

Well Name: POKER LAKE UNIT 29-20 BS	Well Location: T25S / R31E / SEC 29 / NENW /	County or Parish/State:
Well Number: 154H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM157756A	Unit or CA Name: POKER LAKE	Unit or CA Number: NMNM071016X
US Well Number: 3001549115	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional Reviews
Conditions_of_Approval_20220119064504.pdf

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: STEPHANIE RABADUE	Signed on: JAN 18, 2022 07:48 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: CHRISTOPHER WALLS	BLM POC Title: Petroleum Engineer
BLM POC Phone: 5752342234	BLM POC Email Address: cwalls@blm.gov
Disposition: Approved	Disposition Date: 02/01/2022
Signature: Chris Walls	

Form 3160-5
(June 2019)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an
abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

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

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

11. Country or Parish, State

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

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

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

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

Title

Signature

Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Additional Information

Additional Remarks

C102

Well Site Layout (Updated)

Drilling Program

Directional Plan

Location of Well

0. SHL: NENW / 536 FNL / 2270 FWL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107084 / LONG: -103.801507 (TVD: 0 feet, MD: 0 feet)

PPP: SENW / 2310 FNL / 1520 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110381 / LONG: -103.802384 (TVD: 12476 feet, MD: 15725 feet)

PPP: SESW / 536 FSL / 2360 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.107084 / LONG: -103.801507 (TVD: 12476 feet, MD: 14405 feet)

PPP: SENW / 2310 FNL / 2360 FWL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102208 / LONG: -103.801263 (TVD: 12476 feet, MD: 13085 feet)

BHL: NENW / 50 FNL / 2360 FWL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.122997 / LONG: -103.801074 (TVD: 12476 feet, MD: 20647 feet)

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

XTO Energy Inc.
PLU 29-20 BS 154H
Projected TD: 23481' MD / 11750' TVD
SHL: 537' FNL & 2544' FEL , Section 29, T25S, R31E
BHL: 2609' FSL & 2266' 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	962'	Water
Top of Salt	1274'	Water
Base of Salt	3966'	Water
Delaware	4195'	Water
Brushy Canyon	6952'	Water/Oil/Gas
Bone Spring	8086'	Water
1st Bone Spring Ss	9081'	Water/Oil/Gas
2nd Bone Spring Ss	9790'	Water/Oil/Gas
3rd Bone Spring Ss	11038'	Water/Oil/Gas
Wolfcamp	11460'	Water/Oil/Gas
Wolfcamp X	11483'	Water/Oil/Gas
Wolfcamp A	11610'	Water/Oil/Gas
Target/Land Curve	11750'	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 @ 1062' (212' 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 11190' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23481 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 10890 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1062'	9.625	40	J-55	BTC	New	1.24	5.35	14.83
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.13	2.65	1.68
8.75	4000' – 11190'	7.625	29.7	HC L-80	Flush Joint	New	1.55	1.79	1.90
6.75	0' – 11090'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.19	1.94
6.75	11090' - 11750'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.07	5.01
6.75	11750' - 23481'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.07	5.73

- XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
- XTO requests to not utilize centralizers in the curve and lateral
- 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
- XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 11" 10M top flange x 9-5/8" SOW bottom

B. Tubing Head: 11" 10M bottom flange x 7-1/16" 15M top flange

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 1062'

Lead: 250 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 +/- 11190'

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 @ 6952

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: 780 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 (6952') 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 +/- 23481'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 10890 feet

Tail: 860 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 11390 feet

Compressives: 12-hr = 800 psi 24 hr = 1500 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

5. Pressure Control Equipment

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 4442 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When 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' - 1062'	12.25	FW/Native	8.7-9.2	35-40	NC
1062' - 11190'	8.75	FW / Cut Brine / Direct Emulsion	9.7-10.2	30-32	NC
11190' - 23481'	6.75	OBM	11.5-12	50-60	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 9-5/8" surface casing with brine solution. A 9.7 ppg - 10.2 ppg cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 9.625 casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 180 to 200 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 7027 psi.

10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

SECTION 20

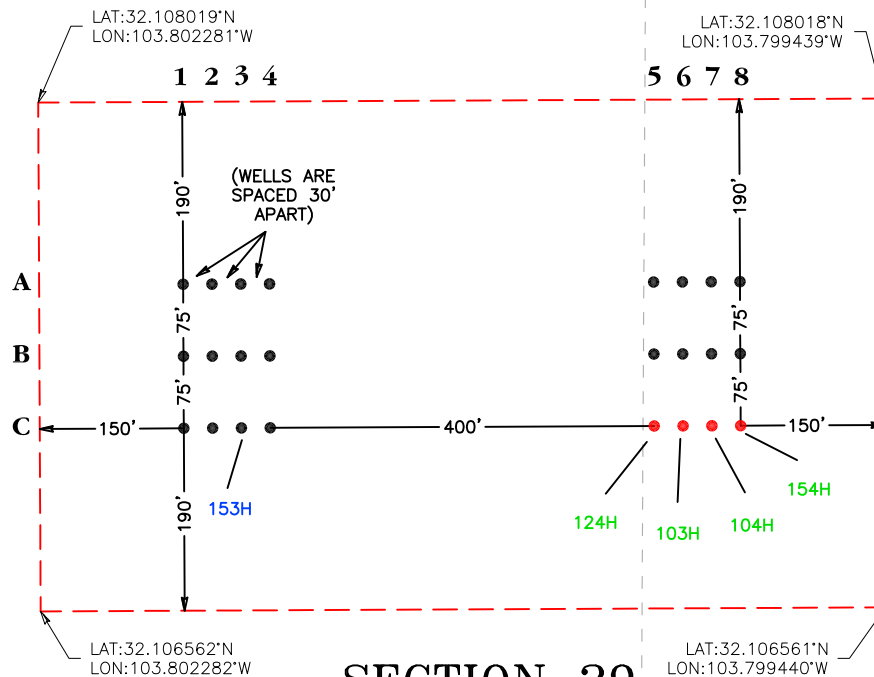
TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN
OWNER: U.S.A.

SE/4 SW/4

SW/4 SE/4

NE/4 NW/4

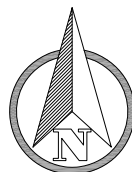
NW/4 NE/4

**SECTION 29**

TOWNSHIP 25 SOUTH, RANGE 31 EAST
NEW MEXICO PRIME MERIDIAN
OWNER: U.S.A.

LEGEND

- ORIGINAL SLOT AND/OR TBD WELL
- STAKED WELL



0 100' 200'

1" = 200' FEET

**XTO PERMIAN
OPERATION, LLC.**

WELL SITE PLAN
POKER LAKE UNIT 29-20 BS
PAD B



FSC INC
SURVEYORS+ENGINEERS

550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

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DATE:	9-30-2021	PROJECT NO:	2017040533
DRAWN BY:	AI	SCALE:	1" = 200'
CHECKED BY:	AR	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	1

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- 49115	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 154H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,369'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	25 S	31 E		537	NORTH	2,544	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		2,609	SOUTH	2,266	EAST	EDDY

¹² Dedicated Acres 600	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 = 403,102.1 X = 706,496.6 LAT. = 32.107084 °N LONG. = 103.799924 °W LTP (NAD83 NME) Y = 411,448.3 X = 701,519.6 LAT. = 32.130093 °N LONG. = 103.815868 °W FTP (NAD83 NME) Y = 401,412.6 X = 707,314.2 LAT. = 32.102428 °N LONG. = 103.797311 °W BHL (NAD83 NME) Y = 411,533.8 X = 701,470.2 LAT. = 32.130328 °N LONG. = 103.816026 °W SHL (NAD27 NME) Y = 403,044.2 X = 665,311.0 LAT. = 32.106959 °N LONG. = 103.799446 °W LTP (NAD27 NME) Y = 411,390.1 X = 660,334.7 LAT. = 32.129968 °N LONG. = 103.815387 °W FTP (NAD27 NME) Y = 401,354.7 X = 666,128.6 LAT. = 32.102304 °N LONG. = 103.796832 °W BHL (NAD27 NME) Y = 411,475.6 X = 660,285.3 LAT. = 32.130204 °N LONG. = 103.815545 °W	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Stephanie Rabadue 11/01/2021 Signature Date Stephanie Rabadue Printed Name stephanie.rabadue@exxonmobil.com E-mail Address ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 10-26-2021 Date of Survey Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number LM 2019082895
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Well Plan Report - PLU 29-20 BS 154H

Measured Depth:	23481.00 ft	Site:	PLU 29-20 Big Sinks Pad B
TVD RKB:	11750.00 ft	Slot:	24
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403040.70 ft		
Easting:	665309.40 ft		
RKB:	3370.00 ft		
Ground Level:	3340.00 ft		
North Reference:	Grid		
Convergence Angle:	0.28 Deg		

Plan Sections PLU 29-20 BS 154H									
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	
2677.73	23.55	154.18	2644.83	-214.86	103.97	2.00	0.00	2.00	
6179.86	23.55	154.18	5855.17	-1474.64	713.60	0.00	0.00	0.00	
7357.59	0.00	0.00	7000.00	-1689.50	817.57	-2.00	0.00	2.00	
11390.58	0.00	0.00	11033.00	-1689.50	817.57	0.00	0.00	0.00	Slant KOP 16
12504.44	90.00	330.00	11742.11	-1075.39	463.02	8.08	0.00	8.08	Slant FTP 16
23381.94	90.00	330.00	11750.00	8344.79	-4975.73	0.00	0.00	0.00	Slant LTP 16
23481.94	90.00	330.00	11750.00	8431.39	-5025.73	0.00	0.00	0.00	Slant BHL 16

Position Uncertainty PLU 29-20 BS 154H														
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	154.100	1599.980	5.901	0.000	6.474	-0.000	2.939	0.000	0.000	6.562	5.805	133.531	MWD+IFR1+MS
1700.000	4.000	154.100	1699.838	6.632	0.000	6.791	-0.000	3.015	0.000	0.000	7.051	6.366	115.353	MWD+IFR1+MS
1800.000	6.000	154.100	1799.452	7.300	0.000	7.112	-0.000	3.098	0.000	0.000	7.628	6.784	101.837	MWD+IFR1+MS
1900.000	7.999	154.100	1898.702	7.918	0.000	7.437	-0.000	3.187	0.000	0.000	8.225	7.142	94.635	MWD+IFR1+MS
2000.000	10.000	154.100	1997.465	8.498	0.000	7.765	-0.000	3.288	0.000	0.000	8.810	7.480	90.678	MWD+IFR1+MS
2100.000	11.990	154.100	2095.623	9.044	0.000	8.095	-0.000	3.399	0.000	0.000	9.375	7.812	88.283	MWD+IFR1+MS
2200.000	14.000	154.100	2193.055	9.561	0.000	8.429	-0.000	3.524	0.000	0.000	9.920	8.142	86.718	MWD+IFR1+MS
2300.000	15.990	154.100	2289.643	10.053	0.000	8.765	-0.000	3.662	0.000	0.000	10.446	8.474	85.633	MWD+IFR1+MS
2400.000	18.000	154.100	2385.268	10.525	0.000	9.105	-0.000	3.817	0.000	0.000	10.956	8.807	84.861	MWD+IFR1+MS
2500.000	19.990	154.100	2479.816	10.978	0.000	9.449	-0.000	3.987	0.000	0.000	11.453	9.144	84.301	MWD+IFR1+MS
2600.000	22.000	154.100	2573.169	11.411	0.000	9.796	-0.000	4.176	0.000	0.000	11.933	9.484	83.888	MWD+IFR1+MS
2677.700	23.550	154.100	2644.833	11.671	0.000	10.064	-0.000	4.306	0.000	0.000	12.241	9.751	83.756	MWD+IFR1+MS
2700.000	23.550	154.100	2665.249	11.737	0.000	10.139	-0.000	4.329	0.000	0.000	12.302	9.829	83.755	MWD+IFR1+MS
2800.000	23.550	154.100	2756.917	12.039	0.000	10.485	-0.000	4.465	0.000	0.000	12.582	10.178	83.983	MWD+IFR1+MS
2900.000	23.550	154.100	2848.585	12.357	0.000	10.847	-0.000	4.613	0.000	0.000	12.877	10.539	84.375	MWD+IFR1+MS
3000.000	23.550	154.100	2940.253	12.684	0.000	11.211	-0.000	4.768	0.000	0.000	13.182	10.902	84.775	MWD+IFR1+MS
3100.000	23.550	154.100	3031.921	13.021	0.000	11.581	-0.000	4.927	0.000	0.000	13.494	11.270	85.172	MWD+IFR1+MS
3200.000	23.550	154.100	3123.589	13.365	0.000	11.954	-0.000	5.094	0.000	0.000	13.814	11.639	85.575	MWD+IFR1+MS
3300.000	23.550	154.100	3215.257	13.715	0.000	12.330	-0.000	5.265	0.000	0.000	14.138	12.014	85.968	MWD+IFR1+MS
3400.000	23.550	154.100	3306.925	14.069	0.000	12.710	-0.000	5.441	0.000	0.000	14.465	12.393	86.351	MWD+IFR1+MS
3500.000	23.550	154.100	3398.593	14.430	0.000	13.092	-0.000	5.621	0.000	0.000	14.798	12.772	86.737	MWD+IFR1+MS
3600.000	23.550	154.100	3490.261	14.798	0.000	13.477	-0.000	5.805	0.000	0.000	15.137	13.155	87.121	MWD+IFR1+MS
3700.000	23.550	154.100	3581.929	15.169	0.000	13.863	-0.000	5.994	0.000	0.000	15.479	13.539	87.501	MWD+IFR1+MS
3800.000	23.550	154.100	3673.597	15.545	0.000	14.252	-0.000	6.186	0.000	0.000	15.826	13.926	87.878	MWD+IFR1+MS
3900.000	23.550	154.100	3765.265	15.926	0.000	14.642	-0.000	6.382	0.000	0.000	16.179	14.312	88.253	MWD+IFR1+MS
4000.000	23.550	154.100	3856.933	16.310	0.000	15.034	-0.000	6.580	0.000	0.000	16.533	14.703	88.621	MWD+IFR1+MS
4100.000	23.550	154.100	3948.601	16.698	0.000	15.426	-0.000	6.782	0.000	0.000	16.891	15.092	88.986	MWD+IFR1+MS
4200.000	23.550	154.100	4040.269	17.089	0.000	15.821	-0.000	6.987	0.000	0.000	17.251	15.485	89.344	MWD+IFR1+MS
4300.000	23.550	154.100	4131.937	17.484	0.000	16.219	-0.000	7.195	0.000	0.000	17.615	15.881	89.698	MWD+IFR1+MS
4400.000	23.550	154.100	4223.605	17.882	0.000	16.616	-0.000	7.405	0.000	0.000	17.983	16.276	90.047	MWD+IFR1+MS
4500.000	23.550	154.100	4315.273	18.282	0.000	17.013	-0.000	7.618	0.000	0.000	18.352	16.670	90.390	MWD+IFR1+MS
4600.000	23.550	154.100	4406.941	18.685	0.000	17.413	-0.000	7.834	0.000	0.000	18.725	17.067	90.726	MWD+IFR1+MS
4700.000	23.550	154.100	4498.609	19.089	0.000	17.814	-0.000	8.052	0.000	0.000	19.098	17.467	91.058	MWD+IFR1+MS
4800.000	23.550	154.100	4590.277	19.497	0.000	18.215	-0.000	8.272	0.000	0.000	19.474	17.865	91.383	MWD+IFR1+MS
4900.000	23.550	154.100	4681.945	19.907	0.000	18.618	-0.000	8.495	0.000	0.000	19.853	18.266	91.701	MWD+IFR1+MS
5000.000	23.550	154.100	4773.613	20.318	0.000	19.021	-0.000	8.720	0.000	0.000	20.233	18.666	92.012	MWD+IFR1+MS
5100.000	23.550	154.100	4865.281	20.732	0.000	19.425	-0.000	8.947	0.000	0.000	20.616	19.068	92.317	MWD+IFR1+MS
5200.000	23.550	154.100	4956.949	21.148	0.000	19.831	-0.000	9.176	0.000	0.000	21.001	19.472	92.615	MWD+IFR1+MS
5300.000	23.550	154.100	5048.617	21.564	0.000	20.236	-0.000	9.406	0.000	0.000	21.386	19.876	92.907	MWD+IFR1+MS
5400.000	23.550	154.100	5140.285	21.982	0.000	20.641	-0.000	9.640	0.000	0.000	21.774	20.278	93.186	MWD+IFR1+MS
5500.000	23.550	154.100	5231.953	22.402	0.000	21.048	-0.000	9.874	0.000	0.000	22.164	20.683	93.458	MWD+IFR1+MS
5600.000	23.550	154.100	5323.621	22.825	0.000	21.456	-0.000	10.109	0.000	0.000	22.554	21.089	93.728	MWD+IFR1+MS
5700.000	23.550	154.100	5415.289	23.247	0.000	21.863	-0.000	10.349	0.000	0.000	22.946	21.494	93.986	MWD+IFR1+MS
5800.000	23.550	154.100	5506.957	23.671	0.000	22.272	-0.000	10.588	0.000	0.000	23.340	21.901	94.236	MWD+IFR1+MS
5900.000	23.550	154.100	5598.625	24.097	0.000	22.682	-0.000	10.831	0.000	0.000	23.734	22.309	94.485	MWD+IFR1+MS
6000.000	23.550	154.100	5690.293	24.524	0.000	23.092	-0.000	11.077	0.000	0.000	24.130	22.717	94.719	MWD+IFR1+MS
6100.000	23.550	154.100	5781.961	24.951	0.000	23.500	-0.000	11.323	0.000	0.000	24.525	23.124	94.947	MWD+IFR1+MS
6179.800	23.550	154.100	5855.167	25.290	0.000	23.826	-0.000	11.520	0.000	0.000	24.840	23.449	95.076	MWD+IFR1+MS
6200.000	23.150	154.100	5873.657	25.393	0.000	23.908	-0.000	11.572	0.000	0.000	24.918	23.532	95.092	MWD+IFR1+MS
6300.000	21.150	154.100	5966.272	25.916	0.000	24.308	-0.000	11.824	0.000	0.000	25.333	23.938	94.757	MWD+IFR1+MS
6400.000	19.150	154.100	6060.145	26.466	0.000	24.709	-0.000	12.087	0.000	0.000	25.805	24.343	93.758	MWD+IFR1+MS
6500.000	17.150	154.100	6155.164	26.976	0.000	25.103	-0.000	12.337	0.000	0.000	26.273	24.741	92.817	MWD+IFR1+MS
6600.000	15.150	154.100	6251.212	27.443	0.000	25.488	-0.000	12.574	0.000	0.000	26.734	25.130	91.944	MWD+IFR1+MS

6700.000	13.150	154.100	6348.172	27.867	0.000	25.867	-0.000	12.798	0.000	0.000	27.187	25.512	91.145	MWD+IFR1+MS
6800.000	11.150	154.100	6445.926	28.249	0.000	26.237	-0.000	13.015	0.000	0.000	27.633	25.884	90.421	MWD+IFR1+MS
6900.000	9.151	154.100	6544.356	28.588	0.000	26.600	-0.000	13.221	0.000	0.000	28.070	26.249	89.774	MWD+IFR1+MS
7000.000	7.151	154.100	6643.340	28.883	0.000	26.953	-0.000	13.416	0.000	0.000	28.496	26.602	89.203	MWD+IFR1+MS
7100.000	5.151	154.100	6742.760	29.136	0.000	27.298	-0.000	13.609	0.000	0.000	28.911	26.947	88.704	MWD+IFR1+MS
7200.000	3.151	154.100	6842.492	29.346	0.000	27.633	-0.000	13.791	0.000	0.000	29.314	27.282	88.277	MWD+IFR1+MS
7300.000	1.151	154.100	6942.416	29.513	0.000	27.960	-0.000	13.975	0.000	0.000	29.705	27.607	87.917	MWD+IFR1+MS
7357.500	0.000	0.000	7000.000	29.863	0.000	27.788	0.000	14.075	0.000	0.000	29.866	27.786	87.955	MWD+IFR1+MS
7400.000	0.000	0.000	7042.413	29.978	0.000	27.916	0.000	14.153	0.000	0.000	29.981	27.913	88.035	MWD+IFR1+MS
7500.000	0.000	0.000	7142.413	30.251	0.000	28.219	0.000	14.332	0.000	0.000	30.252	28.217	88.261	MWD+IFR1+MS
7600.000	0.000	0.000	7242.413	30.529	0.000	28.525	0.000	14.516	0.000	0.000	30.530	28.524	88.577	MWD+IFR1+MS
7700.000	0.000	0.000	7342.413	30.807	0.000	28.834	0.000	14.704	0.000	0.000	30.808	28.833	88.895	MWD+IFR1+MS
7800.000	0.000	0.000	7442.413	31.087	0.000	29.144	0.000	14.896	0.000	0.000	31.087	29.144	89.216	MWD+IFR1+MS
7900.000	0.000	0.000	7542.413	31.369	0.000	29.455	0.000	15.093	0.000	0.000	31.369	29.455	89.541	MWD+IFR1+MS
8000.000	0.000	0.000	7642.413	31.639	0.000	29.767	0.000	15.291	0.000	0.000	31.639	29.767	89.869	MWD+IFR1+MS
8100.000	0.000	0.000	7742.413	31.937	0.000	30.080	0.000	15.495	0.000	0.000	31.937	30.080	90.202	MWD+IFR1+MS
8200.000	0.000	0.000	7842.413	32.218	0.000	30.394	0.000	15.700	0.000	0.000	32.218	30.394	90.539	MWD+IFR1+MS
8300.000	0.000	0.000	7942.413	32.512	0.000	30.710	0.000	15.909	0.000	0.000	32.512	30.709	90.878	MWD+IFR1+MS
8400.000	0.000	0.000	8042.413	32.787	0.000	31.026	0.000	16.125	0.000	0.000	32.788	31.025	91.230	MWD+IFR1+MS
8500.000	0.000	0.000	8142.413	33.091	0.000	31.342	0.000	16.340	0.000	0.000	33.092	31.340	91.566	MWD+IFR1+MS
8600.000	0.000	0.000	8242.413	33.377	0.000	31.654	0.000	16.562	0.000	0.000	33.379	31.652	91.918	MWD+IFR1+MS
8700.000	0.000	0.000	8342.413	33.675	0.000	31.969	0.000	16.787	0.000	0.000	33.678	31.966	92.258	MWD+IFR1+MS
8800.000	0.000	0.000	8442.413	33.971	0.000	32.296	0.000	17.015	0.000	0.000	33.974	32.292	92.622	MWD+IFR1+MS
8900.000	0.000	0.000	8542.413	34.264	0.000	32.604	0.000	17.248	0.000	0.000	34.268	32.599	92.964	MWD+IFR1+MS
9000.000	0.000	0.000	8642.413	34.554	0.000	32.939	0.000	17.481	0.000	0.000	34.560	32.934	93.365	MWD+IFR1+MS
9100.000	0.000	0.000	8742.413	34.857	0.000	33.257	0.000	17.723	0.000	0.000	34.863	33.250	93.712	MWD+IFR1+MS
9200.000	0.000	0.000	8842.413	35.157	0.000	33.571	0.000	17.964	0.000	0.000	35.165	33.563	94.057	MWD+IFR1+MS
9300.000	0.000	0.000	8942.413	35.454	0.000	33.897	0.000	18.210	0.000	0.000	35.463	33.887	94.442	MWD+IFR1+MS
9400.000	0.000	0.000	9042.413	35.749	0.000	34.220	0.000	18.461	0.000	0.000	35.760	34.209	94.831	MWD+IFR1+MS
9500.000	0.000	0.000	9142.413	36.056	0.000	34.554	0.000	18.714	0.000	0.000	36.068	34.541	95.227	MWD+IFR1+MS
9600.000	0.000	0.000	9242.413	36.359	0.000	34.871	0.000	18.971	0.000	0.000	36.373	34.857	95.577	MWD+IFR1+MS
9700.000	0.000	0.000	9342.413	36.661	0.000	35.199	0.000	19.233	0.000	0.000	36.676	35.183	95.974	MWD+IFR1+MS
9800.000	0.000	0.000	9442.413	36.973	0.000	35.525	0.000	19.496	0.000	0.000	36.991	35.506	96.323	MWD+IFR1+MS
9900.000	0.000	0.000	9542.413	37.283	0.000	35.861	0.000	19.764	0.000	0.000	37.302	35.840	96.732	MWD+IFR1+MS
10000.000	0.000	0.000	9642.413	37.590	0.000	36.180	0.000	20.035	0.000	0.000	37.612	36.158	97.080	MWD+IFR1+MS
10100.000	0.000	0.000	9742.413	37.895	0.000	36.510	0.000	20.310	0.000	0.000	37.919	36.485	97.495	MWD+IFR1+MS
10200.000	0.000	0.000	9842.413	38.197	0.000	36.837	0.000	20.589	0.000	0.000	38.223	36.810	97.915	MWD+IFR1+MS
10300.000	0.000	0.000	9942.413	38.510	0.000	37.175	0.000	20.871	0.000	0.000	38.539	37.145	98.339	MWD+IFR1+MS
10400.000	0.000	0.000	10042.413	38.820	0.000	37.497	0.000	21.157	0.000	0.000	38.851	37.464	98.687	MWD+IFR1+MS
10500.000	0.000	0.000	10142.413	39.141	0.000	37.829	0.000	21.445	0.000	0.000	39.174	37.794	99.032	MWD+IFR1+MS
10600.000	0.000	0.000	10242.413	39.446	0.000	38.158	0.000	21.737	0.000	0.000	39.482	38.120	99.461	MWD+IFR1+MS
10700.000	0.000	0.000	10342.413	39.762	0.000	38.497	0.000	22.034	0.000	0.000	39.801	38.456	99.894	MWD+IFR1+MS
10800.000	0.000	0.000	10442.413	40.075	0.000	38.820	0.000	22.334	0.000	0.000	40.117	38.777	100.236	MWD+IFR1+MS
10900.000	0.000	0.000	10542.413	40.386	0.000	39.154	0.000	22.636	0.000	0.000	40.430	39.107	100.673	MWD+IFR1+MS
11000.000	0.000	0.000	10642.413	40.706	0.000	39.484	0.000	22.943	0.000	0.000	40.754	39.435	101.011	MWD+IFR1+MS
11100.000	0.000	0.000	10742.413	41.024	0.000	39.825	0.000	23.253	0.000	0.000	41.075	39.772	101.451	MWD+IFR1+MS
11200.000	0.000	0.000	10842.413	41.340	0.000	40.162	0.000	23.565	0.000	0.000	41.394	40.107	101.895	MWD+IFR1+MS
11300.000	0.000	0.000	10942.413	41.653	0.000	40.497	0.000	23.883	0.000	0.000	41.711	40.438	102.341	MWD+IFR1+MS
11390.000	0.000	0.000	11033.000	41.940	0.000	40.792	0.000	24.172	0.000	0.000	42.000	40.731	102.614	MWD+IFR1+MS
11400.000	0.760	330.000	11042.412	41.374	0.000	41.354	0.000	24.203	0.000	0.000	42.036	40.767	102.629	MWD+IFR1+MS
11500.000	8.840	330.000	11141.979	40.787	0.000	41.660	0.000	24.530	0.000	0.000	42.526	41.177	96.516	MWD+IFR1+MS
11600.000	16.920	330.000	11239.382	40.433	0.000	41.940	0.000	24.920	0.000	0.000	43.558	41.637	83.143	MWD+IFR1+MS
11700.000	25.000	330.000	11332.687	39.652	0.000	42.195	0.000	25.430	0.000	0.000	44.561	41.956	77.406	MWD+IFR1+MS

11800.000	33.080	330.000	11420.042	38.530	0.000	42.408	0.000	26.104	0.000	0.000	45.417	42.193	74.678	MWD+IFR1+MS
11900.000	41.160	330.000	11499.713	37.214	0.000	42.589	0.000	26.965	0.000	0.000	46.102	42.387	73.228	MWD+IFR1+MS
12000.000	49.240	330.000	11570.118	35.867	0.000	42.724	0.000	28.016	0.000	0.000	46.614	42.522	72.536	MWD+IFR1+MS
12100.000	57.320	330.000	11629.858	34.688	0.000	42.826	0.000	29.239	0.000	0.000	46.961	42.623	72.202	MWD+IFR1+MS
12200.000	65.400	330.000	11677.748	33.873	0.000	42.880	0.000	30.601	0.000	0.000	47.159	42.673	72.114	MWD+IFR1+MS
12300.000	73.480	330.000	11712.837	33.594	0.000	42.896	0.000	32.047	0.000	0.000	47.259	42.681	72.225	MWD+IFR1+MS
12400.000	81.560	330.000	11734.428	33.988	0.000	42.878	0.000	33.556	0.000	0.000	47.280	42.657	72.306	MWD+IFR1+MS
12504.000	90.000	330.000	11742.106	35.242	0.000	42.825	0.000	35.242	0.000	0.000	47.275	42.603	72.269	MWD+IFR1+MS
12600.000	90.000	330.000	11742.106	35.805	0.000	42.755	0.000	35.805	0.000	0.000	47.264	42.534	72.156	MWD+IFR1+MS
12700.000	90.000	330.000	11742.106	36.042	0.000	42.697	0.000	36.042	0.000	0.000	47.262	42.477	72.067	MWD+IFR1+MS
12800.000	90.000	330.000	11742.106	36.304	0.000	42.645	0.000	36.304	0.000	0.000	47.257	42.423	72.033	MWD+IFR1+MS
12900.000	90.000	330.000	11742.106	36.579	0.000	42.617	0.000	36.579	0.000	0.000	47.261	42.395	72.004	MWD+IFR1+MS
13000.000	90.000	330.000	11742.106	36.865	0.000	42.593	0.000	36.865	0.000	0.000	47.263	42.370	72.017	MWD+IFR1+MS
13100.000	90.000	330.000	11742.106	37.175	0.000	42.583	0.000	37.175	0.000	0.000	47.263	42.358	72.034	MWD+IFR1+MS
13200.000	90.000	330.000	11742.106	37.483	0.000	42.585	0.000	37.483	0.000	0.000	47.262	42.359	72.055	MWD+IFR1+MS
13300.000	90.000	330.000	11742.106	37.815	0.000	42.594	0.000	37.815	0.000	0.000	47.268	42.364	72.157	MWD+IFR1+MS
13400.000	90.000	330.000	11742.106	38.158	0.000	42.616	0.000	38.158	0.000	0.000	47.272	42.383	72.263	MWD+IFR1+MS
13500.000	90.000	330.000	11742.106	38.523	0.000	42.658	0.000	38.523	0.000	0.000	47.277	42.425	72.326	MWD+IFR1+MS
13600.000	90.000	330.000	11742.106	38.884	0.000	42.700	0.000	38.884	0.000	0.000	47.287	42.461	72.520	MWD+IFR1+MS
13700.000	90.000	330.000	11742.106	39.268	0.000	42.763	0.000	39.268	0.000	0.000	47.297	42.521	72.685	MWD+IFR1+MS
13800.000	90.000	330.000	11742.106	39.661	0.000	42.842	0.000	39.661	0.000	0.000	47.315	42.594	72.897	MWD+IFR1+MS
13900.000	90.000	330.000	11742.106	40.062	0.000	42.922	0.000	40.062	0.000	0.000	47.321	42.670	73.121	MWD+IFR1+MS
14000.000	90.000	330.000	11742.106	40.485	0.000	43.017	0.000	40.485	0.000	0.000	47.336	42.759	73.398	MWD+IFR1+MS
14100.000	90.000	330.000	11742.106	40.902	0.000	43.128	0.000	40.902	0.000	0.000	47.359	42.862	73.731	MWD+IFR1+MS
14200.000	90.000	330.000	11742.106	41.340	0.000	43.239	0.000	41.340	0.000	0.000	47.370	42.966	74.086	MWD+IFR1+MS
14300.000	90.000	330.000	11742.106	41.797	0.000	43.366	0.000	41.797	0.000	0.000	47.390	43.084	74.506	MWD+IFR1+MS
14400.000	90.000	330.000	11742.106	42.249	0.000	43.517	0.000	42.249	0.000	0.000	47.420	43.225	74.956	MWD+IFR1+MS
14500.000	90.000	330.000	11742.106	42.720	0.000	43.668	0.000	42.720	0.000	0.000	47.438	43.367	75.449	MWD+IFR1+MS
14600.000	90.000	330.000	11742.106	43.197	0.000	43.826	0.000	43.197	0.000	0.000	47.464	43.510	76.064	MWD+IFR1+MS
14700.000	90.000	330.000	11742.106	43.681	0.000	44.003	0.000	43.681	0.000	0.000	47.491	43.676	76.698	MWD+IFR1+MS
14800.000	90.000	330.000	11742.106	44.170	0.000	44.187	0.000	44.170	0.000	0.000	47.527	43.843	77.476	MWD+IFR1+MS
14900.000	90.000	330.000	11742.106	44.677	0.000	44.383	0.000	44.677	0.000	0.000	47.563	44.020	78.335	MWD+IFR1+MS
15000.000	90.000	330.000	11742.106	45.177	0.000	44.590	0.000	45.177	0.000	0.000	47.600	44.207	79.296	MWD+IFR1+MS
15100.000	90.000	330.000	11742.106	45.706	0.000	44.811	0.000	45.706	0.000	0.000	47.648	44.404	80.411	MWD+IFR1+MS
15200.000	90.000	330.000	11742.106	46.228	0.000	45.035	0.000	46.228	0.000	0.000	47.696	44.599	81.704	MWD+IFR1+MS
15300.000	90.000	330.000	11742.106	46.755	0.000	45.270	0.000	46.755	0.000	0.000	47.748	44.801	83.170	MWD+IFR1+MS
15400.000	90.000	330.000	11742.106	47.297	0.000	45.516	0.000	47.297	0.000	0.000	47.803	45.010	84.846	MWD+IFR1+MS
15500.000	90.000	330.000	11742.106	47.843	0.000	45.775	0.000	47.843	0.000	0.000	47.872	45.224	86.793	MWD+IFR1+MS
15600.000	90.000	330.000	11742.106	48.394	0.000	46.044	0.000	48.394	0.000	0.000	47.949	45.442	89.033	MWD+IFR1+MS
15700.000	90.000	330.000	11742.106	48.959	0.000	46.319	0.000	48.959	0.000	0.000	48.043	45.649	91.602	MWD+IFR1+MS
15800.000	90.000	330.000	11742.106	49.518	0.000	46.601	0.000	49.518	0.000	0.000	48.139	45.855	94.527	MWD+IFR1+MS
15900.000	90.000	330.000	11742.106	50.090	0.000	46.898	0.000	50.090	0.000	0.000	48.268	46.056	97.760	MWD+IFR1+MS
16000.000	90.000	330.000	11742.106	50.666	0.000	47.202	0.000	50.666	0.000	0.000	48.404	46.250	101.355	MWD+IFR1+MS
16100.000	90.000	330.000	11742.106	51.254	0.000	47.511	0.000	51.254	0.000	0.000	48.567	46.424	105.089	MWD+IFR1+MS
16200.000	90.000	330.000	11742.106	51.836	0.000	47.829	0.000	51.836	0.000	0.000	48.752	46.586	108.940	MWD+IFR1+MS
16300.000	90.000	330.000	11742.106	52.431	0.000	48.157	0.000	52.431	0.000	0.000	48.959	46.734	112.791	MWD+IFR1+MS
16400.000	90.000	330.000	11742.106	53.028	0.000	48.496	0.000	53.028	0.000	0.000	49.196	46.870	116.420	MWD+IFR1+MS
16500.000	90.000	330.000	11742.106	53.638	0.000	48.843	0.000	53.638	0.000	0.000	49.454	46.993	119.816	MWD+IFR1+MS
16600.000	90.000	330.000	11742.106	54.240	0.000	49.193	0.000	54.240	0.000	0.000	49.730	47.095	122.852	MWD+IFR1+MS
16700.000	90.000	330.000	11742.106	54.854	0.000	49.553	0.000	54.854	0.000	0.000	50.030	47.191	125.487	MWD+IFR1+MS
16800.000	90.000	330.000	11742.106	55.471	0.000	49.922	0.000	55.471	0.000	0.000	50.347	47.277	127.852	MWD+IFR1+MS
16900.000	90.000	330.000	11742.106	56.089	0.000	50.299	0.000	56.089	0.000	0.000	50.678	47.358	129.956	MWD+IFR1+MS
17000.000	90.000	330.000	11742.106	56.719	0.000	50.686	0.000	56.719	0.000	0.000	51.027	47.437	131.751	MWD+IFR1+MS

17100.000	90.000	330.000	11742.106	57.341	0.000	51.074	0.000	57.341	0.000	0.000	51.384	47.504	133.282	MWD+IFR1+MS
17200.000	90.000	330.000	11742.106	57.974	0.000	51.470	0.000	57.974	0.000	0.000	51.751	47.569	134.655	MWD+IFR1+MS
17300.000	90.000	330.000	11742.106	58.609	0.000	51.876	0.000	58.609	0.000	0.000	52.134	47.634	-44.170	MWD+IFR1+MS
17400.000	90.000	330.000	11742.106	59.254	0.000	52.288	0.000	59.254	0.000	0.000	52.526	47.698	-43.104	MWD+IFR1+MS
17500.000	90.000	330.000	11742.106	59.892	0.000	52.701	0.000	59.892	0.000	0.000	52.920	47.754	-42.186	MWD+IFR1+MS
17600.000	90.000	330.000	11742.106	60.539	0.000	53.124	0.000	60.539	0.000	0.000	53.328	47.813	-41.395	MWD+IFR1+MS
17700.000	90.000	330.000	11742.106	61.188	0.000	53.553	0.000	61.188	0.000	0.000	53.743	47.872	-40.662	MWD+IFR1+MS
17800.000	90.000	330.000	11742.106	61.838	0.000	53.989	0.000	61.838	0.000	0.000	54.166	47.927	-39.982	MWD+IFR1+MS
17900.000	90.000	330.000	11742.106	62.498	0.000	54.432	0.000	62.498	0.000	0.000	54.596	47.982	-39.347	MWD+IFR1+MS
18000.000	90.000	330.000	11742.106	63.159	0.000	54.876	0.000	63.159	0.000	0.000	55.031	48.037	-38.832	MWD+IFR1+MS
18100.000	90.000	330.000	11742.106	63.820	0.000	55.328	0.000	63.820	0.000	0.000	55.473	48.091	-38.345	MWD+IFR1+MS
18200.000	90.000	330.000	11742.106	64.483	0.000	55.787	0.000	64.483	0.000	0.000	55.924	48.151	-37.917	MWD+IFR1+MS
18300.000	90.000	330.000	11742.106	65.154	0.000	56.252	0.000	65.154	0.000	0.000	56.382	48.209	-37.509	MWD+IFR1+MS
18400.000	90.000	330.000	11742.106	65.818	0.000	56.723	0.000	65.818	0.000	0.000	56.845	48.266	-37.117	MWD+IFR1+MS
18500.000	90.000	330.000	11742.106	66.491	0.000	57.194	0.000	66.491	0.000	0.000	57.309	48.318	-36.773	MWD+IFR1+MS
18600.000	90.000	330.000	11742.106	67.164	0.000	57.672	0.000	67.164	0.000	0.000	57.781	48.377	-36.467	MWD+IFR1+MS
18700.000	90.000	330.000	11742.106	67.845	0.000	58.156	0.000	67.845	0.000	0.000	58.260	48.434	-36.171	MWD+IFR1+MS
18800.000	90.000	330.000	11742.106	68.520	0.000	58.639	0.000	68.520	0.000	0.000	58.738	48.486	-35.909	MWD+IFR1+MS
18900.000	90.000	330.000	11742.106	69.203	0.000	59.135	0.000	69.203	0.000	0.000	59.229	48.548	-35.652	MWD+IFR1+MS
19000.000	90.000	330.000	11742.106	69.886	0.000	59.630	0.000	69.886	0.000	0.000	59.720	48.605	-35.424	MWD+IFR1+MS
19100.000	90.000	330.000	11742.106	70.576	0.000	60.133	0.000	70.576	0.000	0.000	60.219	48.669	-35.222	MWD+IFR1+MS
19200.000	90.000	330.000	11742.106	71.260	0.000	60.638	0.000	71.260	0.000	0.000	60.720	48.725	-35.000	MWD+IFR1+MS
19300.000	90.000	330.000	11742.106	71.951	0.000	61.144	0.000	71.951	0.000	0.000	61.223	48.783	-34.822	MWD+IFR1+MS
19400.000	90.000	330.000	11742.106	72.643	0.000	61.663	0.000	72.643	0.000	0.000	61.739	48.850	-34.646	MWD+IFR1+MS
19500.000	90.000	330.000	11742.106	73.335	0.000	62.178	0.000	73.335	0.000	0.000	62.251	48.907	-34.470	MWD+IFR1+MS
19600.000	90.000	330.000	11742.106	74.034	0.000	62.699	0.000	74.034	0.000	0.000	62.769	48.970	-34.312	MWD+IFR1+MS
19700.000	90.000	330.000	11742.106	74.726	0.000	63.228	0.000	74.726	0.000	0.000	63.295	49.039	-34.172	MWD+IFR1+MS
19800.000	90.000	330.000	11742.106	75.425	0.000	63.752	0.000	75.425	0.000	0.000	63.817	49.096	-34.031	MWD+IFR1+MS
19900.000	90.000	330.000	11742.106	76.131	0.000	64.283	0.000	76.131	0.000	0.000	64.345	49.160	-33.905	MWD+IFR1+MS
20000.000	90.000	330.000	11742.106	76.831	0.000	64.819	0.000	76.831	0.000	0.000	64.880	49.230	-33.791	MWD+IFR1+MS
20100.000	90.000	330.000	11742.106	77.537	0.000	65.358	0.000	77.537	0.000	0.000	65.416	49.292	-33.663	MWD+IFR1+MS
20200.000	90.000	330.000	11742.106	78.237	0.000	65.903	0.000	78.237	0.000	0.000	65.959	49.360	-33.547	MWD+IFR1+MS
20300.000	90.000	330.000	11742.106	78.949	0.000	66.446	0.000	78.949	0.000	0.000	66.500	49.424	-33.444	MWD+IFR1+MS
20400.000	90.000	330.000	11742.106	79.656	0.000	67.000	0.000	79.656	0.000	0.000	67.052	49.498	-33.339	MWD+IFR1+MS
20500.000	90.000	330.000	11742.106	80.362	0.000	67.553	0.000	80.362	0.000	0.000	67.603	49.567	-33.245	MWD+IFR1+MS
20600.000	90.000	330.000	11742.106	81.074	0.000	68.102	0.000	81.074	0.000	0.000	68.151	49.633	-33.160	MWD+IFR1+MS
20700.000	90.000	330.000	11742.106	81.786	0.000	68.661	0.000	81.786	0.000	0.000	68.708	49.701	-33.061	MWD+IFR1+MS
20800.000	90.000	330.000	11742.106	82.505	0.000	69.216	0.000	82.505	0.000	0.000	69.261	49.778	-32.977	MWD+IFR1+MS
20900.000	90.000	330.000	11742.106	83.217	0.000	69.778	0.000	83.217	0.000	0.000	69.822	49.849	-32.897	MWD+IFR1+MS
21000.000	90.000	330.000	11742.106	83.934	0.000	70.349	0.000	83.934	0.000	0.000	70.391	49.921	-32.831	MWD+IFR1+MS
21100.000	90.000	330.000	11742.106	84.652	0.000	70.920	0.000	84.652	0.000	0.000	70.961	49.995	-32.758	MWD+IFR1+MS
21200.000	90.000	330.000	11742.106	85.370	0.000	71.487	0.000	85.370	0.000	0.000	71.527	50.069	-32.690	MWD+IFR1+MS
21300.000	90.000	330.000	11742.106	86.087	0.000	72.065	0.000	86.087	0.000	0.000	72.104	50.140	-32.615	MWD+IFR1+MS
21400.000	90.000	330.000	11742.106	86.810	0.000	72.641	0.000	86.810	0.000	0.000	72.679	50.217	-32.553	MWD+IFR1+MS
21500.000	90.000	330.000	11742.106	87.533	0.000	73.218	0.000	87.533	0.000	0.000	73.254	50.297	-32.485	MWD+IFR1+MS
21600.000	90.000	330.000	11742.106	88.255	0.000	73.796	0.000	88.255	0.000	0.000	73.831	50.368	-32.430	MWD+IFR1+MS
21700.000	90.000	330.000	11742.106	88.978	0.000	74.386	0.000	88.978	0.000	0.000	74.421	50.443	-32.377	MWD+IFR1+MS
21800.000	90.000	330.000	11742.106	89.705	0.000	74.967	0.000	89.705	0.000	0.000	75.000	50.527	-32.318	MWD+IFR1+MS
21900.000	90.000	330.000	11742.106	90.432	0.000	75.555	0.000	90.432	0.000	0.000	75.588	50.611	-32.270	MWD+IFR1+MS
22000.000	90.000	330.000	11742.106	91.159	0.000	76.143	0.000	91.159	0.000	0.000	76.175	50.679	-32.225	MWD+IFR1+MS
22100.000	90.000	330.000	11742.106	91.886	0.000	76.738	0.000	91.886	0.000	0.000	76.769	50.759	-32.173	MWD+IFR1+MS
22200.000	90.000	330.000	11742.106	92.617	0.000	77.330	0.000	92.617	0.000	0.000	77.360	50.847	-32.132	MWD+IFR1+MS
22300.000	90.000	330.000	11742.106	93.343	0.000	77.926	0.000	93.343	0.000	0.000	77.955	50.921	-32.085	MWD+IFR1+MS

22400.000	90.000	330.000	11742.106	94.074	0.000	78.524	0.000	94.074	0.000	0.000	78.553	51.005	-32.041	MWD+IFR1+MS
22500.000	90.000	330.000	11742.106	94.805	0.000	79.123	0.000	94.805	0.000	0.000	79.151	51.098	-31.998	MWD+IFR1+MS
22600.000	90.000	330.000	11742.106	95.541	0.000	79.722	0.000	95.541	0.000	0.000	79.750	51.176	-31.957	MWD+IFR1+MS
22700.000	90.000	330.000	11742.106	96.276	0.000	80.333	0.000	96.276	0.000	0.000	80.360	51.257	-31.918	MWD+IFR1+MS
22800.000	90.000	330.000	11742.106	97.005	0.000	80.934	0.000	97.005	0.000	0.000	80.960	51.346	-31.874	MWD+IFR1+MS
22900.000	90.000	330.000	11742.106	97.745	0.000	81.542	0.000	97.745	0.000	0.000	81.568	51.437	-31.839	MWD+IFR1+MS
23000.000	90.000	330.000	11742.106	98.478	0.000	82.151	0.000	98.478	0.000	0.000	82.176	51.518	-31.811	MWD+IFR1+MS
23100.000	90.000	330.000	11742.106	99.217	0.000	82.764	0.000	99.217	0.000	0.000	82.788	51.605	-31.773	MWD+IFR1+MS
23200.000	90.000	330.000	11742.106	99.950	0.000	83.374	0.000	99.950	0.000	0.000	83.398	51.699	-31.741	MWD+IFR1+MS
23300.000	90.000	330.000	11742.106	100.648	0.000	83.988	0.000	100.648	0.000	0.000	84.012	51.779	-31.706	MWD+IFR1+MS
23381.000	90.000	330.000	11750.000	101.292	0.000	84.489	0.000	101.292	0.000	0.000	84.512	51.863	-31.683	MWD+IFR1+MS
23400.000	90.000	330.000	11750.000	101.390	0.000	84.601	0.000	101.390	0.000	0.000	84.624	51.873	-31.683	MWD+IFR1+MS
23481.000	90.000	330.000	11750.000	102.029	0.000	85.102	0.000	102.029	0.000	0.000	85.125	51.960	-31.655	MWD+IFR1+MS

Plan Targets		PLU 29-20 BS 154H			
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
Slant KOP 16	11390.59	401351.20	666126.97	7663.00	CIRCLE
Slant FTP 16	12515.14	401972.11	665768.49	8380.00	CIRCLE
Slant LTP 16	23382.32	411385.49	660333.67	8380.00	CIRCLE
Slant BHL 16	23481.94	411472.09	660283.67	8380.00	CIRCLE

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating, LLC
LEASE NO.:	NMNM-157756A
WELL NAME & NO.:	Poker Lake Unit 29-20 BS 154H
SURFACE HOLE FOOTAGE:	0537' FNL & 2544' FEL
BOTTOM HOLE FOOTAGE:	2609' FSL & 2266' 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 **1220** 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 121004

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 121004
	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