U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Well Name: POKER LAKE UNIT 28 BS Well Location: T25S / R31E / SEC 28 /

SENE / 32.101858 / -103.776667

County or Parish/State: EDDY /

**Sundry Print Report** 

NN

Well Number: 408H Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMLC062140 Unit or CA Name: POKER LAKE UNIT

Unit or CA Number:

NMNM71016X

US Well Number: Operator: XTO PERMIAN OPERATING

LLC

# **Notice of Intent**

Sundry ID: 2820288

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/31/2024

Time Sundry Submitted: 02:32

Date proposed operation will begin: 11/21/2024

**Procedure Description:** XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include KOP, FTP, LTP, BHL, and Proposed total Depth. No additional surface disturbance. FROM: KOP: 2435' FNL & 659' FEL OF SECTION 28-T25S-R31E 964' FNL & 473' FEL OF SECTION 27-T25S-R31E FTP: 2435' FNL & 330' FEL OF SECTION 28-T25S-R31E 1680' FNL & 475' FWL OF SECTION 27-T25S-R31E LTP: 100' FSL & 330' FEL OF SECTION 4-T26S-R31E 100' FSL & 1600' FWL OF SECTION 34-T25S-R31E BHL: 50' FSL & 330' FEL OF SECTION 4-T26S-R31E 50' FSL & 1600' FWL OF SECTION 34-T25S-R31E The proposed total depth is changing from 24831' MD; 11039' TVD (Bone Spring 3 Shale) to 19246' MD; 9445' TVD (Bone Spring 1 Sand). A saturated salt brine will be utilized while drilling through the salt formations.

# **NOI Attachments**

# **Procedure Description**

PLU 28 BS 408H Sundry Attachments 20241209114120.pdf

Received by OCD: Wall Walls 4-24-ANAPMUNIT 28 BS

Well Location: T25S / R31E / SEC 28 /

County or Parish/State: EDDY / SENE / 32.101858 / -103.776667

Well Number: 408H

Type of Well: OIL WELL

Allottee or Tribe Name:

Page 2 of 53

Lease Number: NMLC062140

Unit or CA Name: POKER LAKE UNIT

**Unit or CA Number:** NMNM71016X

**US Well Number:** 

Operator: XTO PERMIAN OPERATING

LLC

# **Conditions of Approval**

# Additional

Poker\_Lake\_Unit\_28\_BS\_309H\_310H\_209H\_210H\_COA\_20241216082935.pdf

# **Operator**

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

Operator Electronic Signature: TERRA SEBASTIAN Signed on: DEC 09, 2024 11:41 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Advisor

Street Address: 6401 HOLIDAY HILL ROAD SUITE 200

City: MIDLAND State: TX

Phone: (432) 999-3107

Email address: TERRA.B.SEBASTIAN@EXXONMOBIL.COM

# **Field**

Representative Name:

**Street Address:** 

City: State: Zip:

Phone:

**Email address:** 

# **BLM Point of Contact**

**BLM POC Title:** Petroleum Engineer **BLM POC Name: CHRISTOPHER WALLS** 

**BLM POC Phone:** 5752342234 BLM POC Email Address: cwalls@blm.gov

Disposition: Approved Disposition Date: 12/16/2024

Signature: Chris Walls

Page 2 of 2

Form 3160-5 (June 2019)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

DETAKTMENT OF THE INTERIOR	
BUREAU OF LAND MANAGEMENT	

BUR	EAU OF LAND MANAGEMENT	5. Lease Serial No.	IMLC062140			
Do not use this t	OTICES AND REPORTS ON W form for proposals to drill or to Use Form 3160-3 (APD) for suc	6. If Indian, Allottee or Tribe	Name			
SUBMIT IN	TRIPLICATE - Other instructions on pag	7. If Unit of CA/Agreement, Name and/or No.				
1. Type of Well  Oil Well  Gas V	Vell Other		POKER LAKE UNIT/NMNM71016X  8. Well Name and No. POKER LAKE UNIT 28 BS/408H	(		
2. Name of Operator XTO PERMIAN	OPERATING LLC		9. API Well No.			
3a. Address 6401 HOLIDAY HILL R		(include area code) 77	10. Field and Pool or Explora JENNINGS/BONE SPRING, WES			
4. Location of Well (Footage, Sec., T.,F SEC 28/T25S/R31E/NMP	R.,M., or Survey Description)		11. Country or Parish, State EDDY/NM			
12. CHE	CK THE APPROPRIATE BOX(ES) TO INI	DICATE NATURE C	)F NOTICE, REPORT OR OT	HER DATA		
TYPE OF SUBMISSION		TYPE	E OF ACTION			
✓ Notice of Intent	Acidize Deep Alter Casing Hydi	en [raulic Fracturing [	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity		
Subsequent Report		Construction and Abandon	Recomplete Temporarily Abandon	Other		
Final Abandonment Notice	Convert to Injection Plug	Back [	Water Disposal			
completion of the involved operation completed. Final Abandonment Notice is ready for final inspection.)  XTO Permian Operating, LLC. FTP, LTP, BHL, and Proposed Not additional surface disturbation of the proposed FROM:  KOP: 2435 FNL & 659 FEL OF STATE STATE STATE OF STATE STATE OF STATE STATE OF STATE S	rse.  F SECTION 28-T25S-R31E 964 FNL & 4 F SECTION 28-T25S-R31E 1680' FNL & SECTION 4-T26S-R31E 100' FSL & 16 SECTION 4-T26S-R31E 50' FSL & 1600 nanging from 24831 MD; 11039 TVD (Bo	npletion or recomplets, including reclamates, including reclamates, including changes the following changes of the follow	tion in a new interval, a Form 3 tion, have been completed and ges to the approved APD. C  ION 27-T25S-R31E  CTION 27-T25S-R31E  ION 34-T25S-R31E	the operator has detennined that the site the operator has detennined that the site th		
	true and correct. Name (Printed/Typed)	Regulatory /	Advisor			
TERRA SEBASTIAN / Ph: (432) 99	99-310 <i>1</i>	Title				
Signature (Electronic Submission	on)	Date	12/09/2	024		
	THE SPACE FOR FED	ERAL OR STA	TE OFICE USE			
Approved by  CHRISTOPHER WALLS / Ph: (578)  Conditions of approval, if any, are attack	hed. Approval of this notice does not warran	t or Title	L	<b>12/16/2024</b> Date		
certify that the applicant holds legal or e which would entitle the applicant to con	equitable title to those rights in the subject le	Office CAR	LSBAD			
Title 18 U.S.C Section 1001 and Title 4.	3 U.S.C Section 1212, make it a crime for an	ny person knowingly	and willfully to make to any de	epartment 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, 3162.3-4.

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

(Form 3160-5, page 2)

# **Additional Information**

# **Additional Remarks**

A saturated salt brine will be utilized while drilling through the salt formations.

# **Location of Well**

0. SHL: SENE / 2435 FNL / 659 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101858 / LONG: -103.776667 ( TVD: 0 feet, MD: 0 feet ) PPP: SENE / 2435 FNL / 330 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101856 / LONG: -103.775605 ( TVD: 11039 feet, MD: 11400 feet ) PPP: SENE / 1650 FNL / 318 FEL / TWSP: 25S / RANGE: 31E / SECTION: 33 / LAT: 32.09035 / LONG: -103.775637 ( TVD: 11039 feet, MD: 15900 feet ) PPP: NESE / 2648 FNL / 329 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101271 / LONG: -103.775607 ( TVD: 11039 feet, MD: 12000 feet ) PPP: NENE / 0 FNL / 318 FEL / TWSP: 25S / RANGE: 31E / SECTION: 33 / LAT: 32.093987 / LONG: -103.775627 ( TVD: 11039 feet, MD: 14600 feet ) BHL: SESE / 50 FSL / 330 FEL / TWSP: 26S / RANGE: 31E / SECTION: 4 / LAT: 32.064911 / LONG: -103.775709 ( TVD: 11039 feet, MD: 24831 feet )



# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

**OPERATOR'S NAME:** XTO

LEASE NO.: NMLC062140

**LOCATION:** Sec. 28, T.25 S, R 31 E

**COUNTY:** Eddy County, New Mexico

WELL NAME & NO.: Poker Lake Unit 28 BS 406H

**SURFACE HOLE FOOTAGE:** 2435'/N & 719'/E **BOTTOM HOLE FOOTAGE:** 50'/S & 1112'/E

WELL NAME & NO.: Poker Lake Unit 28 BS 407H

**SURFACE HOLE FOOTAGE:** 2435'/N & 689'/E **BOTTOM HOLE FOOTAGE:** 50'/S & 600'/E

WELL NAME & NO.: Poker Lake Unit 28 BS 408H

**SURFACE HOLE FOOTAGE:** 2435'/N & 659'/E **BOTTOM HOLE FOOTAGE:** 50'/S & 1600'/W

COA

H <sub>2</sub> S	0	No	С	Yes
Potash /	None	Secretary	© R-111-Q	Open Annulus
WIPP	Choose	e an option (including blan	nk option.)	□ WIPP
Cave / Karst	C Low	Medium	• High	Critical
Wellhead	Conventional	Multibowl	Both	Diverter
Cementing	Primary Squeeze	Cont. Squeeze	EchoMeter	DV Tool
Special Req	Capitan Reef	Water Disposal	COM	Unit
Waste Prev.	C Self-Certification	C Waste Min. Plan	APD Submitted p	prior to 06/10/2024
Additional	▼ Flex Hose	Casing Clearance	Pilot Hole	Break Testing
Language	Four-String	Offline Cementing	Fluid-Filled	

Changes approved through engineering via **Sundry 2820286,2820287,2820288\_** on 12-15-2024\_. Any previous COAs not addressed within the updated COAs still apply.

# 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 43 CFR 3176 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 994 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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.
- 2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.
  - a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon at 6920-6975'.
  - b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

❖ In <u>High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down Surface X Intermediate 1 annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the Surface casing to tieback requirements listed above after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

If cement does not reach surface, the next casing string must come to surface.

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.

# C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Operator has proposed a multi-bowl wellhead assembly. 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 43 CFR 3172 must be followed.

# 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. (This is not necessary for secondary recovery unit wells)

# **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone

Springs formation.

- 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 (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# **Offline Cementing**

Contact the BLM prior to the commencement of any offline cementing procedure.

# **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)

# **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM NM CFO DrillingNotifications@BLM.GOV**; (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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

# 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 Potash Areas: 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 for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. 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.
- 4. 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.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. 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.

- 7. 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.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

# **B. PRESSURE CONTROL**

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 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.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- i. 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 cement), 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).
- ii. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.

viii. 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 43 CFR 3172.

# 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.

**Approved by Zota Stevens on 12/16/2024** 575-234-5998 / zstevens@blm.gov

# **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- d. Spudding well (minimum of 24 hours)
- e. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- f. BOPE tests (minimum of 4 hours)

# **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM NM CFO DrillingNotifications@BLM.GOV**; (575) 361-2822

- 4. 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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> Rig is rigged up on well.
- 5. 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.
- 6. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

# E. 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 Potash Areas: 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 for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. 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.
- 4. 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.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. 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.
- 7. 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.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

# F. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 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.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. 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 cement), 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).
  - ii. In potash areas, 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. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

- open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 43 CFR 3172.

# G. 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.

# H. 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.

**Approved by Zota Stevens on 12/16/2024** 575-234-5998 / zstevens@blm.gov

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<u>C-102</u>			Ene	rov N			ew Mexico ral Resources Department					Revised July 9, 2024
Submit Electronic			Lite.				ATION DIVISION	•	CIII			Initial Submittal
Via OCD Permitti	ing									Submitt Type:	:al 🗵	Amended Report
												As Drilled
APD ID: 10400	0094975				WELL LO	CATION	INFORMATION					
API Number 30-015		Por	ool Code 9	97860		Pool Nam	JENNING	S;BON!	E SPRII	NG; W	EST	
Property Code	<del></del>	Pro	roperty Name	POKE	ER LAKE UN	INIT 28 BS					Well Nu	
ORGID No. 373075		Op	perator Name		PERMIAN C						408H Ground 3,337	Level Elevation
	er: State	Fee [	Tribal X	Federal			Mineral Owner: S	State   F	ee 🗌 Trib	al 💢 Fed		
						Surface	Location					
UL Secti		•	Range	Lot	Ft. from N/	I/S	Ft. from E/W	Latitude		ongitude	2007	County
H 2	28 25	S ——	31 E		· ·	35' FNL Bottom Ho	659' FEL ole Location	32.1018	58	-103.776	3667	EDDY
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N 34	34 25	s ——	31 E		50' F	SL	1,600' FWL	32.0795	.74	-103.769	9438 ———	EDDY
Dedicated Acr	res Infill or	Defin	ning Well	Definin	g Well API		Overlapping Spacing Ur	nit (Y/N)	Consolid:	ation Code		
400		finin	ŭ		,	ļ	No		U	**		
Order Number	ers. N/	A					Well setbacks are under	c Common C	Ownership:	X Yes [	] No	
					,	Kick Off	Point (KOP)					
UL Secti	Section Township Range Lot Ft. from N/S				Ft. from E/W	Latitude		ongitude		County		
D 2	27 25	S	31 E		964' I		473' FEL	32.1028	.99	-103.772	2974	EDDY
UL Secti	tion Towns	hip	Range	Lot	Ft. from N/		Point (FTP) Ft. from E/W	Latitude	I	ongitude		County
E 2			31 E			0' FNL	475' FWL	32.1039		-103.775	5985	EDDY
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UL Secti N 34			Range 31 E	Lot	Ft. from N/ 100' I		Ft. from E/W 1,600' FWL	Latitude 32.0797		ongitude. -103.769	9438	County EDDY
	a or Area of Unif MNM-071016X	orm In	nterest	Spacin	g Unit Type	Horizor	ntal   Vertical	Gro	ound Floor l	 Elevation:	3,337'	
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Signature	•		D	Date			Signature and Seal of	Professional	1 Surveyor			
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terra.b.sebastian@exxonmobil.com Email Address							TIM C. PAPPAS 2	21209	9/28/2	.024		
		nill he	a assigned to t	this comp	lation until a	Il interests	have been consolidated o	or a non-sta	mdard unit	has heen	annrovei	d by the division
<b>♦ F</b> §	3C	N(		Ph: 817	Street., Ste 2 7.349.9800 - I rm 17957   TI	Fax: 979.73		DATE: DRAWN E		9-28-2024 LM	PROJ SCAI	DJECT NO: 202304016



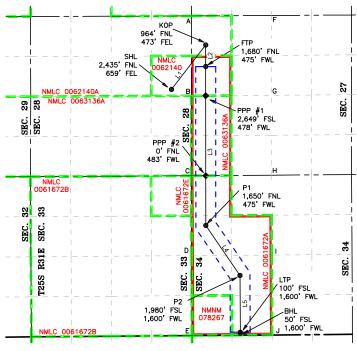
# ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is the closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

					_							
<u> </u>			NATES (I	NAD83 NME)								
A - Y =	403,674.7	Ν	A - X =	714,373.5	Е							
B-Y=	401,027.1	Z	B - X =	714,365.8	Е							
C - Y =	398,377.8	Ν	C - X =	714,362.5	Е							
D-Y=	395,732.5	Ν	D - X =	714,375.6	Е							
E-Y=	393,080.5	Ν	E-X=	714,388.8	Е							
F-Y=	403,690.4	Ν	F-X=	717,024.7	Е							
G-Y=	401,045.8	Ν	G-X=	717,021.9	Е							
H-Y=	398,397.9	Ν	H-X=	717,019.2	Е							
I-Y=	395,750.3	Ν	E-X=	717,032.3	Е							
J-Y=	393,100.7	Ν	F-X=	717,045.5	Е							
CC	CORNER COORDINATES (NAD27 NME)											
A - Y =	403,616.8	Ν	A - X =	673,187.8	Е							
B-Y=	400,969.2	Ν	B - X =	673,180.0	Е							
C-Y=	398,320.0	Ν	C - X =	673,176.6	Е							
D-Y=	395,674.8	Ν	D - X =	673,189.6	Е							
E-Y=	393,022.8	Ν	E-X=	673,202.7	Е							
F-Y=	403,632.5	Ν	F - X =	675,839.0	Е							
G-Y=	400,988.0	Ν	G-X=	675,836.1	Е							
H-Y=	398,340.1	Ν	H-X=	675,833.3	Е							
I-Y=	395,692.6	Ν	E - X =	675,846.3	Е							
J-Y=	393,043.1	Ν	F-X=	675,859.4	Е							

			NATE TAB		
	L (NAD 83 NN			TP (NAD 83 NME	
Y =	401,237.5	N	Y =	401,997.4	N
X =	713,707.4	Е	X =	714,843.6	Е
LAT. =	32.101858	°N	LAT. =	32.103931	°N
LONG. =	103.776667	°W	LONG. =	103.775985	°W
KC	OP (NAD 83 NN	IE)			
Y =	402,713.6	N			
X =	714,843.4	Е			
LAT. =	32.102899	°N			
	103.772974	°W			
	TP (NAD 83 NN	IE)		HL (NAD 83 NME	Ξ)
Y =	393,192.7	N	Y =	393,142.7	N
X =	715,988.2	E	X =	715,988.5	Е
LAT. =	32.079711	°N	LAT. =	32.079574	°N
LONG. =		°W	LONG. =		°W
	1 (NAD 83 NM			P2 (NAD 83 NME	
Y =	396,731.4	N	Y =	395,072.6	N
X =	714,845.7	E	X =	715,978.9	E
LAT. =	32.089455	°N	LAT. =	32.084879	°N
LONG. =	103.773067	°W		103.769436	°W
	HL (NAD 27 NN			TP (NAD 27 NME	
Y =	401,179.6	N	Y =	401,939.5	N
X =	672,521.6	E	X =	673,657.9	Е
LAT. =	32.101733	°N	LAT. =	32.103806	°N
LONG. =	103.776190	°W	LONG. =	103.772508	°W
	OP (NAD 27 NN				
Y =	402,655.7	Ν			
X =	673,657.7	Е			
LAT. =	32.105775	°N			
LONG. =	103.772497	°W			
	ΓP (NAD 27 NN			HL (NAD 27 NME	
Y =	393,135.0	N	Y =	393,085.0	N
X =	674,802.1	Е	X =	674,802.4	Е
LAT. =	32.079587	°N	LAT. =	32.079449	°N
LONG. =		°W	LONG. =	103.768962	°W
P	1 (NAD 27 NM		F	2 (NAD 27 NME	)
Y =	396,673.7	N	Y =	395,014.9	N
X =	673,659.8	E	X =	674,792.9	E
LAT. =	32.089331	°N	LAT. =	32.084755	°N
LONG. =		°W	LONG. =	103.768960	°W
	#1 (NAD 83 N	ME)		P #1 (NAD 27 NN	
Y =	401,030.5	N	Y =	400,972.6	N
X =	714,844.0	Е	X =	673,658.2	Е
LAT. =	32.101273	°N	LAT. =	32.101148	°N
LONG. =		°W	LONG. =	103.772523	°W
PPF	P #2 (NAD 83 N	ME)	PPI	P #2 (NAD 27 NN	IE)
Y =	398,381.4	N	Y =	398,323.6	N
X =	714,845.0	E	X =	673,659.1	E
LAT. =	32.093991	°N	LAT. =	32.093866	°N
LONG. =	103.773042	°W	LONG. =	103.772565	°W





LINE TABLE											
LINE	AZIMUTH	LENGTH									
L1	37° 34'58"	1,862.65'									
L2	179° 59'14"	716.20'									
L3	179° 58'40"	5,266.05'									
L4	145° 39'35"	2,088.87'									
L5	179° 42'56"	1,930.01'									

2821 West 7th Street, Suite 200
Fort Worth, TX 7610.7
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net
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 DATE:
 9-28-2024
 PROJECT NO:
 2023040169

 DRAWN BY:
 LM
 SCALE:
 1" = 2,500"

 CHECKED BY:
 CH
 SHEET:
 2 = 2500"

 FIELD CREW:
 IR
 REVISION:
 NO

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

XTO Energy Inc.
POKER LAKE UNIT 28 BS 408H
Projected TD: 19246.41' MD / 9445' TVD
SHL: 2435' FNL & 659' FEL , Section 28, T25S, R31E
BHL: 50' FSL & 1600' FWL , Section 34, 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	850'	Water
Top of Sa <b>l</b> t	1221'	Water
Base of Sa <b>l</b> t	4093'	Water
Delaware	4266'	Water
Brushy Canyon	6975'	Water/Oil/Gas
Bone Spring	8219'	Water
Avalon	8368'	Water/Oil/Gas
1st Bone Spring	8984'	Water/Oil/Gas
Target/Land Curve	9445'	Water/Oil/Gas

<sup>\*\*\*</sup> Hydrocarbons @ Brushy Canyon

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 @ 950' (271' 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 8851.15' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19246.41 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8551.15 feet).

# 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 950'	9.625	40	J-55	втс	New	1.63	6.63	16.58
8.75	0' - 4000'	7.625	29.7	RY P-110	F <b>l</b> ush Joint	New	4.04	2.71	2.12
8.75	4000' – 8851.15'	7.625	29.7	HC L-80	F <b>l</b> ush Joint	New	2.94	2.35	2.82
6.75	0' – 8751.15'	5.5	20	RY P-110	Freedom/Semi- Permium	New	1.05	2.71	2.40
6.75	8751.15' - 19246.41'	5.5	20	RY P-110	Ta <b>l</b> on/Semi- F <b>l</b> ush	New	1.05	2.51	2.40

<sup>•</sup> XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry

<sup>\*\*\*</sup> Groundwater depth 40' (per NM State Engineers Office).

### Wellhead:

Operator will utilize Multibowl System SEE ATTACHED

### 4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 950'

Lead: 210 sxs EconoCem-HLTRRC (mixed at 10.5 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

# Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 8851.15'

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

TOC: Brushy Canyon @ 6975

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: 790 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 (6975') 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 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, 20 New Talon/Semi-Flush, RY P-110 casing to be set at +/- 19246.41'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8551.15 feet
Tail: 730 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9051.15 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 surface casing, the blow out preventer equipment (BOP) will consist of a **5M Hydril Annular** and **a 10M Triple Ram** BOP

All BOP testing will be done by an independent service company. Operator will test as per BLM CFR43-3172

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. 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	Viscosity	Fluid Loss	Additional Comments
			(ppg)	(sec/qt)	(cc)	
0' - 950'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
950' - 8851.15'	8.75	Saturated brine for salt interval / Direct Emulsion	9.5-10	30-32	NC	Fully saturated salt across salado / salt
8851.15' - 19246.41'	6.75	ОВМ	9-9.5	50-60	NC - 20	N/A

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 surface casing with Saturated Salt. A saturated salt 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

Open hole logging will not be done on this well.

# 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 160 to 180 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.

# 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.

Well Plan Report

# Well Plan Report - Poker Lake Unit 28 BS 408H

port - Poker Lake Unit	. 19246.41 ft	9445.00 ft		New Mexico East - stem: NAD 27	401179.60 ft	672521.60 ft	3369.00 ft	3337.00 ft	ce: Grid	Angle: 0.30 Deg
9/20/24, 7:36 AM  well Plan Report	Imaging Weasured Depth:	TVD RKB:	Focation Pocation	Cartographic Reference System:	Northing:	Easting:	RKB:	Ground Level:	North Reference:	Convergence Angle:

Plan Sections	Pok	Poker Lake Unit 28 BS 408H	BS 408H						
Measured			ΔΛΙ			Build	Turn	Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	
(ft)	(Ded)	(Deg)	(#)	(ft)	(#)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft) Target	get
00:00	00:00	00.00	00.00	00.00	00.00	0.00	0.00	00:00	
1100.00	00.00	00.00	1100.00	00.00	00.00	0.00	0.00	00.00	
2153.56	21.07	37.58	2129.97	151.80	116.83	2.00	0.00	2.00	
6268.79	21.07	37.58	5970.03	1324.29	1019.21	0.00	0.00	00:00	
7322.34	00:00	00.00	7000.00	1476.10	1136.04	-2.00	0.00	2.00	
9051.15	00'0	00.00	8728.80	1476.10	1136.04	0.00	0.00	00.00	
10176.15	90.00	179.98	9445.00	759.90	1136.30	8.00	0.00	8.00 FTP 14	14
14576.15	00'06	179.98	9445.00	-3640.10	1137.89	0.00	0.00	00.00	
15791.14	90.00	155.68	9445.00	-4818.90	1392.12	-0.00	-2.00	2.00	
17391.14	00'06	155.68	9445 00	-6276.91	2051.06	00.00	0.00	00.00	
18743.78	00'06	182.73	9445.00	-7593.32	2302.04	-0.00	2.00	2.00	
19195.58	00'06	182.73	9445 00	-8044.60	2280.50	00.00	0.00	0.00 LTP 14	14
19246.41	00.06	182.73	9445.00	-8095.37	2278.08	00.00	00.00	0.00 BHL 8	8

			77		MWD+IFR1+MS																											
		Semi-minor Tool	Azimuth Used	(6)	0.000 MWI	112.264 MWI	122.711 MWI	125.469 MWI	126.713 MWI	127.419 MWI	127.873 MWI	128.190 MWI	128.423 MWI	128.602 MWI	128.744 MWI	128.859 MWI	131.347 MWI	134.925 MWI	-43.380 MWI	-42.402 MWI	-41.766 MWI	-41.317 MWI	-40.979 MWI	-40.711 MWI	-40.488 MWI	-40.292 MWI	-40.301 MWI	-40.317 MWI	-40.220 MWI	-39.981 MWI	-39.741 MWI	-39.500 MWI
		Semi-minor Se	Error	(ft)	0.000	0.220	0.627	0.986	1.344	1.701	2.059	2.417	2.775	3.133	3.491	3.849	4.214	4.582	4.942	5.300	5.658	6.016	6.376	6.739	7.105	7,475	7.674	7.848	8.234	8.630	9.028	9.429
		Semi-major	Error	(#)	00000	0.751	1.259	1.698	2.108	2.503	2.888	3.267	3.642	4.014	4.384	4.752	5.295	6.068	6.774	7.430	8.046	8.629	9.186	9.720	10.234	10.732	10.908	11.031	11.299	11.585	11.877	12.177
sport		Magnitude	of Bias	(ft)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report		=	r Bias	(ff.)	000.00	000.00	000.00	00000 9	00000 2	4 0.000	00000 9	3 0.000	00000 9	1 0.000	1 0.000	4 0.000	000000	000000	00000 9	000.0 6	1 0.000	00000 9	4 0.000	00000 2	00000 2	00000	00000	00000	4 0.000	1 0.000	4 0.000	2 0.000
>		Vertical	Error	(#)	0.000	2.300	2.310	2.325	2.347	2.374	2.406	2.443	2.485	2.531	2.581	2.634	2.690	2.750	2.815	2.889	2.971	3.066	3.174	3.297	3.437	3.595	3.650	3.695	3.804	3.921	4.044	4.172
			Bias	Œ	0.000	0000	0.000	0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.000	0.000	000'0	0.000	0000	0.000	0.000
		Latera	Error	<b>(£</b> )	0.000	0.350	0.861	1.271	1.658	2.034	2.405	2.773	3.138	3.502	3.865	4.228	4.219	4.610	4.996	5.377	5.756	6.133	6.510	6.887	7.266	7.648	7.845	8.015	8.395	8.789	9.186	9.585
	S 408H		Bias	<b>(#</b> )	0.000	0.000	0.000	0.000	0.000	00000	0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	000'0	0.000	000'0	0.000	000.0	0.000	0.000
	Poker Lake Unit 28 BS 408H	Highside	Error	(#)	0.000	00.700	1.112	1.497	1.871	2.240	2.607	2.971	3.334	3.696	4.058	4.419	5.288	6.037	6.714	7.339	7.921	8.470	8.990	9.486	9.960	10.416	10.559	10.691	10.979	11.284	11.597	11.919
	Poker Lak	TVD	RKB	( <del>#</del> )	0.000	100.000	200.000	300.000	400.000	500.000	000 009	700.000	800.000	900.000	1000.000	1100.000	1199 980	1299 838	1399.452	1498.702	1597.465	1695.623	1793.055	1889.643	1985.268	2079 816	2129.970	2173 306	2266.620	2359.933	2453.246	2546.560
			Azimuth	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	37 583	37.583	37.583	37.583	37.583	37.583	37.583	37 583	37.583	37 583	37.583	37 583	37.583	37 583	37.583	37.583
	certainty		Inclination	(6)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.000	4.000	000'9	8.000	10.000	12.000	14.000	16.000	18.000	20.000	21.071	21.071	21.071	21.071	21.071	21.071
9/20/24, 7:36 AM	Position Uncertainty	Measured	Depth	(#)	0.000	100.000	200.000	300.000	400.000	200.000	000'009	700.000	800.000	000'006	1000.000	1100.000	1200.000	1300.000	1400.000	1500.000	1600.000	1700.000	1800.000	1900.000	2000.000	2100.000	2153.558	2200.000	2300.000	2400.000	2500.000	2600.000
Z/6 Releas	ed to 1	mag	ging	: 1/2	2/202	25 1	:38:	39 1	PM																							

	-39.258 MWD+IFR1+MS	-39.013 MWD+IFR1+MS	-38.766 MWD+IFR1+MS	-38.517 MWD+IFR1+MS	-38.266 MWD+IFR1+MS	-38.011 MWD+IFR1+MS	-37.753 MWD+IFR1+MS	-37.492 MWD+IFR1+MS	-37.226 MWD+IFR1+MS	-36.957 MWD+IFR1+MS	-36.683 MWD+IFR1+MS	-36.404 MWD+IFR1+MS	-36.120 MWD+IFR1+MS	-35.830 MWD+IFR1+MS	-35.534 MWD+IFR1+MS	-35.232 MWD+IFR1+MS	-34.923 MWD+IFR1+MS	-34.607 MWD+IFR1+MS	-34.282 MWD+IFR1+MS	-33.950 MWD+IFR1+MS	-33.608 MWD+IFR1+MS	-33.257 MWD+IFR1+MS	-32.896 MWD+IFR1+MS	-32.525 MWD+IFR1+MS	-32.142 MWD+IFR1+MS	-31.747 MWD+IFR1+MS	-31.340 MWD+IFR1+MS	-30.919 MWD+IFR1+MS	-30.483 MWD+IFR1+MS	-30.033 MWD+IFR1+MS	-29.566 MWD+IFR1+MS	-29.082 MWD+IFR1+MS	-28.581 MWD+IFR1+MS
	9.832	10.236	10.642	11.050	11.458	11.868	12.279	12.691	13.103	13.517	13.931	14.345	14.761	15.176	15.592	16.009	16.426	16.843	17.261	17.679	18.097	18.516	18.934	19.353	19.773	20.192	20.611	21.031	21.451	21.871	22.291	22.711	23.131
	12.484	12.796	13.114	13 437	13.765	14 097	14.434	14.774	15.119	15.466	15.817	16.171	16.527	16.887	17 248	17 612	17 978	18.347	18.717	19.089	19.463	19.838	20.215	20.594	20.974	21 355	21 738	22.122	22.507	22.893	23.281	23.669	24.059
ort	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report	4.305 0.000	4.441 0.000	4.581 0.000	4.725 0.000	4.872 0.000	5.022 0.000	5.175 0.000	5.330 0.000	5.488 0.000	5.649 0.000	5.811 0.000	5.976 0.000	6.142 0.000	6.310 0.000	6.481 0.000	6.653 0.000	6.826 0.000	7.002 0.000	7.179 0.000	7.357 0.000	7.537 0.000	7.719 0.000	7.902 0.000	8.086 0.000	8.272 0.000	8.460 0.000	8.648 0.000	8.839 0.000	9.030 0.000	9.223 0.000	9.418 0.000	9.614 0.000	9.811 0.000
	0.000	0.000	0.000	000'0	0.000	000'0	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0000	0.000	0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0000	0.000	0000	0.000
	9.986	10.390	10.795	11.201	11.609	12.018	12.428	12.839	13.252	13.664	14.078	14.492	14.907	15.323	15.739	16.155	16.572	16.990	17.407	17.825	18.244	18.663	19.082	19.501	19.921	20.341	20.761	21.181	21.601	22.022	22.443	22.864	23.285
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	12.248	12.584	12.926	13.274	13.627	13.985	14.347	14.714	15.085	15.459	15.837	16.218	16.601	16.988	17.377	17 768	18 162	18.557	18.955	19.354	19.756	20.158	20.563	20.968	21.375	21.784	22.193	22.604	23.016	23.429	23.842	24.257	24.673
	37.583 2639.873	37.583 2733.187	37.583 2826.500	37.583 2919.814	37.583 3013.127	37.583 3106.441	37.583 3199.754	37.583 3293.068	37.583 3386.381	37.583 3479.694	37.583 3573.008	37.583 3666.321	37.583 3759.635	37.583 3852.948	37.583 3946.262	37.583 4039.575	37.583 4132.889	37.583 4226.202	37.583 4319.516	37.583 4412.829	37.583 4506.143	37.583 4599.456	37.583 4692.769	37.583 4786.083	37.583 4879.396	37.583 4972.710	37.583 5066.023	37 583 5159 337	37.583 5252.650	37.583 5345.964	37.583 5439.277	37.583 5532.591	37.583 5625.904
	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071	21.071
9/20/24, 7:36 AM	2700.000	2800.000	2900.000	3000.000	3100.000	3200.000	3300.000	3400.000	3500.000	3600.000	3700.000	3800.000	3900,000	4000.000	4100.000	4200.000	4300.000	4400.000	4500.000	4600.000	4700.000	4800.000	4900.000	2000.000	5100.000	5200.000	5300.000	5400.000	5500.000	2600.000	5700.000	5800.000	2900.000
	leas	ed to	o Im	agii	ng:	1/2/2	2025	<b>5 1:</b> 3	38:3	9 <b>P</b> A	И																						

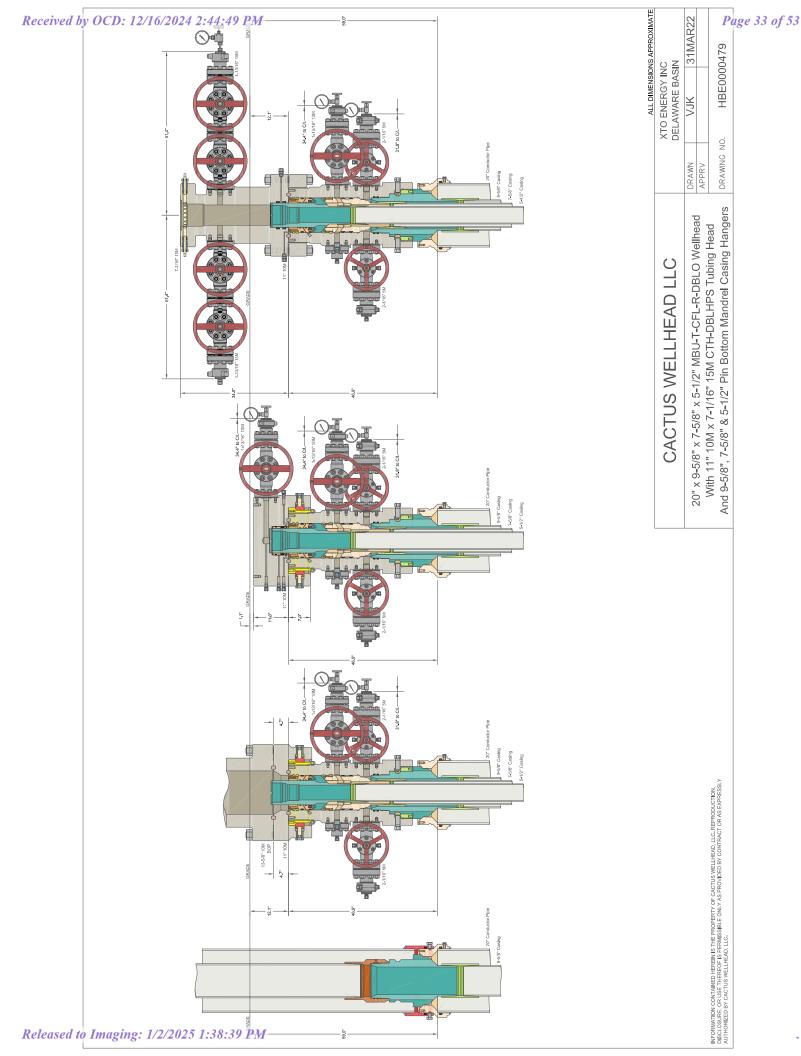
	-28.060 MWD+IFR1+MS	-27.519 MWD+IFR1+MS	-26.956 MWD+IFR1+MS	-26.672 MWD+IFR1+MS	-26.584 MWD+IFR1+MS	-26.923 MWD+IFR1+MS	-27.986 MWD+IFR1+MS	-28.976 MWD+IFR1+MS	-29.877 MWD+IFR1+MS	-30.684 MWD+IFR1+MS	-31.394 MWD+IFR1+MS	-32.011 MWD+IFR1+MS	-32.539 MWD+IFR1+MS	-32.983 MWD+IFR1+MS	-33.348 MWD+IFR1+MS	-33.363 MWD+IFR1+MS	-33.423 MWD+IFR1+MS	-33.508 MWD+IFR1+MS	-33.614 MWD+IFR1+MS	-33.719 MWD+IFR1+MS	-33.826 MWD+IFR1+MS	-33.932 MWD+IFR1+MS	-34.038 MWD+IFR1+MS	-34.145 MWD+IFR1+MS	-34.252 MWD+IFR1+MS	-34.359 MWD+IFR1+MS	-34.467 MWD+IFR1+MS	-34.574 MWD+IFR1+MS	-34.682 MWD+IFR1+MS	-34.790 MWD+IFR1+MS	-34.898 MWD+IFR1+MS	-35.006 MWD+IFR1+MS	-35.115 MWD+IFR1+MS
	23.551	23.971	24.392	24.680	24.810	25.223	25.628	26.023	26.408	26.781	27.143	27.494	27.833	28.161	28.478	28.547	28.789	29.100	29.413	29.726	30.041	30.357	30.673	30.990	31.309	31.628	31.948	32.269	32.590	32.912	33.236	33,559	33.884
	24.449	24.840	25.233	25.499	25.618	26.037	26.506	26.968	27.423	27.869	28.305	28.731	29.145	29.548	29.937	30.003	30.225	30.518	30.815	31.113	31.412	31.713	32.015	32.318	32.622	32,927	33.233	33.541	33.849	34.158	34.469	34.780	35.092
ort	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report	10.010 0.000	10.210 0.000	10.411 0.000	10.550 0.000	10.613 0.000	10.821 0.000	11.031 0.000	11.227 0.000	11.408 0.000	11.576 0.000	11.734 0.000	11.881 0.000	12.021 0.000	12.153 0.000	12.280 0.000	12.308 0.000	12.404 0.000	12.531 0.000	12.661 0.000	12.795 0.000	12.931 0.000	13.070 0.000	13.213 0.000	13.359 0.000	13.508 0.000	13.660 0.000	13.816 0.000	13.975 0.000	14.137 0.000	14.302 0.000	14.471 0.000	14.643 0.000	14.819 0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0000	0.000
	23.706	24.128	24.549	24.837	24.966	25.376	25.781	26.175	26.559	26.933	27.296	27.647	27.988	28.318	28.637	29.570	29.796	30.093	30.392	30.692	30.994	31.297	31.600	31.905	32.212	32.519	32.827	33.136	33.447	33.758	34.070	34.383	34.697
	0.000	0.000	0.000	0.000	0.000	000.0	0.000	0000	0.000	000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0000	0.000	0.000	0.000	0.000	0.000
	25.089	25 506	25.924	26.210	26.359	26.854	27 364	27.831	28.253	28.630	28 963	29.250	29.492	29.689	29.842	28.995	29.232	29.539	29.849	30 160	30.472	30.786	31.100	31.415	31.731	32.047	32 365	32.684	33 003	33.323	33.644	33 966	34.288
	37.583 5719.217	37.583 5812.531	37.583 5905.844	37.583 5970.030	37.583 5999.218	37.583 6093.509	37.583 6188.903	37.583 6285.286	37.583 6382.540	37.583 6480.546	37.583 6579.185	37.583 6678.336	37.583 6777.880	37.583 6877.694	37.583 6977.657	0.000 7000.000	0.000 7077.656	0.000 7177.656	0.000 7277.656	0.000 7377.656	0.000 7477.656	0.000 7577.656	0.000 7677.656	0.000 7777.656	0.000 7877.656	0.000 7977.656	0.000 8077.656	0.000 8177.656	0.000 8277.656	0.000 8377.656	0.000 8477.656	0.000 8577.656	0.000 8677.656
	21.071	21.071	21.071	21.071	20.447	18.447	16.447	14,447	12.447	10.447	8.447	6.447	4,447	2.447	0.447	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9/20/24, 7:36 AM	000.0009	6100.000	6200.000	6268.785	0300.000	6400.000	6500.000	000.0099	6700.000	000'0089	000.0069	7000.0007	7100.000	7200.000	7300.000	7322.344	7400.000	7500.000	7600.000	7700.000	7800.000	7900.000	8000.000	8100.000	8200.000	8300,000	8400.000	8500,000	8600.000	8700.000	8800.000	8900.000	000'0006
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	-35.140 MWD+IFR1+MS	-35.396 MWD+IFR1+MS	128.815 MWD+IFR1+MS	111.876 MWD+IFR1+MS	105.627 MWD+IFR1+MS	102.896 MWD+IFR1+MS	101.580 MWD+IFR1+MS	100.994 MWD+IFR1+MS	100.862 MWD+IFR1+MS	101.045 MWD+IFR1+MS	101.444 MWD+IFR1+MS	101.962 MWD+IFR1+MS	102.346 MWD+IFR1+MS	102.460 MWD+IFR1+MS	102.966 MWD+IFR1+MS	103.501 MWD+IFR1+MS	104.060 MWD+IFR1+MS	104.646 MWD+IFR1+MS	105.263 MWD+IFR1+MS	105.914 MWD+IFR1+MS	106.602 MWD+IFR1+MS	107.332 MWD+IFR1+MS	108.106 MWD+IFR1+MS	108.930 MWD+IFR1+MS	109.808 MWD+IFR1+MS	110.744 MWD+IFR1+MS	111.743 MWD+IFR1+MS	112.811 MWD+IFR1+MS	113.951 MWD+IFR1+MS	115.169 MWD+IFR1+MS	116.468 MWD+IFR1+MS	117.853 MWD+IFR1+MS	119.325 MWD+IFR1+MS
	34.050	34.209	34.792	35.245	35.517	35.715	35.865	35.972	36.041	36.073	36.071	36.037	35.989	35.971	35.908	35.863	35.832	35.815	35.812	35.824	35.848	35.886	35.937	36.001	36.076	36.163	36.260	36.368	36.485	36.610	36.743	36.882	37.027
	35.248	35.392	35.985	37.073	38 124	39.013	39 716	40.233	40.582	40.788	40.887	40 922	40.934	40.939	40.959	40.981	41.005	41.031	41.060	41.091	41.126	41.163	41.204	41.249	41.297	41.350	41.408	41.472	41.541	41.617	41.701	41.792	41.893
ort	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report	14.910 0.000	14.996 0.000	15.205 0.000	15.576 0.000	16.179 0.000	17.065 0.000	18.241 0.000	19.678 0.000	21.323 0.000	23.109 0.000	24.969 0.000	26.836 0.000	27.745 0.000	27.822 0.000	28.102 0.000	28.405 0.000	28.727 0.000	29.066 0.000	29.422 0.000	29.794 0.000	30.182 0.000	30.586 0.000	31.004 0.000	31.436 0.000	31.882 0.000	32.340 0.000	32.811 0.000	33.294 0.000	33.788 0.000	34.293 0.000	34.808 0.000	35.333 0.000	35.868 0.000
	0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	34.856	35.000	35.266	35.505	35.713	35.887	36.028	36.137	36.213	36.258	36.273	36.261	36.231	36.218	36.180	36.161	36.159	36.172	36.202	36.247	36.309	36.387	36.480	36.590	36.714	36,855	37.010	37.181	37.366	37.567	37.781	38.010	38.252
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	34.451	34.156	33.787	33.481	32.744	31.677	30.413	29.117	27.980	27.208	26.985	27 428	27.745	27.822	28.102	28.405	28.727	29.066	29.422	29.794	30.182	30.586	31.004	31.436	31.882	32.340	32.811	33.294	33.788	34 293	34.808	35,333	35.868
	8728.803	8777.619	8876.587	8972.679	9064 024	9148.845	9225 490	9292.467	9348.474	9392.419	9423 448	9440 956	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445 000	9445.000	9445,000	9445.000
	0.000	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179.979	179 979
	0.000	3.908	11.908	19.908	27 908	35.908	43 908	51.908	59.908	67.908	75 908	83 908	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	000.06	90.000	90.000	90.000	90.000	90.000	000.06	90.000	000 06	90.000	000'06	90.000
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	-16.880 MWD+IFR1+MS	-16.769 MWD+IFR1+MS	-16.724 MWD+IFR1+MS	-16.738 MWD+IFR1+MS	-16.795 MWD+IFR1+MS	-16.798 MWD+IFR1+MS	-16.870 MWD+IFR1+MS	-16.944 MWD+IFR1+MS	-17.019 MWD+IFR1+MS	-17.094 MWD+IFR1+MS	-17.169 MWD+IFR1+MS	-17.244 MWD+IFR1+MS	-17.319 MWD+IFR1+MS	-17.393 MWD+IFR1+MS	-17.467 MWD+IFR1+MS	-17.540 MWD+IFR1+MS	-17.613 MWD+IFR1+MS	-17.685 MWD+IFR1+MS	-17.756 MWD+IFR1+MS	-17.826 MWD+IFR1+MS	-17.896 MWD+IFR1+MS	-17.958 MWD+IFR1+MS	-17.964 MWD+IFR1+MS	-18.015 MWD+IFR1+MS	-18.038 MWD+IFR1+MS	-18.026 MWD+IFR1+MS	-17.980 MWD+IFR1+MS	-17.904 MWD+IFR1+MS	-17.798 MWD+IFR1+MS	-17.666 MWD+IFR1+MS	-17.509 MWD+IFR1+MS	-17.329 MWD+IFR1+MS	-17.128 MWD+IFR1+MS
	40.183	40.208	40.232	40.254	40.273	40.274	40.295	40.316	40.339	40.361	40.385	40.409	40.434	40.460	40.486	40.513	40.541	40.570	40.599	40.628	40.659	40.687	40.690	40.722	40.757	40.794	40.832	40.872	40.915	40.960	41.008	41.058	41.110
	53.571	54.180	54.794	55.414	55.976	56.027	56.611	57.204	57.803	58.410	59.023	59.642	60.267	868.09	61.535	62.177	62.825	63.478	64.136	64.799	65.467	620.99	66.138	66.824	67.540	68.255	68.970	69.681	70.388	71.090	71.785	72.472	73.150
ort	0.000	0.000	0.000	000'0	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000
Well Plan Report	56.862 0.000	57.561 0.000	58.262 0.000	58.965 0.000	59.607 0.000	29.669 0.000	60.374 0.000	61.083 0.000	61.794 0.000	62.506 0.000	63.221 0.000	63.937 0.000	64.654 0.000	65.373 0.000	66.094 0.000	66.816 0.000	67.539 0.000	68.264 0.000	000'0 066'89	69.717 0.000	70.446 0.000	71.111 0.000	71.175 0.000	71.904 0.000	72.636 0.000	73.370 0.000	74.104 0.000	74.839 0.000	75.575 0.000	76.312 0.000	77.051 0.000	000'0 062'22	78.530 0.000
	53.571 -0.000	54.169 -0.000	54.740 -0.000	55.282 -0.000	55.744 -0.000	55.795 -0.000	56.376 -0.000	26.966 -0.000	57.563 -0.000	58.168 -0.000	58.779 -0.000	59.397 -0.000	60.020 -0.000	000'0- 059'09	61.286 -0.000	61.928 -0.000	62.575 -0.000	63.227 -0.000	63.885 -0.000	64.547 -0.000	65.215 -0.000	65.827 -0.000	000.0- 006.59	66.715 -0.000	67.511 -0.000	68.255 -0.000	68.947 -0.000	69.583 -0.000	70.162 -0.000	70.682 -0.000	71.141 -0.000	71.540 -0.000	71.875 -0.000
	56.862 0.000	57.561 0.000	58.262 0.000	58.965 0.000	59.607 0.000	29.669 0.000	60.374 0.000	61.083 0.000	61.794 0.000	62.506 0.000	63.221 0.000	63.937 0.000	64.654 0.000	65.373 0.000	66.094 0.000	66.816 0.000	67.539 0.000	68.264 0.000	000.0 066.89	69.717 0.000	70.446 0.000	71.111 0.000	71.175 0.000	71.904 0.000	72.636 0.000	73.370 0.000	74.104 0.000	74.839 0.000	75.575 0.000	76.312 0.000	77.051 0.000	000'0 062'22	78.530 0.000
	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000 (	9445.000 (	9445.000 (	9445.000	9445.000	9445.000	9445.000	9445.000 (	9445.000 (	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000	9445.000
	163.502	161.502	159.502	157.502	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.680	155.857	157.857	159.857	161.857	163.857	165.857	167.857	169.857	171.857	173.857	175.857
	90.000	90.000	90.000	000'06	90.000	000'06	90.000	000'06	90.000	000'06	000'06	000'06	90.000	90.000	90.000	000'06	90.000	90.000	000.06	90.000	90.000	90.000	90.000	90.000	90.000	000'06	90.000	000'06	90.000	000'06	90.000	000'06	90.000
9/20/24, 7:36 AM	15400.000	15500.000	15600.000	15700.000	15791.139	15800.000	15900.000	16000.000	16100.000	16200.000	16300.000	16400.000	16500.000	16600.000	16700.000	16800.000	16900.000	17000.000	17100.000	17200.000	17300.000	17391.140	17400.000	17500.000	17600.000	17700.000	17800.000	17900.000	18000.000	18100.000	18200.000	18300.000	18400.000
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n Re	9/20/24, 7:36 AM								Wel	Well Plan Report					
leas	18500.000	90.000	177.857	9445.000	79.270	0.000	72.147 -0.000	-0.000	79.270 0.000	0.000	0.000	73.818	41.165	-16.908 MWD+IFR1+MS	-R1+MS
ed to	18600.000	90.000	179.857	9445.000	80.012	0000	72.356 -	-0.000	80.012	0.000	0.000	74.476	41.224	-16.669 MWD+IFR1+MS	-R1+MS
o In	18700.000	90.000	181.857	9445.000	80.755	0000-0	72.500	0.000	80.755	0.000	0.000	75.123	41.284	-16.414 MWD+IFR1+MS	-R1+MS
agi	18743.785	90.000	182.732	9445,000	81.079 -0.000		72.530	0.000	81.079	0.000	0.000	75.391	41.309	-16.306 MWD+IFR1+MS	-R1+MS
ng:	18800.000	90.000	182.732	9445.000	81.496	-0.000	72.888	0.000	81.496	0.000	0.000	75.731	41.341	-16.168 MWD+IFR1+MS	R1+MS
1/2/.	18900.000	90.000	182.732	9445,000	82.239	0000	73.529	0.000	82.239	0.000	0.000	76.338	41.399	-15.924 MWD+IFR1+MS	-R1+MS
2025	19000.000	90.000	182.732	9445.000	82.984	-0.000	74.173	0.000	82.984	0.000	0.000	76.949	41.458	-15.686 MWD+IFR1+MS	R1+MS
5 1:3	19100.000	90.000	182.732	9445,000	83.730 -0.000	_	74.819	0.000	83.730	0.000	0.000	77.563	41.516	-15.454 MWD+IFR1+MS	-R1+MS
38:3	19195.580	90.000	182.732	9445.000	84.443 -0.000		75.438	0.000	84.443	0.000	0.000	78.152	41.572	-15.237 MWD+IFR1+MS	R1+MS
9 P	19200.000	000'06	182.732	9445.000	84.476	-0.000	75.467	0.000	84.476	0.000	0.000	78.179	41.575	-15.227 MWD+IFR1+MS	R1+MS
М	19246.410	90.000		182.732 9445.000	84.821 -0.000		75.767	0.000	84.821	0.000	0.000	78.465	41.602	-15.124 MWD+IFR1+MS	-R1+MS
	Plan Targets			Poker Lake Unit 28 BS 408H	nit 28 BS 4(	)8H									
				Ž	Measured Depth	pth		Grid	<b>Grid Northing</b>	_	Grid Easting	ting	TVD MSL	TVD MSL Target Shape	
	Target Name					(£)			(#)	_		(#)	(ft)		
	FTP 14				10176.11	3.11		4	401939.50		673657.90	7.90	6076.00 CIRCLE	CIRCLE	
	408H PP1				35513.89	3.89		ന	396673.70		673659.80	08.6	6076.00	CIRCLE	
	408H PP2				17638.32	3.32		ന	395014.90		674792.90	12.90	6076.00	CIRCLE	
	BHL 8				19245.59	5.59		ന	393085.00		674802.40	2.40	6076.00	CIRCLE	
	LTP 14				19195.58	5.58		ന	393135.00		674802.10	2.10	6076.00	CIRCLE	



Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

XTO Energy requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

# **Background**

Onshore Oil and Gas Order CFR Title 43 Part 3170, Drilling Operations, Sections III.A.2.i.iv.B states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. CFR Title 43 Part 3170 states, "Some situation may exist either on a well-by- well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this order. This situation can be resolved by requesting a variance...". XTO Energy feels the break testing the BOPE is such a situation. Therefore, as per CFR Title 43 Part 3170, XTO Energy submits this request for the variance.

# **Supporting Documentation**

CFR Title 43 Part 3170 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time there have been significant changes in drilling technology. BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since CFR Title 43 Part 3170 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.



Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. CFR Title 43 Part 3170recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

Tal	ole C.4—Initial Pressure Te	esting, Surface BOP Stacks	
	Pressure Test—Low	Pressure Test-	-High Pressureac
Component to be Pressure Tested	Pressure <sup>ac</sup> psig (MPa)	Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer <sup>b</sup>	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers <sup>bd</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokese	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokese	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or M whichever is lower	MASP for the well program,
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	
b Annular(s) and VBR(s) shall be pre	during the evaluation period. The passure tested on the largest and sm	pressure shall not decrease below the allest OD drill pipe to be used in well	program.
	from one wellhead to another within when the integrity of a pressure se	n the 21 days, pressure testing is req al is broken.	uired for pressure-containing an
For surface offshore operations, the	ne ram BOPs shall be pressure tes land operations, the ram BOPs sha	ted with the ram locks engaged and all be pressure tested with the ram lo	

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 Oand often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after

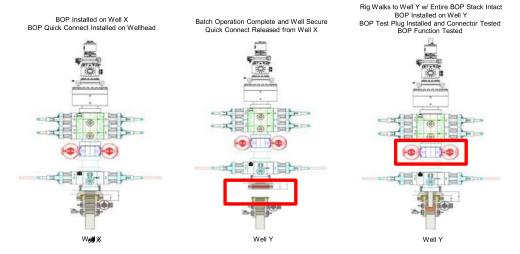
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

# **Procedures**

- XTO Energy will use this document for our break testing plan for New Mexico Delaware basin.
  The summary below will be referenced in the APD or Sundry Notice and receive approval prior
  to implementing this variance.
- 2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
  - a. A full BOP test will be conducted on the first well on the pad.
  - b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
    - i. Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
    - ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
  - c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
  - d. A full BOP test will be required prior to drilling any production hole.
- 3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
  - a. Between the HCV valve and choke line connection
  - b. Between the BOP quick connect and the wellhead
- 4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
- 5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
- 6. The connections mentioned in 3a and 3b will then be reconnected.
- 7. Install test plug into the wellhead using test joint or drill pipe.
- 8. A shell test is performed against the upper pipe rams testing the two breaks.
- 9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
- 10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

- 11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
- 12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



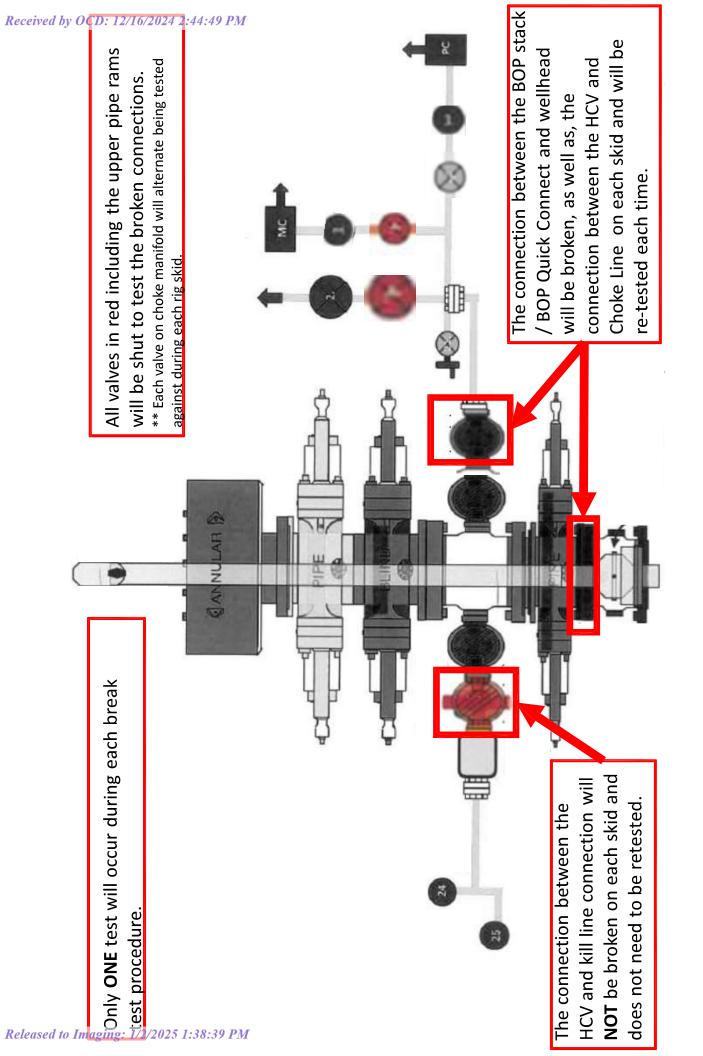
### **Summary**

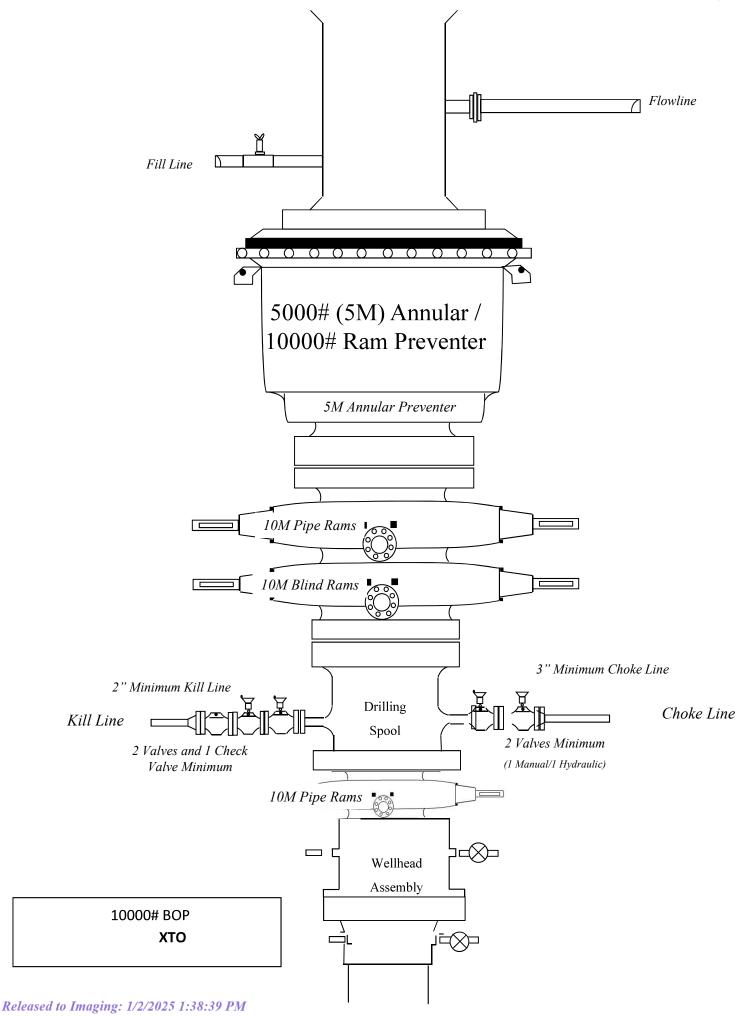
A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, 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. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
- 3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
- 4. Full BOP test will be required prior to drilling the production hole.





# **U. S. Steel Tubular Products** 5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®

MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ $^{\circledR}$	
Minimum Yield Strength	110,000		psi
Maximum Yield Strength	125,000		psi
Minimum Tensile Strength	125,000		psi
IMENSIONS	Pipe	USS-FREEDOM HTQ <sup>®</sup>	
Outside Diameter	5.500	6.300	in.
Wall Thickness	0.361		in.
Inside Diameter	4.778	4.778	in.
Standard Drift	4.653	4.653	in.
Alternate Drift			in.
Nominal Linear Weight, T&C	20.00		lb/ft
Plain End Weight	19.83		lb/ft
ECTION AREA	Pipe	USS-FREEDOM HTQ <sup>®</sup>	
Critical Area	5.828	5.828	sq. in.
Joint Efficiency		100.0	%
ERFORMANCE	Pipe	USS-FREEDOM HTQ <sup>®</sup>	
Minimum Collapse Pressure	11,100	11,100	psi
Minimum Internal Yield Pressure	12,640	12,640	psi
Minimum Pipe Body Yield Strength	641,000		lb
Joint Strength		641,000	lb
Compression Rating		641,000	<b>l</b> b
Reference Length [4]		21,370	ft
Maximum Uniaxial Bend Rating [2]		91.7	deg/100 ft
IAKE-UP DATA	Pipe	USS-FREEDOM HTQ <sup>®</sup>	
Make-Up Loss		4.13	in.
Minimum Make-Up Torque [3]		15,000	ft-lb
			6. 11
Maximum Make-Up Torque [3]		21,000	ft-lb

# **Notes**

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- 3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- 4. Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

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> U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380

1-877-893-9461 connections@uss.com www.usstubular.com

#### **XTO Permian Operating, LLC Offline Cementing Variance Request**

XTO requests the option to cement the surface and intermediate casing strings offline as a prudent batch drilling efficiency of acreage development.

# 1. Cement Program

No changes to the cement program will take place for offline cementing.

# 2. Offline Cementing Procedure

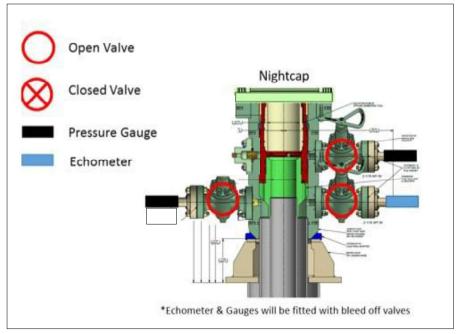
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

- 1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
- 2. Land casing with mandrel
- 3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
- 4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi.
- 5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
  - a. If any barrier fails to test, the BOP stack will not be nippled down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50-psi compressive strength if kill weight fluid cannot be verified.



Annular packoff with both external and internal seals

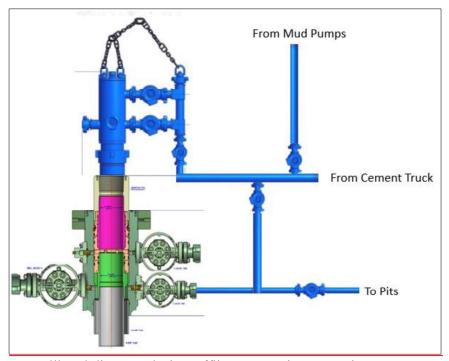
#### XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
  - a. Well Control Plan
    - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
    - ii. Rig pumps or a 3<sup>rd</sup> party pump will be tied into the upper casing valve to pump down the casing ID
    - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
    - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
    - v. Well will be confirmed static
    - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
- 8. Install offline cement tool
- 9. Rig up cement equipment

## XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

- 10. Circulate bottoms up with cement truck
  - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
  - b. Max anticipated time before circulating with cement truck is 6 hrs
- 11. Perform cement job taking returns from the annulus wellhead valve
- 12. Confirm well is static and floats are holding after cement job
- 13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

XTO respectfully requests approval to utilize a spudder rig to pre-set surface casing.

# Description of Operations:

- Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
  - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
  - The spudder rig will utilize fresh water-based mud to drill the surface hole to TD.
     Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
- 2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
- 3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
  - a. A means for intervention will be maintained while the drilling rig is not over the well.
- 4. Spudder rig operations are expected to take 2-3 days per well on the pad.
- 5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled up and tested on the wellhead before drilling operations resume on each well.
  - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
  - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
- 7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
- 8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.



# U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall

# 5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-TALON HTQ™ RD

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000		psi	-
Maximum Yield Strength	125,000		psi	-
Minimum Tensile Strength	125,000		psi	-
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		
Outside Diameter	5.500	5.900	in.	-
Wall Thickness	0.361		in.	-
Inside Diameter	4.778	4.778	in.	-
Standard Drift	4.653	4.653	in.	_
Alternate Drift			in.	_
Nominal Linear Weight, T&C	20.00		lb/ft	_
Plain End Weight	19.83		lb/ft	_
SECTION AREA	Pipe	USS-TALON HTQ™ RD		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lb	
Joint Strength		641,000	<b>l</b> b	
Compression Rating		641,000	lb	
Reference Length		21,370	ft	[5]
Maximum Uniaxial Bend Rating		91.7	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		
Make-Up Loss		5.58	in.	
Minimum Make-Up Torque		17,000	ft-Ib	[4]
Maximum Make-Up Torque		20,000	ft-Ib	[4]
Maximum Operating Torque		39,500	ft-lb	[4]

#### **Notes**

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- 3. Uniaxial bend rating shown is structural only.
- 4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- 5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- 6. Coupling must meet minimum mechanical properties of the pipe.

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NEW CHOKE HOSE

INSTRUED 02-10-2024

# CERTIFICATE OF CONFORMANCE

This is to verify that the items detailed below meet the requirements of the Customer's Purchase Order referenced herein, and are in Conformance with applicable specifications, and that Records of Required Tests are on file and subject to examination. The following items were inspected and hydrostatically tested at **Gates Engineering & Services North America** facilities in Houston, TX, USA.

CII	TZ	ON	1FR	
CU	-23	CIA	IFU	

NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA

CUSTOMER P.O.#:

15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)

CUSTOMER P/N:

IMR RETEST SN 74621 ASSET #66-1531

PART DESCRIPTION:

RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K

FLANGES

SALES ORDER #:

529480

QUANTITY:

1

SERIAL #:

74621 H3-012524-1

SIGNATURE: 7: OUSTANDE

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

# H3-15/16





# **TEST REPORT**

CUSTOMER

Company:

Nabors Industries Inc.

**TEST OBJECT** 

Serial number: H3-012524-1

Lot number:

Production description: 74621/66-1531 Sales order #:

529480

Customer reference: FG1213 Description:

74621/66-1531

Hose ID:

Part number:

3" 16C CK

**TEST INFORMATION** 

Test pressure hold:

Work pressure hold:

Length difference:

Length difference:

Test procedure: Test pressure:

Work pressure:

GTS-04-053 15000.00

psi

sec psi

10000.00

900.00

0.00

0.00

3600.00

sec

% inch Fitting 1:

Part number:

Description:

Fitting 2:

Part number:

Description:

3.0 x 4-1/16 10K

3.0 x 4-1/16 10K

Visual check:

Pressure test result:

PASS

Length measurement result:

Length:

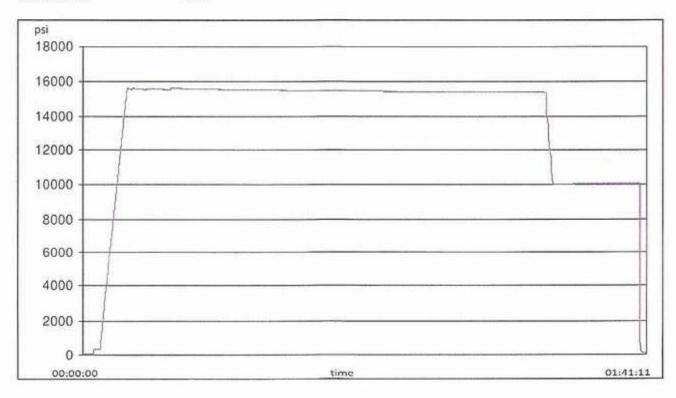
45

feet

D. -- - 17

Test operator:

Travis





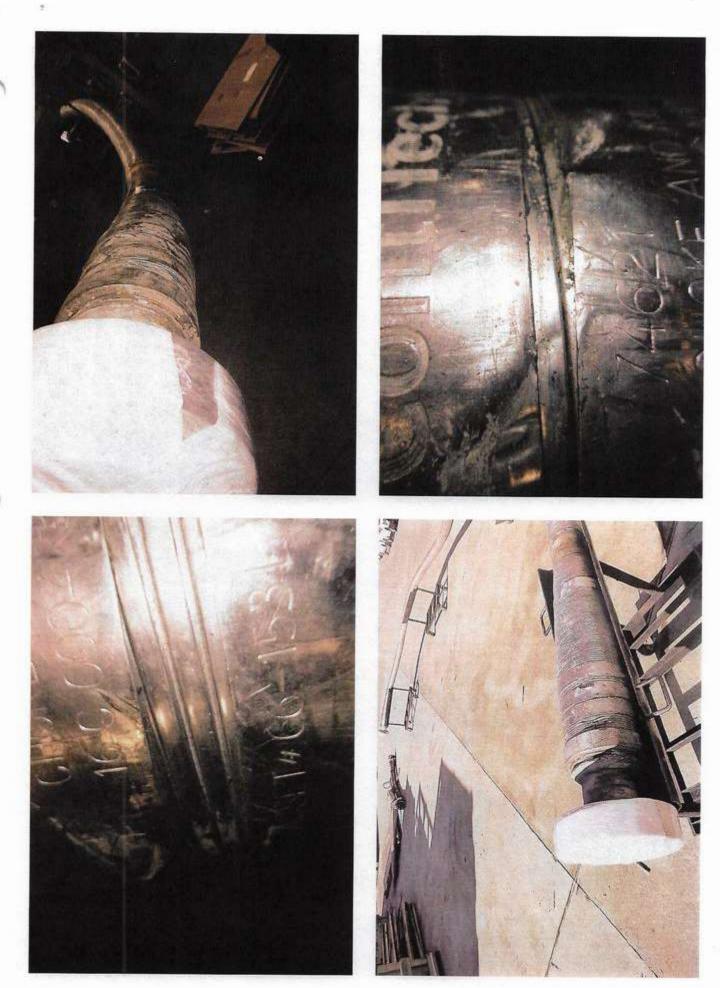
# H3-15/16

1/25/2024 11:48:06 AM

# **TEST REPORT**

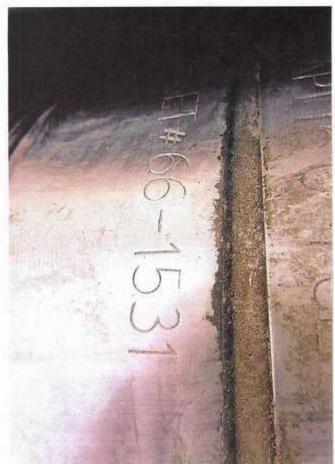
# **GAUGE TRACEABILITY**

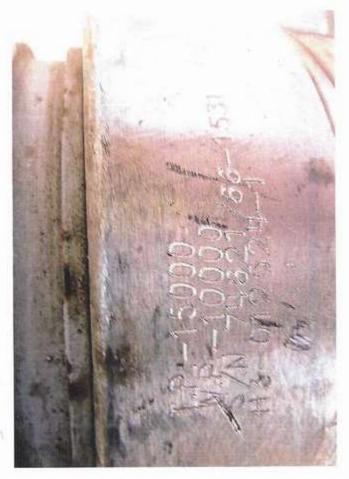
Serial number	Calibration date	Calibration due date
110D3PHO	2023-06-06	2024-06-06
110IQWDG	2023-05-16	2024-05-16
	110D3PHO	110D3PHO 2023-06-06



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Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

# State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Action 412478

#### **CONDITIONS**

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	412478
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By		Condition Date
dmcclur	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	1/2/2025