	19.116	0.000	8.635	0.000	0.000	20.521	18.801	124.430	MWD+IFR1+MS
5200.000	21.310	189.600	4995.379	20.984	-0.000	19.514	0.000	8.852	0.000	0.000	20.899	19.200	124.599	MWD+IFR1+MS
5300.000	21.310	189.600	5088.538	21.388	-0.000	19.915	0.000	9.071	0.000	0.000	21.278	19.600	124.805	MWD+IFR1+MS
5400.000	21.310	189.600	5181.697	21.793	-0.000	20.312	0.000	9.292	0.000	0.000	21.656	19.998	124.969	MWD+IFR1+MS
5500.000	21.310	189.600	5274.856	22.200	-0.000	20.714	0.000	9.516	0.000	0.000	22.038	20.399	125.173	MWD+IFR1+MS
5600.000	21.310	189.600	5368.015	22.610	-0.000	21.113	0.000	9.741	0.000	0.000	22.421	20.799	125.294	MWD+IFR1+MS
5700.000	21.310	189.600	5461.174	23.020	-0.000	21.514	0.000	9.968	0.000	0.000	22.805	21.200	125.454	MWD+IFR1+MS
5800.000	21.310	189.600	5554.333	23.431	-0.000	21.915	0.000	10.193	0.000	0.000	23.190	21.601	125.574	MWD+IFR1+MS
5900.000	21.310	189.600	5647.493	23.843	-0.000	22.315	0.000	10.426	0.000	0.000	23.576	22.002	125.692	MWD+IFR1+MS
6000.000	21.310	189.600	5740.652	24.255	-0.000	22.717	0.000	10.658	0.000	0.000	23.962	22.403	125.848	MWD+IFR1+MS
6100.000	21.310	189.600	5833.811	24.669	-0.000	23.120	0.000	10.895	0.000	0.000	24.351	22.807	125.999	MWD+IFR1+MS
6200.000	21.310	189.600	5926.970	25.084	-0.000	23.521	0.000	11.131	0.000	0.000	24.740	23.209	126.076	MWD+IFR1+MS
6233.900	21.310	189.600	5958.618	25.223	-0.000	23.656	0.000	11.212	0.000	0.000	24.869	23.346	126.081	MWD+IFR1+MS
6300.000	19.990	189.600	6020.398	25.545	-0.000	23.916	0.000	11.371	0.000	0.000	25.124	23.609	126.006	MWD+IFR1+MS
6400.000	17.990	189.600	6114.948	26.065	-0.000	24.308	0.000	11.619	0.000	0.000	25.565	24.005	125.407	MWD+IFR1+MS
6500.000	15.990	189.600	6210.576	26.578	-0.000	24.699	0.000	11.866	0.000	0.000	26.032	24.398	124.661	MWD+IFR1+MS
6600.000	13.990	189.600	6307.166	27.049	-0.000	25.083	0.000	12.100	0.000	0.000	26.493	24.783	123.979	MWD+IFR1+MS

6700.000	11.990	189.600	6404.600	27.478	-0.000	25.459	0.000	12.325	0.000	0.000	26.947	25.161	123.354	MWD+IFR1+MS
6800.000	9.994	189.600	6502.759	27.866	-0.000	25.828	0.000	12.538	0.000	0.000	27.392	25.530	122.802	MWD+IFR1+MS
6900.000	7.995	189.600	6601.524	28.213	-0.000	26.188	0.000	12.744	0.000	0.000	27.828	25.890	122.284	MWD+IFR1+MS
7000.000	5.995	189.600	6700.775	28.516	-0.000	26.540	0.000	12.946	0.000	0.000	28.253	26.242	121.865	MWD+IFR1+MS
7100.000	3.995	189.600	6800.390	28.778	-0.000	26.885	0.000	13.138	0.000	0.000	28.667	26.585	121.506	MWD+IFR1+MS
7200.000	1.995	189.600	6900.248	28.998	-0.000	27.222	0.000	13.327	0.000	0.000	29.071	26.920	121.194	MWD+IFR1+MS
7299.700	0.000	0.000	7000.000	28.799	0.000	27.824	0.000	13.513	0.000	0.000	29.356	27.237	121.299	MWD+IFR1+MS
7400.000	0.000	0.000	7100.228	29.115	0.000	28.132	0.000	13.700	0.000	0.000	29.672	27.543	121.236	MWD+IFR1+MS
7500.000	0.000	0.000	7200.228	29.401	0.000	28.439	0.000	13.889	0.000	0.000	29.960	27.850	121.438	MWD+IFR1+MS
7600.000	0.000	0.000	7300.228	29.687	0.000	28.749	0.000	14.082	0.000	0.000	30.248	28.158	121.659	MWD+IFR1+MS
7700.000	0.000	0.000	7400.228	29.975	0.000	29.060	0.000	14.279	0.000	0.000	30.538	28.468	121.879	MWD+IFR1+MS
7800.000	0.000	0.000	7500.228	30.264	0.000	29.372	0.000	14.481	0.000	0.000	30.829	28.778	122.099	MWD+IFR1+MS
7900.000	0.000	0.000	7600.228	30.555	0.000	29.683	0.000	14.687	0.000	0.000	31.121	29.089	122.298	MWD+IFR1+MS
8000.000	0.000	0.000	7700.228	30.848	0.000	29.997	0.000	14.893	0.000	0.000	31.416	29.401	122.496	MWD+IFR1+MS
8100.000	0.000	0.000	7800.228	31.142	0.000	30.312	0.000	15.103	0.000	0.000	31.712	29.715	122.714	MWD+IFR1+MS
8200.000	0.000	0.000	7900.228	31.437	0.000	30.627	0.000	15.320	0.000	0.000	32.009	30.029	122.911	MWD+IFR1+MS
8300.000	0.000	0.000	8000.228	31.733	0.000	30.943	0.000	15.537	0.000	0.000	32.307	30.344	123.129	MWD+IFR1+MS
8400.000	0.000	0.000	8100.228	32.031	0.000	31.262	0.000	15.761	0.000	0.000	32.607	30.661	123.346	MWD+IFR1+MS
8500.000	0.000	0.000	8200.228	32.326	0.000	31.580	0.000	15.984	0.000	0.000	32.905	30.977	123.608	MWD+IFR1+MS
8600.000	0.000	0.000	8300.228	32.619	0.000	31.890	0.000	16.214	0.000	0.000	33.199	31.286	123.803	MWD+IFR1+MS
8700.000	0.000	0.000	8400.228	32.924	0.000	32.218	0.000	16.447	0.000	0.000	33.507	31.611	124.061	MWD+IFR1+MS
8800.000	0.000	0.000	8500.228	33.226	0.000	32.527	0.000	16.682	0.000	0.000	33.808	31.922	124.104	MWD+IFR1+MS
8900.000	0.000	0.000	8600.228	33.526	0.000	32.848	0.000	16.923	0.000	0.000	34.110	32.241	124.362	MWD+IFR1+MS
9000.000	0.000	0.000	8700.228	33.838	0.000	33.181	0.000	17.167	0.000	0.000	34.425	32.572	124.619	MWD+IFR1+MS
9100.000	0.000	0.000	8800.228	34.147	0.000	33.496	0.000	17.413	0.000	0.000	34.732	32.889	124.660	MWD+IFR1+MS
9200.000	0.000	0.000	8900.228	34.453	0.000	33.823	0.000	17.664	0.000	0.000	35.041	33.214	124.915	MWD+IFR1+MS
9300.000	0.000	0.000	9000.228	34.756	0.000	34.147	0.000	17.916	0.000	0.000	35.347	33.535	125.170	MWD+IFR1+MS
9400.000	0.000	0.000	9100.228	35.071	0.000	34.467	0.000	18.174	0.000	0.000	35.660	33.858	125.208	MWD+IFR1+MS
9500.000	0.000	0.000	9200.228	35.369	0.000	34.799	0.000	18.436	0.000	0.000	35.966	34.182	125.680	MWD+IFR1+MS
9600.000	0.000	0.000	9300.228	35.693	0.000	35.128	0.000	18.700	0.000	0.000	36.288	34.514	125.716	MWD+IFR1+MS
9700.000	0.000	0.000	9400.228	36.000	0.000	35.454	0.000	18.968	0.000	0.000	36.598	34.837	125.968	MWD+IFR1+MS
9800.000	0.000	0.000	9500.228	36.304	0.000	35.777	0.000	19.238	0.000	0.000	36.905	35.157	126.220	MWD+IFR1+MS
9900.000	0.000	0.000	9600.228	36.620	0.000	36.111	0.000	19.514	0.000	0.000	37.223	35.489	126.471	MWD+IFR1+MS
10000.000	0.000	0.000	9700.228	36.932	0.000	36.442	0.000	19.791	0.000	0.000	37.539	35.817	126.721	MWD+IFR1+MS
10100.000	0.000	0.000	9800.228	37.256	0.000	36.770	0.000	20.075	0.000	0.000	37.860	36.147	126.753	MWD+IFR1+MS
10200.000	0.000	0.000	9900.228	37.563	0.000	37.094	0.000	20.359	0.000	0.000	38.171	36.469	127.001	MWD+IFR1+MS
10300.000	0.000	0.000	10000.228	37.881	0.000	37.430	0.000	20.647	0.000	0.000	38.492	36.802	127.249	MWD+IFR1+MS
10400.000	0.000	0.000	10100.228	38.197	0.000	37.762	0.000	20.940	0.000	0.000	38.810	37.132	127.495	MWD+IFR1+MS
10500.000	0.000	0.000	10200.228	38.523	0.000	38.092	0.000	21.234	0.000	0.000	39.134	37.464	127.526	MWD+IFR1+MS
10600.000	0.000	0.000	10300.228	38.833	0.000	38.419	0.000	21.534	0.000	0.000	39.447	37.788	127.770	MWD+IFR1+MS
10700.000	0.000	0.000	10400.228	39.154	0.000	38.756	0.000	21.836	0.000	0.000	39.771	38.122	128.014	MWD+IFR1+MS
10800.000	0.000	0.000	10500.228	39.472	0.000	39.090	0.000	22.140	0.000	0.000	40.091	38.454	128.257	MWD+IFR1+MS
10900.000	0.000	0.000	10600.228	39.799	0.000	39.421	0.000	22.450	0.000	0.000	40.417	38.787	128.283	MWD+IFR1+MS
11000.000	0.000	0.000	10700.228	40.125	0.000	39.749	0.000	22.762	0.000	0.000	40.741	39.118	128.309	MWD+IFR1+MS
11100.000	0.000	0.000	10800.228	40.435	0.000	40.087	0.000	23.078	0.000	0.000	41.059	39.448	128.764	MWD+IFR1+MS
11200.000	0.000	0.000	10900.228	40.768	0.000	40.423	0.000	23.397	0.000	0.000	41.389	39.786	128.788	MWD+IFR1+MS
11300.000	0.000	0.000	11000.228	41.085	0.000	40.755	0.000	23.719	0.000	0.000	41.710	40.116	129.026	MWD+IFR1+MS
11352.000	0.000	0.000	11053.000	41.255	0.000	40.939	0.000	23.891	0.000	0.000	41.882	40.298	129.241	MWD+IFR1+MS
11400.000	3.778	330.000	11100.196	40.328	0.000	41.829	0.000	24.044	0.000	0.000	42.028	40.456	128.990	MWD+IFR1+MS
11500.000	11.770	330.000	11199.195	40.143	0.000	42.137	0.000	24.386	0.000	0.000	42.450	41.194	119.856	MWD+IFR1+MS
11600.000	19.770	330.000	11295.349	39.970	0.000	42.417	0.000	24.821	0.000	0.000	43.173	41.953	97.869	MWD+IFR1+MS
11700.000	27.770	330.000	11386.786	39.381	0.000	42.677	0.000	25.389	0.000	0.000	44.037	42.388	84.558	MWD+IFR1+MS
11800.000	35.770	330.000	11471.726	38.470	0.000	42.899	0.000	26.127	0.000	0.000	44.836	42.670	78.729	MWD+IFR1+MS

11900.000	43.770	330.000	11548.516	37.355	0.000	43.091	0.000	27.048	0.000	0.000	45.481	42.889	75.950	MWD+IFR1+MS
12000.000	51.770	330.000	11615.662	36.190	0.000	43.243	0.000	28.146	0.000	0.000	45.978	43.046	74.772	MWD+IFR1+MS
12100.000	59.770	330.000	11671.855	35.131	0.000	43.365	0.000	29.401	0.000	0.000	46.310	43.167	74.284	MWD+IFR1+MS
12200.000	67.770	330.000	11716.004	34.357	0.000	43.447	0.000	30.775	0.000	0.000	46.512	43.239	74.349	MWD+IFR1+MS
12300.000	75.770	330.000	11747.248	34.019	0.000	43.494	0.000	32.218	0.000	0.000	46.613	43.269	74.752	MWD+IFR1+MS
12400.000	83.770	330.000	11764.979	34.253	0.000	43.506	0.000	33.705	0.000	0.000	46.654	43.260	75.330	MWD+IFR1+MS
12477.000	90.000	330.000	11769.197	34.467	0.000	43.495	0.000	34.467	0.000	0.000	46.667	43.234	75.711	MWD+IFR1+MS
12500.000	90.000	330.000	11769.197	34.525	0.000	43.482	0.000	34.525	0.000	0.000	46.675	43.214	75.864	MWD+IFR1+MS
12600.000	90.000	330.000	11769.197	34.742	0.000	43.458	0.000	34.742	0.000	0.000	46.697	43.167	76.369	MWD+IFR1+MS
12700.000	90.000	330.000	11769.197	34.971	0.000	43.447	0.000	34.971	0.000	0.000	46.718	43.133	76.896	MWD+IFR1+MS
12800.000	90.000	330.000	11769.197	35.228	0.000	43.452	0.000	35.228	0.000	0.000	46.748	43.112	77.470	MWD+IFR1+MS
12900.000	90.000	330.000	11769.197	35.496	0.000	43.461	0.000	35.496	0.000	0.000	46.777	43.092	78.092	MWD+IFR1+MS
13000.000	90.000	330.000	11769.197	35.777	0.000	43.482	0.000	35.777	0.000	0.000	46.806	43.084	78.727	MWD+IFR1+MS
13100.000	90.000	330.000	11769.197	36.083	0.000	43.516	0.000	36.083	0.000	0.000	46.834	43.088	79.382	MWD+IFR1+MS
13200.000	90.000	330.000	11769.197	36.401	0.000	43.566	0.000	36.401	0.000	0.000	46.873	43.104	80.091	MWD+IFR1+MS
13300.000	90.000	330.000	11769.197	36.715	0.000	43.619	0.000	36.715	0.000	0.000	46.911	43.121	80.854	MWD+IFR1+MS
13400.000	90.000	330.000	11769.197	37.068	0.000	43.696	0.000	37.068	0.000	0.000	46.960	43.160	81.649	MWD+IFR1+MS
13500.000	90.000	330.000	11769.197	37.417	0.000	43.778	0.000	37.417	0.000	0.000	47.009	43.199	82.500	MWD+IFR1+MS
13600.000	90.000	330.000	11769.197	37.789	0.000	43.871	0.000	37.789	0.000	0.000	47.059	43.249	83.391	MWD+IFR1+MS
13700.000	90.000	330.000	11769.197	38.171	0.000	43.968	0.000	38.171	0.000	0.000	47.110	43.297	84.345	MWD+IFR1+MS
13800.000	90.000	330.000	11769.197	38.562	0.000	44.089	0.000	38.562	0.000	0.000	47.173	43.367	85.346	MWD+IFR1+MS
13900.000	90.000	330.000	11769.197	38.962	0.000	44.214	0.000	38.962	0.000	0.000	47.237	43.436	86.414	MWD+IFR1+MS
14000.000	90.000	330.000	11769.197	39.383	0.000	44.353	0.000	39.383	0.000	0.000	47.314	43.513	87.544	MWD+IFR1+MS
14100.000	90.000	330.000	11769.197	39.799	0.000	44.504	0.000	39.799	0.000	0.000	47.394	43.599	88.732	MWD+IFR1+MS
14200.000	90.000	330.000	11769.197	40.237	0.000	44.659	0.000	40.237	0.000	0.000	47.476	43.681	89.984	MWD+IFR1+MS
14300.000	90.000	330.000	11769.197	40.694	0.000	44.834	0.000	40.694	0.000	0.000	47.562	43.782	91.303	MWD+IFR1+MS
14400.000	90.000	330.000	11769.197	41.146	0.000	45.014	0.000	41.146	0.000	0.000	47.663	43.878	92.681	MWD+IFR1+MS
14500.000	90.000	330.000	11769.197	41.617	0.000	45.206	0.000	41.617	0.000	0.000	47.768	43.980	94.125	MWD+IFR1+MS
14600.000	90.000	330.000	11769.197	42.095	0.000	45.401	0.000	42.095	0.000	0.000	47.879	44.075	95.621	MWD+IFR1+MS
14700.000	90.000	330.000	11769.197	42.579	0.000	45.618	0.000	42.579	0.000	0.000	48.005	44.187	97.178	MWD+IFR1+MS
14800.000	90.000	330.000	11769.197	43.081	0.000	45.838	0.000	43.081	0.000	0.000	48.138	44.291	98.773	MWD+IFR1+MS
14900.000	90.000	330.000	11769.197	43.578	0.000	46.069	0.000	43.578	0.000	0.000	48.278	44.399	100.418	MWD+IFR1+MS
15000.000	90.000	330.000	11769.197	44.091	0.000	46.314	0.000	44.091	0.000	0.000	48.435	44.509	102.082	MWD+IFR1+MS
15100.000	90.000	330.000	11769.197	44.609	0.000	46.568	0.000	44.609	0.000	0.000	48.601	44.620	103.778	MWD+IFR1+MS
15200.000	90.000	330.000	11769.197	45.144	0.000	46.825	0.000	45.144	0.000	0.000	48.775	44.722	105.470	MWD+IFR1+MS
15300.000	90.000	330.000	11769.197	45.673	0.000	47.095	0.000	45.673	0.000	0.000	48.966	44.825	107.127	MWD+IFR1+MS
15400.000	90.000	330.000	11769.197	46.217	0.000	47.375	0.000	46.217	0.000	0.000	49.167	44.928	108.803	MWD+IFR1+MS
15500.000	90.000	330.000	11769.197	46.765	0.000	47.664	0.000	46.765	0.000	0.000	49.378	45.032	110.464	MWD+IFR1+MS
15600.000	90.000	330.000	11769.197	47.318	0.000	47.964	0.000	47.318	0.000	0.000	49.599	45.133	112.126	MWD+IFR1+MS
15700.000	90.000	330.000	11769.197	47.885	0.000	48.269	0.000	47.885	0.000	0.000	49.836	45.225	113.674	MWD+IFR1+MS
15800.000	90.000	330.000	11769.197	48.456	0.000	48.584	0.000	48.456	0.000	0.000	50.092	45.319	115.137	MWD+IFR1+MS
15900.000	90.000	330.000	11769.197	49.031	0.000	48.907	0.000	49.031	0.000	0.000	50.349	45.409	116.626	MWD+IFR1+MS
16000.000	90.000	330.000	11769.197	49.608	0.000	49.241	0.000	49.608	0.000	0.000	50.624	45.500	118.029	MWD+IFR1+MS
16100.000	90.000	330.000	11769.197	50.190	0.000	49.576	0.000	50.190	0.000	0.000	50.905	45.582	119.340	MWD+IFR1+MS
16200.000	90.000	330.000	11769.197	50.784	0.000	49.923	0.000	50.784	0.000	0.000	51.204	45.664	120.571	MWD+IFR1+MS
16300.000	90.000	330.000	11769.197	51.381	0.000	50.278	0.000	51.381	0.000	0.000	51.511	45.745	121.763	MWD+IFR1+MS
16400.000	90.000	330.000	11769.197	51.981	0.000	50.641	0.000	51.981	0.000	0.000	51.827	45.826	122.912	MWD+IFR1+MS
16500.000	90.000	330.000	11769.197	52.583	0.000	51.013	0.000	52.583	0.000	0.000	52.152	45.904	124.025	MWD+IFR1+MS
16600.000	90.000	330.000	11769.197	53.198	0.000	51.388	0.000	53.198	0.000	0.000	52.489	45.977	125.014	MWD+IFR1+MS
16700.000	90.000	330.000	11769.197	53.814	0.000	51.770	0.000	53.814	0.000	0.000	52.834	46.050	125.969	MWD+IFR1+MS
16800.000	90.000	330.000	11769.197	54.433	0.000	52.160	0.000	54.433	0.000	0.000	53.186	46.122	126.888	MWD+IFR1+MS
16900.000	90.000	330.000	11769.197	55.055	0.000	52.561	0.000	55.055	0.000	0.000	53.553	46.196	127.739	MWD+IFR1+MS
17000.000	90.000	330.000	11769.197	55.687	0.000	52.968	0.000	55.687	0.000	0.000	53.927	46.269	128.561	MWD+IFR1+MS

17100.000	90.000	330.000	11769.197	56.321	0.000	53.379	0.000	56.321	0.000	0.000	54.311	46.339	129.285	MWD+IFR1+MS
17200.000	90.000	330.000	11769.197	56.956	0.000	53.794	0.000	56.956	0.000	0.000	54.696	46.405	130.019	MWD+IFR1+MS
17300.000	90.000	330.000	11769.197	57.593	0.000	54.217	0.000	57.593	0.000	0.000	55.092	46.474	130.696	MWD+IFR1+MS
17400.000	90.000	330.000	11769.197	58.232	0.000	54.650	0.000	58.232	0.000	0.000	55.501	46.547	131.322	MWD+IFR1+MS
17500.000	90.000	330.000	11769.197	58.881	0.000	55.081	0.000	58.881	0.000	0.000	55.907	46.609	131.929	MWD+IFR1+MS
17600.000	90.000	330.000	11769.197	59.532	0.000	55.520	0.000	59.532	0.000	0.000	56.325	46.674	132.489	MWD+IFR1+MS
17700.000	90.000	330.000	11769.197	60.183	0.000	55.969	0.000	60.183	0.000	0.000	56.753	46.744	133.007	MWD+IFR1+MS
17800.000	90.000	330.000	11769.197	60.836	0.000	56.421	0.000	60.836	0.000	0.000	57.183	46.809	133.539	MWD+IFR1+MS
17900.000	90.000	330.000	11769.197	61.498	0.000	56.881	0.000	61.498	0.000	0.000	57.623	46.878	134.030	MWD+IFR1+MS
18000.000	90.000	330.000	11769.197	62.161	0.000	57.342	0.000	62.161	0.000	0.000	58.068	46.948	134.460	MWD+IFR1+MS
18100.000	90.000	330.000	11769.197	62.825	0.000	57.807	0.000	62.825	0.000	0.000	58.515	47.011	134.906	MWD+IFR1+MS
18200.000	90.000	330.000	11769.197	63.490	0.000	58.280	0.000	63.490	0.000	0.000	58.972	47.078	-44.682	MWD+IFR1+MS
18300.000	90.000	330.000	11769.197	64.164	0.000	58.759	0.000	64.164	0.000	0.000	59.433	47.145	-44.278	MWD+IFR1+MS
18400.000	90.000	330.000	11769.197	64.838	0.000	59.246	0.000	64.838	0.000	0.000	59.904	47.218	-43.904	MWD+IFR1+MS
18500.000	90.000	330.000	11769.197	65.513	0.000	59.731	0.000	65.513	0.000	0.000	60.375	47.284	-43.556	MWD+IFR1+MS
18600.000	90.000	330.000	11769.197	66.189	0.000	60.221	0.000	66.189	0.000	0.000	60.852	47.351	-43.214	MWD+IFR1+MS
18700.000	90.000	330.000	11769.197	66.866	0.000	60.719	0.000	66.866	0.000	0.000	61.336	47.422	-42.897	MWD+IFR1+MS
18800.000	90.000	330.000	11769.197	67.550	0.000	61.213	0.000	67.550	0.000	0.000	61.817	47.483	-42.584	MWD+IFR1+MS
18900.000	90.000	330.000	11769.197	68.235	0.000	61.722	0.000	68.235	0.000	0.000	62.315	47.559	-42.292	MWD+IFR1+MS
19000.000	90.000	330.000	11769.197	68.920	0.000	62.228	0.000	68.920	0.000	0.000	62.808	47.625	-42.005	MWD+IFR1+MS
19100.000	90.000	330.000	11769.197	69.606	0.000	62.741	0.000	69.606	0.000	0.000	63.310	47.696	-41.737	MWD+IFR1+MS
19200.000	90.000	330.000	11769.197	70.299	0.000	63.258	0.000	70.299	0.000	0.000	63.815	47.766	-41.472	MWD+IFR1+MS
19300.000	90.000	330.000	11769.197	70.993	0.000	63.775	0.000	70.993	0.000	0.000	64.324	47.838	-41.240	MWD+IFR1+MS
19400.000	90.000	330.000	11769.197	71.687	0.000	64.301	0.000	71.687	0.000	0.000	64.837	47.907	-40.980	MWD+IFR1+MS
19500.000	90.000	330.000	11769.197	72.381	0.000	64.828	0.000	72.381	0.000	0.000	65.354	47.977	-40.751	MWD+IFR1+MS
19600.000	90.000	330.000	11769.197	73.082	0.000	65.360	0.000	73.082	0.000	0.000	65.877	48.054	-40.538	MWD+IFR1+MS
19700.000	90.000	330.000	11769.197	73.783	0.000	65.892	0.000	73.783	0.000	0.000	66.400	48.136	-40.323	MWD+IFR1+MS
19800.000	90.000	330.000	11769.197	74.485	0.000	66.426	0.000	74.485	0.000	0.000	66.926	48.207	-40.125	MWD+IFR1+MS
19900.000	90.000	330.000	11769.197	75.186	0.000	66.969	0.000	75.186	0.000	0.000	67.460	48.272	-39.930	MWD+IFR1+MS
20000.000	90.000	330.000	11769.197	75.888	0.000	67.508	0.000	75.888	0.000	0.000	67.990	48.356	-39.741	MWD+IFR1+MS
20100.000	90.000	330.000	11769.197	76.596	0.000	68.061	0.000	76.596	0.000	0.000	68.536	48.424	-39.560	MWD+IFR1+MS
20200.000	90.000	330.000	11769.197	77.305	0.000	68.608	0.000	77.305	0.000	0.000	69.074	48.505	-39.373	MWD+IFR1+MS
20300.000	90.000	330.000	11769.197	78.013	0.000	69.160	0.000	78.013	0.000	0.000	69.619	48.582	-39.212	MWD+IFR1+MS
20400.000	90.000	330.000	11769.197	78.727	0.000	69.724	0.000	78.727	0.000	0.000	70.175	48.656	-39.042	MWD+IFR1+MS
20500.000	90.000	330.000	11769.197	79.436	0.000	70.283	0.000	79.436	0.000	0.000	70.727	48.730	-38.881	MWD+IFR1+MS
20600.000	90.000	330.000	11769.197	80.150	0.000	70.840	0.000	80.150	0.000	0.000	71.278	48.810	-38.739	MWD+IFR1+MS
20700.000	90.000	330.000	11769.197	80.864	0.000	71.403	0.000	80.864	0.000	0.000	71.834	48.897	-38.584	MWD+IFR1+MS
20800.000	90.000	330.000	11769.197	81.584	0.000	71.968	0.000	81.584	0.000	0.000	72.392	48.974	-38.441	MWD+IFR1+MS
20900.000	90.000	330.000	11769.197	82.298	0.000	72.539	0.000	82.298	0.000	0.000	72.957	49.044	-38.301	MWD+IFR1+MS
21000.000	90.000	330.000	11769.197	83.018	0.000	73.113	0.000	83.018	0.000	0.000	73.525	49.124	-38.168	MWD+IFR1+MS
21100.000	90.000	330.000	11769.197	83.738	0.000	73.689	0.000	83.738	0.000	0.000	74.095	49.213	-38.041	MWD+IFR1+MS
21200.000	90.000	330.000	11769.197	84.457	0.000	74.264	0.000	84.457	0.000	0.000	74.665	49.286	-37.916	MWD+IFR1+MS
21300.000	90.000	330.000	11769.197	85.182	0.000	74.847	0.000	85.182	0.000	0.000	75.242	49.373	-37.788	MWD+IFR1+MS
21400.000	90.000	330.000	11769.197	85.907	0.000	75.426	0.000	85.907	0.000	0.000	75.814	49.459	-37.666	MWD+IFR1+MS
21500.000	90.000	330.000	11769.197	86.631	0.000	76.012	0.000	86.631	0.000	0.000	76.396	49.545	-37.554	MWD+IFR1+MS
21600.000	90.000	330.000	11769.197	87.356	0.000	76.594	0.000	87.356	0.000	0.000	76.973	49.631	-37.448	MWD+IFR1+MS
21700.000	90.000	330.000	11769.197	88.080	0.000	77.187	0.000	88.080	0.000	0.000	77.560	49.714	-37.335	MWD+IFR1+MS
21800.000	90.000	330.000	11769.197	88.809	0.000	77.775	0.000	88.809	0.000	0.000	78.143	49.796	-37.227	MWD+IFR1+MS
21900.000	90.000	330.000	11769.197	89.538	0.000	78.365	0.000	89.538	0.000	0.000	78.728	49.888	-37.124	MWD+IFR1+MS
22000.000	90.000	330.000	11769.197	90.266	0.000	78.957	0.000	90.266	0.000	0.000	79.316	49.970	-37.029	MWD+IFR1+MS
22100.000	90.000	330.000	11769.197	90.995	0.000	79.554	0.000	90.995	0.000	0.000	79.909	50.066	-36.932	MWD+IFR1+MS
22200.000	90.000	330.000	11769.197	91.728	0.000	80.152	0.000	91.728	0.000	0.000	80.501	50.145	-36.836	MWD+IFR1+MS
22300.000	90.000	330.000	11769.197	92.461	0.000	80.751	0.000	92.461	0.000	0.000	81.096	50.234	-36.744	MWD+IFR1+MS

22400.000	90.000	330.000	11769.197	93.193	0.000	81.352	0.000	93.193	0.000	0.000	81.693	50.332	-36.656	MWD+IFR1+MS
22500.000	90.000	330.000	11769.197	93.926	0.000	81.958	0.000	93.926	0.000	0.000	82.295	50.424	-36.569	MWD+IFR1+MS
22600.000	90.000	330.000	11769.197	94.657	0.000	82.560	0.000	94.657	0.000	0.000	82.893	50.515	-36.485	MWD+IFR1+MS
22700.000	90.000	330.000	11769.197	95.394	0.000	83.171	0.000	95.394	0.000	0.000	83.500	50.604	-36.397	MWD+IFR1+MS
22800.000	90.000	330.000	11769.197	96.130	0.000	83.780	0.000	96.130	0.000	0.000	84.105	50.699	-36.318	MWD+IFR1+MS
22900.000	90.000	330.000	11769.197	96.866	0.000	84.394	0.000	96.866	0.000	0.000	84.715	50.787	-36.240	MWD+IFR1+MS
23000.000	90.000	330.000	11769.197	97.606	0.000	84.998	0.000	97.606	0.000	0.000	85.315	50.885	-36.161	MWD+IFR1+MS
23100.000	90.000	330.000	11769.197	98.341	0.000	85.614	0.000	98.341	0.000	0.000	85.929	50.973	-36.093	MWD+IFR1+MS
23200.000	90.000	330.000	11769.197	99.081	0.000	86.230	0.000	99.081	0.000	0.000	86.540	51.077	-36.013	MWD+IFR1+MS
23300.000	90.000	330.000	11769.197	99.825	0.000	86.846	0.000	99.825	0.000	0.000	87.152	51.172	-35.939	MWD+IFR1+MS
23348.000	90.000	330.000	11770.000	100.150	0.000	87.145	0.000	100.150	0.000	0.000	87.450	51.211	-35.909	MWD+IFR1+MS
23400.000	90.000	330.000	11770.000	100.548	0.000	87.464	0.000	100.548	0.000	0.000	87.767	51.263	-35.877	MWD+IFR1+MS
23448.000	90.000	330.000	11770.000	100.896	0.000	87.760	0.000	100.896	0.000	0.000	88.061	51.315	-35.839	MWD+IFR1+MS

Plan Targets		PLU 29-20 BS 107H			
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
Slant KOP 13	11352.77	401358.93	667299.97	7683.00	CIRCLE
Slant FTP 13	12478.11	401979.84	666941.49	8400.00	CIRCLE
Slant LTP 13	23348.18	411393.22	661506.67	8400.00	CIRCLE
Slant BHL 13	23448.18	411479.82	661456.67	8400.00	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 107H
SURFACE HOLE FOOTAGE:	0533' FNL & 0265' FEL
BOTTOM HOLE FOOTAGE:	2609' FSL & 1093' 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 120994

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 120994
	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