

Well Name: POKER LAKE UNIT 29-20 BS	Well Location: T25S / R31E / SEC 29 / NENE /	County or Parish/State:
Well Number: 127H	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: 3001549120	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2652941

Type of Submission: Notice of Intent	Type of Action: Other
Date Sundry Submitted: 01/18/2022	Time Sundry Submitted: 08:07
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 & 990'FEL to 2608'FSL & 1679'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_127H_NOI_Attachments_20220118080738.pdf

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Conditions of Approval

Specialist Review

Conditions_of_Approval_20220119060053.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 08:07 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)

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

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

11. Country or Parish, State

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

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

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or 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 / 295 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107105 / LONG: -103.79266 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 2310 FSL / 2080 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110387 / LONG: -103.798103 (TVD: 12451 feet, MD: 15725 feet)

PPP: SENE / 2310 FNL / 990 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102217 / LONG: -103.794927 (TVD: 12451 feet, MD: 13085 feet)

BHL: NENE / 50 FNL / 990 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.122991 / LONG: -103.794787 (TVD: 12451 feet, MD: 20643 feet)

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

XTO Energy Inc.
PLU 29-20 BS 127H
Projected TD: 23247' MD / 11505' TVD
SHL: 533' FNL & 295' FEL , Section 29, T25S, R31E
BHL: 2608' FSL & 1679' 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 10956' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23247 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 10656 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	1.27	5.70	15.80
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.18	2.65	1.71
8.75	4000' – 10956'	7.625	29.7	HC L-80	Flush Joint	New	1.58	1.83	1.97
6.75	0' – 10856'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.24	1.97
6.75	10856' - 11550'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.11	5.01
6.75	11550' - 23247'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.11	5.78

- 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 +/- 10956'

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: 380 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 +/- 23247'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10656 feet

Tail: 860 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 11156 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' - 10956'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
10956' - 23247'	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 30-015-49120	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 127H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,357'

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	295	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
J	18	25 S	31 E		2,608	SOUTH	1,679	EAST	EDDY

¹² Dedicated Acres 6.40	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 = 403,121.1 X = 708,745.9 LAT. = 32.107105 °N LONG. = 103.792659 °W LTP (NAD83 NME) Y = 411,450.9 X = 702,106.2 LAT. = 32.130092 °N LONG. = 103.813973 °W FTP (NAD83 NME) Y = 401,415.1 X = 707,900.9 LAT. = 32.102427 °N LONG. = 103.795416 °W BHL (NAD83 NME) Y = 411,536.3 X = 702,056.9 LAT. = 32.130327 °N LONG. = 103.814131 °W SHL (NAD27 NME) Y = 403,063.2 X = 667,560.3 LAT. = 32.106981 °N LONG. = 103.792181 °W LTP (NAD27 NME) Y = 411,392.7 X = 660,921.2 LAT. = 32.129968 °N LONG. = 103.813492 °W FTP (NAD27 NME) Y = 401,357.2 X = 666,715.2 LAT. = 32.102303 °N LONG. = 103.794938 °W BHL (NAD27 NME) Y = 411,478.0 X = 660,871.9 LAT. = 32.130203 °N LONG. = 103.813650 °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 2019082890
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Well Plan Report - PLU 29-20 BS 127H

Measured Depth:	23247.00 ft	Site:	PLU 29-20 Big Sinks
TVD RKB:	11505.00 ft		Pad D
Location		Slot:	21
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403060.00 ft		
Easting:	667558.60 ft		
RKB:	3370.00 ft		
Ground Level:	3340.00 ft		
North Reference:	Grid		
Convergence Angle:	0.29 Deg		

Plan Sections PLU 29-20 BS 127H									
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	
2698.00	23.96	206.35	2663.38	-221.21	-109.57	2.00	0.00	2.00	
6170.45	23.96	206.35	5836.62	-1484.83	-735.51	0.00	0.00	0.00	
7368.45	0.00	0.00	7000.00	-1706.04	-845.08	-2.00	0.00	2.00	
11156.44	0.00	0.00	10788.00	-1706.04	-845.08	0.00	0.00	0.00	Slant KOP 15
12270.30	90.00	330.00	11497.11	-1091.94	-1199.63	8.08	0.00	8.08	Slant FTP 15
23147.80	90.00	330.00	11505.00	8328.25	-6638.38	0.00	0.00	0.00	Slant LTP 15
23247.80	90.00	330.00	11505.00	8414.85	-6688.38	0.00	0.00	0.00	Slant BHL 15

Position Uncertainty PLU 29-20 BS 127H														
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	206.300	1599.980	6.517	-0.000	5.812	0.000	2.939	0.000	0.000	6.603	5.719	134.632	MWD+IFR1+MS
1700.000	4.000	206.300	1699.838	7.184	-0.000	6.164	0.000	3.015	0.000	0.000	7.295	6.047	133.331	MWD+IFR1+MS
1800.000	6.000	206.300	1799.452	7.802	-0.000	6.517	0.000	3.098	0.000	0.000	7.942	6.379	132.682	MWD+IFR1+MS
1900.000	7.999	206.300	1898.702	8.380	-0.000	6.870	0.000	3.187	0.000	0.000	8.554	6.712	132.327	MWD+IFR1+MS
2000.000	10.000	206.300	1997.465	8.925	-0.000	7.223	0.000	3.288	0.000	0.000	9.135	7.047	132.113	MWD+IFR1+MS
2100.000	11.990	206.300	2095.623	9.441	-0.000	7.577	0.000	3.399	0.000	0.000	9.692	7.385	131.977	MWD+IFR1+MS
2200.000	14.000	206.300	2193.055	9.932	-0.000	7.933	0.000	3.524	0.000	0.000	10.227	7.726	131.881	MWD+IFR1+MS
2300.000	15.990	206.300	2289.643	10.402	-0.000	8.289	0.000	3.662	0.000	0.000	10.743	8.069	131.827	MWD+IFR1+MS
2400.000	18.000	206.300	2385.268	10.852	-0.000	8.649	0.000	3.817	0.000	0.000	11.244	8.415	131.820	MWD+IFR1+MS
2500.000	19.990	206.300	2479.816	11.282	-0.000	9.007	0.000	3.987	0.000	0.000	11.727	8.762	131.834	MWD+IFR1+MS
2600.000	22.000	206.300	2573.169	11.700	-0.000	9.373	0.000	4.176	0.000	0.000	12.201	9.118	131.856	MWD+IFR1+MS
2697.900	23.950	206.300	2663.384	12.084	-0.000	9.728	0.000	4.375	0.000	0.000	12.643	9.464	131.896	MWD+IFR1+MS
2700.000	23.950	206.300	2665.215	12.090	-0.000	9.738	0.000	4.370	0.000	0.000	12.651	9.473	131.897	MWD+IFR1+MS
2800.000	23.950	206.300	2756.598	12.380	-0.000	10.096	0.000	4.506	0.000	0.000	12.917	9.836	132.052	MWD+IFR1+MS
2900.000	23.950	206.300	2847.981	12.692	-0.000	10.472	0.000	4.653	0.000	0.000	13.206	10.213	132.339	MWD+IFR1+MS
3000.000	23.950	206.300	2939.364	13.009	-0.000	10.848	0.000	4.807	0.000	0.000	13.498	10.588	132.668	MWD+IFR1+MS
3100.000	23.950	206.300	3030.747	13.339	-0.000	11.233	0.000	4.969	0.000	0.000	13.802	10.973	132.996	MWD+IFR1+MS
3200.000	23.950	206.300	3122.130	13.674	-0.000	11.616	0.000	5.135	0.000	0.000	14.109	11.355	133.283	MWD+IFR1+MS
3300.000	23.950	206.300	3213.513	14.017	-0.000	12.006	0.000	5.307	0.000	0.000	14.425	11.744	133.611	MWD+IFR1+MS
3400.000	23.950	206.300	3304.896	14.366	-0.000	12.396	0.000	5.484	0.000	0.000	14.744	12.133	133.938	MWD+IFR1+MS
3500.000	23.950	206.300	3396.279	14.720	-0.000	12.787	0.000	5.665	0.000	0.000	15.068	12.524	134.225	MWD+IFR1+MS
3600.000	23.950	206.300	3487.662	15.082	-0.000	13.181	0.000	5.851	0.000	0.000	15.399	12.918	134.511	MWD+IFR1+MS
3700.000	23.950	206.300	3579.045	15.448	-0.000	13.578	0.000	6.040	0.000	0.000	15.734	13.314	134.837	MWD+IFR1+MS
3800.000	23.950	206.300	3670.428	15.819	-0.000	13.975	0.000	6.234	0.000	0.000	16.073	13.710	-44.878	MWD+IFR1+MS
3900.000	23.950	206.300	3761.810	16.193	-0.000	14.374	0.000	6.431	0.000	0.000	16.416	14.108	-44.553	MWD+IFR1+MS
4000.000	23.950	206.300	3853.193	16.575	-0.000	14.774	0.000	6.631	0.000	0.000	16.763	14.508	-44.309	MWD+IFR1+MS
4100.000	23.950	206.300	3944.576	16.957	-0.000	15.175	0.000	6.835	0.000	0.000	17.113	14.908	-43.985	MWD+IFR1+MS
4200.000	23.950	206.300	4035.959	17.346	-0.000	15.579	0.000	7.041	0.000	0.000	17.469	15.312	-43.703	MWD+IFR1+MS
4300.000	23.950	206.300	4127.342	17.736	-0.000	15.983	0.000	7.251	0.000	0.000	17.826	15.715	-43.421	MWD+IFR1+MS
4400.000	23.950	206.300	4218.725	18.129	-0.000	16.388	0.000	7.463	0.000	0.000	18.186	16.118	-43.100	MWD+IFR1+MS
4500.000	23.950	206.300	4310.108	18.527	-0.000	16.793	0.000	7.678	0.000	0.000	18.549	16.524	-42.861	MWD+IFR1+MS
4600.000	23.950	206.300	4401.491	18.927	-0.000	17.200	0.000	7.896	0.000	0.000	18.915	16.930	-42.582	MWD+IFR1+MS
4700.000	23.950	206.300	4492.874	19.329	-0.000	17.606	0.000	8.115	0.000	0.000	19.282	17.335	-42.305	MWD+IFR1+MS
4800.000	23.950	206.300	4584.257	19.735	-0.000	18.015	0.000	8.338	0.000	0.000	19.654	17.743	-42.068	MWD+IFR1+MS
4900.000	23.950	206.300	4675.640	20.142	-0.000	18.425	0.000	8.562	0.000	0.000	20.028	18.152	-41.793	MWD+IFR1+MS
5000.000	23.950	206.300	4767.023	20.551	-0.000	18.833	0.000	8.788	0.000	0.000	20.402	18.560	-41.519	MWD+IFR1+MS
5100.000	23.950	206.300	4858.406	20.964	-0.000	19.244	0.000	9.017	0.000	0.000	20.780	18.970	-41.286	MWD+IFR1+MS
5200.000	23.950	206.300	4949.789	21.376	-0.000	19.654	0.000	9.249	0.000	0.000	21.158	19.379	-41.015	MWD+IFR1+MS
5300.000	23.950	206.300	5041.172	21.792	-0.000	20.065	0.000	9.482	0.000	0.000	21.540	19.790	-40.785	MWD+IFR1+MS
5400.000	23.950	206.300	5132.555	22.208	-0.000	20.477	0.000	9.717	0.000	0.000	21.923	20.201	-40.518	MWD+IFR1+MS
5500.000	23.950	206.300	5223.938	22.627	-0.000	20.889	0.000	9.954	0.000	0.000	22.307	20.613	-40.291	MWD+IFR1+MS
5600.000	23.950	206.300	5315.321	23.048	-0.000	21.303	0.000	10.188	0.000	0.000	22.694	21.026	-40.066	MWD+IFR1+MS
5700.000	23.950	206.300	5406.704	23.469	-0.000	21.715	0.000	10.431	0.000	0.000	23.081	21.438	-39.843	MWD+IFR1+MS
5800.000	23.950	206.300	5498.087	23.892	-0.000	22.129	0.000	10.672	0.000	0.000	23.470	21.851	-39.621	MWD+IFR1+MS
5900.000	23.950	206.300	5589.470	24.317	-0.000	22.543	0.000	10.918	0.000	0.000	23.861	22.265	-39.401	MWD+IFR1+MS
6000.000	23.950	206.300	5680.853	24.744	-0.000	22.957	0.000	11.167	0.000	0.000	24.253	22.678	-39.182	MWD+IFR1+MS
6100.000	23.950	206.300	5772.236	25.172	-0.000	23.372	0.000	11.415	0.000	0.000	24.647	23.094	-39.006	MWD+IFR1+MS
6170.400	23.950	206.300	5836.616	25.469	-0.000	23.661	0.000	11.589	0.000	0.000	24.919	23.384	-38.928	MWD+IFR1+MS
6200.000	23.360	206.300	5863.680	25.621	-0.000	23.781	0.000	11.662	0.000	0.000	25.033	23.506	-38.927	MWD+IFR1+MS
6300.000	21.360	206.300	5956.151	26.150	-0.000	24.187	0.000	11.921	0.000	0.000	25.454	23.915	-39.153	MWD+IFR1+MS
6400.000	19.360	206.300	6049.893	26.702	-0.000	24.592	0.000	12.186	0.000	0.000	25.927	24.320	-39.757	MWD+IFR1+MS
6500.000	17.360	206.300	6144.793	27.210	-0.000	24.989	0.000	12.438	0.000	0.000	26.395	24.717	-40.303	MWD+IFR1+MS
6600.000	15.360	206.300	6240.735	27.677	-0.000	25.377	0.000	12.673	0.000	0.000	26.856	25.107	-40.889	MWD+IFR1+MS

6700.000	13.360	206.300	6337.601	28.101	-0.000	25.760	0.000	12.900	0.000	0.000	27.312	25.489	-41.358	MWD+IFR1+MS
6800.000	11.360	206.300	6435.275	28.481	-0.000	26.133	0.000	13.115	0.000	0.000	27.757	25.862	-41.809	MWD+IFR1+MS
6900.000	9.368	206.300	6533.637	28.817	-0.000	26.497	0.000	13.319	0.000	0.000	28.193	26.225	-42.214	MWD+IFR1+MS
7000.000	7.368	206.300	6632.567	29.111	-0.000	26.853	0.000	13.517	0.000	0.000	28.619	26.579	-42.580	MWD+IFR1+MS
7100.000	5.368	206.300	6731.945	29.362	-0.000	27.200	0.000	13.704	0.000	0.000	29.034	26.925	-42.886	MWD+IFR1+MS
7200.000	3.368	206.300	6831.649	29.570	-0.000	27.538	0.000	13.889	0.000	0.000	29.437	27.261	-43.165	MWD+IFR1+MS
7300.000	1.368	206.300	6931.559	29.734	-0.000	27.866	0.000	14.068	0.000	0.000	29.827	27.586	-43.351	MWD+IFR1+MS
7368.400	0.000	0.000	7000.000	28.862	0.000	28.997	0.000	14.192	0.000	0.000	30.018	27.798	-43.258	MWD+IFR1+MS
7400.000	0.000	0.000	7031.552	28.950	0.000	29.088	0.000	14.244	0.000	0.000	30.103	27.893	-43.211	MWD+IFR1+MS
7500.000	0.000	0.000	7131.552	29.232	0.000	29.377	0.000	14.426	0.000	0.000	30.376	28.192	-43.095	MWD+IFR1+MS
7600.000	0.000	0.000	7231.552	29.518	0.000	29.672	0.000	14.608	0.000	0.000	30.657	28.493	-42.962	MWD+IFR1+MS
7700.000	0.000	0.000	7331.552	29.804	0.000	29.968	0.000	14.795	0.000	0.000	30.940	28.794	-42.808	MWD+IFR1+MS
7800.000	0.000	0.000	7431.552	30.093	0.000	30.265	0.000	14.983	0.000	0.000	31.224	29.097	-42.675	MWD+IFR1+MS
7900.000	0.000	0.000	7531.552	30.384	0.000	30.565	0.000	15.179	0.000	0.000	31.511	29.402	-42.543	MWD+IFR1+MS
8000.000	0.000	0.000	7631.552	30.676	0.000	30.866	0.000	15.375	0.000	0.000	31.798	29.708	-42.389	MWD+IFR1+MS
8100.000	0.000	0.000	7731.552	30.969	0.000	31.167	0.000	15.576	0.000	0.000	32.087	30.015	-42.258	MWD+IFR1+MS
8200.000	0.000	0.000	7831.552	31.265	0.000	31.469	0.000	15.780	0.000	0.000	32.378	30.323	-42.149	MWD+IFR1+MS
8300.000	0.000	0.000	7931.552	31.561	0.000	31.765	0.000	15.987	0.000	0.000	32.665	30.628	-42.129	MWD+IFR1+MS
8400.000	0.000	0.000	8031.552	31.843	0.000	32.078	0.000	16.202	0.000	0.000	32.956	30.934	-41.667	MWD+IFR1+MS
8500.000	0.000	0.000	8131.552	32.156	0.000	32.373	0.000	16.416	0.000	0.000	33.251	31.247	-41.890	MWD+IFR1+MS
8600.000	0.000	0.000	8231.552	32.450	0.000	32.680	0.000	16.637	0.000	0.000	33.544	31.556	-41.671	MWD+IFR1+MS
8700.000	0.000	0.000	8331.552	32.757	0.000	33.000	0.000	16.858	0.000	0.000	33.850	31.878	-41.454	MWD+IFR1+MS
8800.000	0.000	0.000	8431.552	33.045	0.000	33.302	0.000	17.085	0.000	0.000	34.138	32.181	-41.237	MWD+IFR1+MS
8900.000	0.000	0.000	8531.552	33.362	0.000	33.615	0.000	17.315	0.000	0.000	34.445	32.505	-41.239	MWD+IFR1+MS
9000.000	0.000	0.000	8631.552	33.660	0.000	33.926	0.000	17.550	0.000	0.000	34.743	32.817	-41.023	MWD+IFR1+MS
9100.000	0.000	0.000	8731.552	33.971	0.000	34.234	0.000	17.788	0.000	0.000	35.044	33.135	-41.025	MWD+IFR1+MS
9200.000	0.000	0.000	8831.552	34.278	0.000	34.554	0.000	18.028	0.000	0.000	35.351	33.456	-40.811	MWD+IFR1+MS
9300.000	0.000	0.000	8931.552	34.583	0.000	34.857	0.000	18.273	0.000	0.000	35.647	33.768	-40.813	MWD+IFR1+MS
9400.000	0.000	0.000	9031.552	34.886	0.000	35.171	0.000	18.523	0.000	0.000	35.949	34.083	-40.599	MWD+IFR1+MS
9500.000	0.000	0.000	9131.552	35.199	0.000	35.496	0.000	18.775	0.000	0.000	36.262	34.410	-40.385	MWD+IFR1+MS
9600.000	0.000	0.000	9231.552	35.511	0.000	35.805	0.000	19.029	0.000	0.000	36.565	34.727	-40.388	MWD+IFR1+MS
9700.000	0.000	0.000	9331.552	35.819	0.000	36.125	0.000	19.290	0.000	0.000	36.873	35.048	-40.176	MWD+IFR1+MS
9800.000	0.000	0.000	9431.552	36.125	0.000	36.442	0.000	19.552	0.000	0.000	37.179	35.366	-39.963	MWD+IFR1+MS
9900.000	0.000	0.000	9531.552	36.442	0.000	36.756	0.000	19.819	0.000	0.000	37.487	35.689	-39.967	MWD+IFR1+MS
10000.000	0.000	0.000	9631.552	36.756	0.000	37.081	0.000	20.087	0.000	0.000	37.801	36.015	-39.755	MWD+IFR1+MS
10100.000	0.000	0.000	9731.552	37.068	0.000	37.403	0.000	20.362	0.000	0.000	38.112	36.338	-39.546	MWD+IFR1+MS
10200.000	0.000	0.000	9831.552	37.390	0.000	37.723	0.000	20.640	0.000	0.000	38.426	36.666	-39.549	MWD+IFR1+MS
10300.000	0.000	0.000	9931.552	37.709	0.000	38.039	0.000	20.919	0.000	0.000	38.738	36.991	-39.552	MWD+IFR1+MS
10400.000	0.000	0.000	10031.552	38.026	0.000	38.367	0.000	21.204	0.000	0.000	39.055	37.319	-39.343	MWD+IFR1+MS
10500.000	0.000	0.000	10131.552	38.341	0.000	38.691	0.000	21.492	0.000	0.000	39.369	37.644	-39.135	MWD+IFR1+MS
10600.000	0.000	0.000	10231.552	38.652	0.000	39.013	0.000	21.783	0.000	0.000	39.681	37.966	-38.928	MWD+IFR1+MS
10700.000	0.000	0.000	10331.552	38.974	0.000	39.332	0.000	22.077	0.000	0.000	39.995	38.294	-38.931	MWD+IFR1+MS
10800.000	0.000	0.000	10431.552	39.294	0.000	39.661	0.000	22.376	0.000	0.000	40.314	38.623	-38.725	MWD+IFR1+MS
10900.000	0.000	0.000	10531.552	39.611	0.000	39.987	0.000	22.678	0.000	0.000	40.631	38.950	-38.520	MWD+IFR1+MS
11000.000	0.000	0.000	10631.552	39.937	0.000	40.311	0.000	22.983	0.000	0.000	40.950	39.282	-38.524	MWD+IFR1+MS
11100.000	0.000	0.000	10731.552	40.262	0.000	40.632	0.000	23.292	0.000	0.000	41.267	39.611	-38.528	MWD+IFR1+MS
11156.000	0.000	0.000	10788.000	40.435	0.000	40.817	0.000	23.467	0.000	0.000	41.442	39.794	-38.309	MWD+IFR1+MS
11200.000	3.519	330.000	10831.525	39.728	0.000	41.549	0.000	23.603	0.000	0.000	41.582	39.949	-38.267	MWD+IFR1+MS
11300.000	11.590	330.000	10930.574	39.666	0.000	41.849	0.000	23.933	0.000	0.000	41.910	40.774	-43.474	MWD+IFR1+MS
11400.000	19.670	330.000	11026.792	39.651	0.000	42.130	0.000	24.364	0.000	0.000	42.408	41.804	107.219	MWD+IFR1+MS
11500.000	27.750	330.000	11118.269	39.209	0.000	42.386	0.000	24.942	0.000	0.000	43.294	42.257	80.574	MWD+IFR1+MS
11600.000	35.830	330.000	11203.189	38.424	0.000	42.619	0.000	25.700	0.000	0.000	44.151	42.529	73.515	MWD+IFR1+MS
11700.000	43.910	330.000	11279.865	37.416	0.000	42.812	0.000	26.657	0.000	0.000	44.858	42.729	71.270	MWD+IFR1+MS

11800.000	51.990	330.000	11346.776	36.319	0.000	42.981	0.000	27.805	0.000	0.000	45.384	42.898	70.383	MWD+IFR1+MS
11900.000	60.070	330.000	11402.592	35.291	0.000	43.117	0.000	29.117	0.000	0.000	45.744	43.029	70.245	MWD+IFR1+MS
12000.000	68.150	330.000	11446.207	34.501	0.000	43.210	0.000	30.553	0.000	0.000	45.964	43.108	70.725	MWD+IFR1+MS
12100.000	76.230	330.000	11476.752	34.107	0.000	43.279	0.000	32.062	0.000	0.000	46.079	43.159	71.489	MWD+IFR1+MS
12200.000	84.310	330.000	11493.623	34.236	0.000	43.309	0.000	33.601	0.000	0.000	46.128	43.165	72.548	MWD+IFR1+MS
12270.000	90.000	330.000	11497.106	34.220	0.000	43.314	0.000	34.220	0.000	0.000	46.153	43.149	73.311	MWD+IFR1+MS
12300.000	90.000	330.000	11497.106	34.307	0.000	43.309	0.000	34.307	0.000	0.000	46.167	43.135	73.669	MWD+IFR1+MS
12400.000	90.000	330.000	11497.106	34.554	0.000	43.300	0.000	34.554	0.000	0.000	46.197	43.091	74.772	MWD+IFR1+MS
12500.000	90.000	330.000	11497.106	34.814	0.000	43.313	0.000	34.814	0.000	0.000	46.227	43.071	75.817	MWD+IFR1+MS
12600.000	90.000	330.000	11497.106	35.086	0.000	43.333	0.000	35.086	0.000	0.000	46.267	43.050	76.940	MWD+IFR1+MS
12700.000	90.000	330.000	11497.106	35.384	0.000	43.377	0.000	35.384	0.000	0.000	46.320	43.052	78.053	MWD+IFR1+MS
12800.000	90.000	330.000	11497.106	35.693	0.000	43.422	0.000	35.693	0.000	0.000	46.362	43.053	79.166	MWD+IFR1+MS
12900.000	90.000	330.000	11497.106	36.014	0.000	43.474	0.000	36.014	0.000	0.000	46.416	43.053	80.353	MWD+IFR1+MS
13000.000	90.000	330.000	11497.106	36.346	0.000	43.547	0.000	36.346	0.000	0.000	46.472	43.074	81.517	MWD+IFR1+MS
13100.000	90.000	330.000	11497.106	36.701	0.000	43.626	0.000	36.701	0.000	0.000	46.539	43.094	82.749	MWD+IFR1+MS
13200.000	90.000	330.000	11497.106	37.054	0.000	43.719	0.000	37.054	0.000	0.000	46.609	43.123	83.995	MWD+IFR1+MS
13300.000	90.000	330.000	11497.106	37.430	0.000	43.823	0.000	37.430	0.000	0.000	46.681	43.161	85.265	MWD+IFR1+MS
13400.000	90.000	330.000	11497.106	37.829	0.000	43.940	0.000	37.829	0.000	0.000	46.756	43.207	86.566	MWD+IFR1+MS
13500.000	90.000	330.000	11497.106	38.223	0.000	44.063	0.000	38.223	0.000	0.000	46.845	43.250	87.918	MWD+IFR1+MS
13600.000	90.000	330.000	11497.106	38.639	0.000	44.207	0.000	38.639	0.000	0.000	46.937	43.312	89.293	MWD+IFR1+MS
13700.000	90.000	330.000	11497.106	39.064	0.000	44.357	0.000	39.064	0.000	0.000	47.043	43.370	90.708	MWD+IFR1+MS
13800.000	90.000	330.000	11497.106	39.497	0.000	44.516	0.000	39.497	0.000	0.000	47.143	43.434	92.158	MWD+IFR1+MS
13900.000	90.000	330.000	11497.106	39.937	0.000	44.682	0.000	39.937	0.000	0.000	47.259	43.493	93.628	MWD+IFR1+MS
14000.000	90.000	330.000	11497.106	40.398	0.000	44.870	0.000	40.398	0.000	0.000	47.390	43.569	95.125	MWD+IFR1+MS
14100.000	90.000	330.000	11497.106	40.866	0.000	45.058	0.000	40.866	0.000	0.000	47.516	43.638	96.652	MWD+IFR1+MS
14200.000	90.000	330.000	11497.106	41.340	0.000	45.260	0.000	41.340	0.000	0.000	47.658	43.711	98.185	MWD+IFR1+MS
14300.000	90.000	330.000	11497.106	41.821	0.000	45.469	0.000	41.821	0.000	0.000	47.817	43.778	99.688	MWD+IFR1+MS
14400.000	90.000	330.000	11497.106	42.320	0.000	45.693	0.000	42.320	0.000	0.000	47.973	43.859	101.254	MWD+IFR1+MS
14500.000	90.000	330.000	11497.106	42.825	0.000	45.924	0.000	42.825	0.000	0.000	48.145	43.932	102.778	MWD+IFR1+MS
14600.000	90.000	330.000	11497.106	43.336	0.000	46.167	0.000	43.336	0.000	0.000	48.335	44.008	104.268	MWD+IFR1+MS
14700.000	90.000	330.000	11497.106	43.852	0.000	46.419	0.000	43.852	0.000	0.000	48.523	44.086	105.793	MWD+IFR1+MS
14800.000	90.000	330.000	11497.106	44.373	0.000	46.683	0.000	44.373	0.000	0.000	48.727	44.166	107.269	MWD+IFR1+MS
14900.000	90.000	330.000	11497.106	44.911	0.000	46.952	0.000	44.911	0.000	0.000	48.949	44.238	108.667	MWD+IFR1+MS
15000.000	90.000	330.000	11497.106	45.453	0.000	47.229	0.000	45.453	0.000	0.000	49.168	44.311	110.079	MWD+IFR1+MS
15100.000	90.000	330.000	11497.106	46.000	0.000	47.518	0.000	46.000	0.000	0.000	49.406	44.386	111.441	MWD+IFR1+MS
15200.000	90.000	330.000	11497.106	46.562	0.000	47.818	0.000	46.562	0.000	0.000	49.651	44.461	112.782	MWD+IFR1+MS
15300.000	90.000	330.000	11497.106	47.117	0.000	48.129	0.000	47.117	0.000	0.000	49.914	44.538	114.057	MWD+IFR1+MS
15400.000	90.000	330.000	11497.106	47.686	0.000	48.442	0.000	47.686	0.000	0.000	50.182	44.607	115.257	MWD+IFR1+MS
15500.000	90.000	330.000	11497.106	48.260	0.000	48.764	0.000	48.260	0.000	0.000	50.458	44.676	116.438	MWD+IFR1+MS
15600.000	90.000	330.000	11497.106	48.847	0.000	49.095	0.000	48.847	0.000	0.000	50.743	44.745	117.592	MWD+IFR1+MS
15700.000	90.000	330.000	11497.106	49.427	0.000	49.438	0.000	49.427	0.000	0.000	51.044	44.817	118.677	MWD+IFR1+MS
15800.000	90.000	330.000	11497.106	50.020	0.000	49.782	0.000	50.020	0.000	0.000	51.350	44.880	119.695	MWD+IFR1+MS
15900.000	90.000	330.000	11497.106	50.616	0.000	50.145	0.000	50.616	0.000	0.000	51.673	44.955	120.687	MWD+IFR1+MS
16000.000	90.000	330.000	11497.106	51.215	0.000	50.505	0.000	51.215	0.000	0.000	51.994	45.018	121.653	MWD+IFR1+MS
16100.000	90.000	330.000	11497.106	51.827	0.000	50.879	0.000	51.827	0.000	0.000	52.336	45.088	122.519	MWD+IFR1+MS
16200.000	90.000	330.000	11497.106	52.431	0.000	51.252	0.000	52.431	0.000	0.000	52.676	45.147	123.364	MWD+IFR1+MS
16300.000	90.000	330.000	11497.106	53.047	0.000	51.641	0.000	53.047	0.000	0.000	53.032	45.217	124.187	MWD+IFR1+MS
16400.000	90.000	330.000	11497.106	53.675	0.000	52.032	0.000	53.675	0.000	0.000	53.392	45.280	124.954	MWD+IFR1+MS
16500.000	90.000	330.000	11497.106	54.295	0.000	52.429	0.000	54.295	0.000	0.000	53.759	45.342	125.702	MWD+IFR1+MS
16600.000	90.000	330.000	11497.106	54.927	0.000	52.837	0.000	54.927	0.000	0.000	54.139	45.409	126.400	MWD+IFR1+MS
16700.000	90.000	330.000	11497.106	55.561	0.000	53.245	0.000	55.561	0.000	0.000	54.522	45.468	127.050	MWD+IFR1+MS
16800.000	90.000	330.000	11497.106	56.196	0.000	53.659	0.000	56.196	0.000	0.000	54.911	45.528	127.685	MWD+IFR1+MS
16900.000	90.000	330.000	11497.106	56.833	0.000	54.090	0.000	56.833	0.000	0.000	55.315	45.599	128.306	MWD+IFR1+MS

17000.000	90.000	330.000	11497.106	57.480	0.000	54.514	0.000	57.480	0.000	0.000	55.718	45.657	128.858	MWD+IFR1+MS
17100.000	90.000	330.000	11497.106	58.121	0.000	54.952	0.000	58.121	0.000	0.000	56.131	45.720	129.427	MWD+IFR1+MS
17200.000	90.000	330.000	11497.106	58.779	0.000	55.398	0.000	58.779	0.000	0.000	56.555	45.788	129.956	MWD+IFR1+MS
17300.000	90.000	330.000	11497.106	59.431	0.000	55.842	0.000	59.431	0.000	0.000	56.975	45.846	130.475	MWD+IFR1+MS
17400.000	90.000	330.000	11497.106	60.083	0.000	56.296	0.000	60.083	0.000	0.000	57.411	45.913	130.935	MWD+IFR1+MS
17500.000	90.000	330.000	11497.106	60.745	0.000	56.755	0.000	60.745	0.000	0.000	57.847	45.975	131.412	MWD+IFR1+MS
17600.000	90.000	330.000	11497.106	61.408	0.000	57.214	0.000	61.408	0.000	0.000	58.290	46.036	131.834	MWD+IFR1+MS
17700.000	90.000	330.000	11497.106	62.073	0.000	57.686	0.000	62.073	0.000	0.000	58.741	46.103	132.272	MWD+IFR1+MS
17800.000	90.000	330.000	11497.106	62.746	0.000	58.160	0.000	62.746	0.000	0.000	59.199	46.168	132.660	MWD+IFR1+MS
17900.000	90.000	330.000	11497.106	63.411	0.000	58.638	0.000	63.411	0.000	0.000	59.660	46.235	133.044	MWD+IFR1+MS
18000.000	90.000	330.000	11497.106	64.086	0.000	59.117	0.000	64.086	0.000	0.000	60.124	46.294	133.403	MWD+IFR1+MS
18100.000	90.000	330.000	11497.106	64.761	0.000	59.606	0.000	64.761	0.000	0.000	60.595	46.361	133.776	MWD+IFR1+MS
18200.000	90.000	330.000	11497.106	65.445	0.000	60.097	0.000	65.445	0.000	0.000	61.071	46.425	134.108	MWD+IFR1+MS
18300.000	90.000	330.000	11497.106	66.121	0.000	60.592	0.000	66.121	0.000	0.000	61.551	46.491	134.437	MWD+IFR1+MS
18400.000	90.000	330.000	11497.106	66.806	0.000	61.095	0.000	66.806	0.000	0.000	62.041	46.561	134.744	MWD+IFR1+MS
18500.000	90.000	330.000	11497.106	67.491	0.000	61.601	0.000	67.491	0.000	0.000	62.529	46.627	-44.934	MWD+IFR1+MS
18600.000	90.000	330.000	11497.106	68.184	0.000	62.107	0.000	68.184	0.000	0.000	63.023	46.692	-44.648	MWD+IFR1+MS
18700.000	90.000	330.000	11497.106	68.869	0.000	62.620	0.000	68.869	0.000	0.000	63.523	46.763	-44.380	MWD+IFR1+MS
18800.000	90.000	330.000	11497.106	69.563	0.000	63.135	0.000	69.563	0.000	0.000	64.025	46.828	-44.098	MWD+IFR1+MS
18900.000	90.000	330.000	11497.106	70.257	0.000	63.657	0.000	70.257	0.000	0.000	64.534	46.898	-43.833	MWD+IFR1+MS
19000.000	90.000	330.000	11497.106	70.951	0.000	64.184	0.000	70.951	0.000	0.000	65.048	46.976	-43.584	MWD+IFR1+MS
19100.000	90.000	330.000	11497.106	71.645	0.000	64.709	0.000	71.645	0.000	0.000	65.561	47.040	-43.337	MWD+IFR1+MS
19200.000	90.000	330.000	11497.106	72.346	0.000	65.238	0.000	72.346	0.000	0.000	66.078	47.113	-43.104	MWD+IFR1+MS
19300.000	90.000	330.000	11497.106	73.048	0.000	65.777	0.000	73.048	0.000	0.000	66.607	47.186	-42.885	MWD+IFR1+MS
19400.000	90.000	330.000	11497.106	73.750	0.000	66.315	0.000	73.750	0.000	0.000	67.133	47.257	-42.654	MWD+IFR1+MS
19500.000	90.000	330.000	11497.106	74.458	0.000	66.851	0.000	74.458	0.000	0.000	67.658	47.332	-42.447	MWD+IFR1+MS
19600.000	90.000	330.000	11497.106	75.160	0.000	67.400	0.000	75.160	0.000	0.000	68.195	47.407	-42.230	MWD+IFR1+MS
19700.000	90.000	330.000	11497.106	75.868	0.000	67.947	0.000	75.868	0.000	0.000	68.732	47.486	-42.036	MWD+IFR1+MS
19800.000	90.000	330.000	11497.106	76.577	0.000	68.500	0.000	76.577	0.000	0.000	69.276	47.558	-41.844	MWD+IFR1+MS
19900.000	90.000	330.000	11497.106	77.285	0.000	69.050	0.000	77.285	0.000	0.000	69.816	47.630	-41.661	MWD+IFR1+MS
20000.000	90.000	330.000	11497.106	78.000	0.000	69.614	0.000	78.000	0.000	0.000	70.371	47.707	-41.480	MWD+IFR1+MS
20100.000	90.000	330.000	11497.106	78.715	0.000	70.165	0.000	78.715	0.000	0.000	70.912	47.786	-41.295	MWD+IFR1+MS
20200.000	90.000	330.000	11497.106	79.429	0.000	70.733	0.000	79.429	0.000	0.000	71.472	47.861	-41.135	MWD+IFR1+MS
20300.000	90.000	330.000	11497.106	80.144	0.000	71.289	0.000	80.144	0.000	0.000	72.019	47.940	-40.970	MWD+IFR1+MS
20400.000	90.000	330.000	11497.106	80.858	0.000	71.865	0.000	80.858	0.000	0.000	72.587	48.012	-40.809	MWD+IFR1+MS
20500.000	90.000	330.000	11497.106	81.578	0.000	72.430	0.000	81.578	0.000	0.000	73.143	48.094	-40.653	MWD+IFR1+MS
20600.000	90.000	330.000	11497.106	82.298	0.000	73.002	0.000	82.298	0.000	0.000	73.707	48.170	-40.499	MWD+IFR1+MS
20700.000	90.000	330.000	11497.106	83.018	0.000	73.577	0.000	83.018	0.000	0.000	74.273	48.255	-40.352	MWD+IFR1+MS
20800.000	90.000	330.000	11497.106	83.744	0.000	74.157	0.000	83.744	0.000	0.000	74.845	48.334	-40.205	MWD+IFR1+MS
20900.000	90.000	330.000	11497.106	84.463	0.000	74.735	0.000	84.463	0.000	0.000	75.416	48.419	-40.074	MWD+IFR1+MS
21000.000	90.000	330.000	11497.106	85.188	0.000	75.323	0.000	85.188	0.000	0.000	75.995	48.495	-39.928	MWD+IFR1+MS
21100.000	90.000	330.000	11497.106	85.913	0.000	75.907	0.000	85.913	0.000	0.000	76.572	48.576	-39.796	MWD+IFR1+MS
21200.000	90.000	330.000	11497.106	86.643	0.000	76.489	0.000	86.643	0.000	0.000	77.148	48.664	-39.677	MWD+IFR1+MS
21300.000	90.000	330.000	11497.106	87.367	0.000	77.080	0.000	87.367	0.000	0.000	77.731	48.743	-39.544	MWD+IFR1+MS
21400.000	90.000	330.000	11497.106	88.097	0.000	77.668	0.000	88.097	0.000	0.000	78.313	48.827	-39.424	MWD+IFR1+MS
21500.000	90.000	330.000	11497.106	88.826	0.000	78.263	0.000	88.826	0.000	0.000	78.900	48.926	-39.303	MWD+IFR1+MS
21600.000	90.000	330.000	11497.106	89.554	0.000	78.858	0.000	89.554	0.000	0.000	79.487	49.008	-39.181	MWD+IFR1+MS
21700.000	90.000	330.000	11497.106	90.288	0.000	79.455	0.000	90.288	0.000	0.000	80.079	49.085	-39.076	MWD+IFR1+MS
21800.000	90.000	330.000	11497.106	91.016	0.000	80.051	0.000	91.016	0.000	0.000	80.668	49.180	-38.958	MWD+IFR1+MS
21900.000	90.000	330.000	11497.106	91.750	0.000	80.650	0.000	91.750	0.000	0.000	81.261	49.271	-38.854	MWD+IFR1+MS
22000.000	90.000	330.000	11497.106	92.482	0.000	81.255	0.000	92.482	0.000	0.000	81.860	49.355	-38.751	MWD+IFR1+MS
22100.000	90.000	330.000	11497.106	93.220	0.000	81.859	0.000	93.220	0.000	0.000	82.458	49.443	-38.646	MWD+IFR1+MS
22200.000	90.000	330.000	11497.106	93.952	0.000	82.466	0.000	93.952	0.000	0.000	83.058	49.541	-38.545	MWD+IFR1+MS

22300.000	90.000	330.000	11497.106	94.689	0.000	83.073	0.000	94.689	0.000	0.000	83.660	49.629	-38.451	MWD+IFR1+MS
22400.000	90.000	330.000	11497.106	95.425	0.000	83.680	0.000	95.425	0.000	0.000	84.261	49.719	-38.354	MWD+IFR1+MS
22500.000	90.000	330.000	11497.106	96.167	0.000	84.292	0.000	96.167	0.000	0.000	84.868	49.804	-38.259	MWD+IFR1+MS
22600.000	90.000	330.000	11497.106	96.902	0.000	84.906	0.000	96.902	0.000	0.000	85.476	49.898	-38.167	MWD+IFR1+MS
22700.000	90.000	330.000	11497.106	97.642	0.000	85.520	0.000	97.642	0.000	0.000	86.084	49.996	-38.072	MWD+IFR1+MS
22800.000	90.000	330.000	11497.106	98.382	0.000	86.136	0.000	98.382	0.000	0.000	86.695	50.089	-37.990	MWD+IFR1+MS
22900.000	90.000	330.000	11497.106	99.121	0.000	86.750	0.000	99.121	0.000	0.000	87.304	50.180	-37.900	MWD+IFR1+MS
23000.000	90.000	330.000	11497.106	99.865	0.000	87.371	0.000	99.865	0.000	0.000	87.920	50.271	-37.816	MWD+IFR1+MS
23100.000	90.000	330.000	11497.106	100.598	0.000	87.993	0.000	100.598	0.000	0.000	88.537	50.371	-37.735	MWD+IFR1+MS
23147.000	90.000	330.000	11505.000	100.946	0.000	88.286	0.000	100.946	0.000	0.000	88.828	50.435	-37.699	MWD+IFR1+MS
23200.000	90.000	330.000	11505.000	101.341	0.000	88.606	0.000	101.341	0.000	0.000	89.144	50.480	-37.655	MWD+IFR1+MS
23247.000	90.000	330.000	11505.000	101.686	0.000	88.900	0.000	101.686	0.000	0.000	89.437	50.528	-37.617	MWD+IFR1+MS

Plan Targets		PLU 29-20 BS 127H			
	Measured Depth	Grid Northing	Grid Easting	TVD MSL	Target Shape
Target Name	(ft)	(ft)	(ft)	(ft)	
Slant KOP 15	11156.45	401353.96	666713.52	7418.00	CIRCLE
Slant FTP 15	12281.14	401974.87	666355.04	8135.00	CIRCLE
Slant LTP 15	23148.45	411388.25	660920.22	8135.00	CIRCLE
Slant BHL 15	23247.80	411474.85	660870.22	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 127H
SURFACE HOLE FOOTAGE:	0533' FNL & 0295' FEL
BOTTOM HOLE FOOTAGE:	2608' FSL & 1679' 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 120998

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 120998
	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	7/6/2022
kpickford	Adhere to previous NMOCD Conditions of Approval	7/6/2022