

<b>Well Name:</b> POKER LAKE UNIT 28 BS	<b>Well Location:</b> T25S / R31E / SEC 28 / SENE / 32.101858 / -103.776861	<b>County or Parish/State:</b> EDDY / NM
<b>Well Number:</b> 406H	<b>Type of Well:</b> OIL WELL	<b>Allottee or Tribe Name:</b>
<b>Lease Number:</b> NMLC062140	<b>Unit or CA Name:</b> POKER LAKE UNIT	<b>Unit or CA Number:</b> NMNM71016X
<b>US Well Number:</b>	<b>Operator:</b> XTO PERMIAN OPERATING LLC	

### Notice of Intent

**Sundry ID:** 2820286

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 10/31/2024

**Time Sundry Submitted:** 02:26

**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 SHL, KOP, FTP, LTP, BHL, and Proposed total Depth. No additional surface disturbance. FROM: TO: SHL: 2435' FNL & 719' FEL OF SECTION 28-T25S-R31E 2435' FNL & 719' FEL OF SECTION 28-T25S-R31E KOP: 2435' FNL & 719' FEL OF SECTION 28-T25S-R31E 2033' FNL & 1127' FEL OF SECTION 28-T25S-R31E FTP: 2435' FNL & 1210' FEL OF SECTION 28-T25S-R31E 2551' FSL & 1123' FEL OF SECTION 28-T25S-R31E LTP: 100' FSL & 1210' FEL OF SECTION 4-T26S-R31E 100' FSL & 1112' FEL OF SECTION 4-T26S-R31E BHL: 50' FSL & 1210' FEL OF SECTION 4-T26S-R31E 50' FSL & 1112' FEL OF SECTION 4-T26S-R31E The proposed total depth is changing from 24843' MD; 11039' TVD (Bone Spring 3 Shale) to 23778' MD; 10210' TVD (Bone Spring 2 Sand). A saturated salt brine will be utilized while drilling through the salt formations.

### NOI Attachments

#### Procedure Description

PLU\_28\_BS\_\_\_406H\_Sundry\_Attachments\_20241209113257.pdf

Well Name: POKER LAKE UNIT 28 BS    **Well Location:** T25S / R31E / SEC 28 / SENE / 32.101858 / -103.776861    **County or Parish/State:** EDDY / NM

**Well Number:** 406H    **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

### Conditions of Approval

#### Additional

Poker\_Lake\_Unit\_28\_BS\_309H\_310H\_209H\_210H\_COA\_20241216083554.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 11:33 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 Name:** CHRISTOPHER WALLS

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234

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

**Disposition:** Approved

**Disposition Date:** 12/16/2024

**Signature:** Chris Walls

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No. NMLC062140
		6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No. POKER LAKE UNIT/NMNM71016X
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	8. Well Name and No. POKER LAKE UNIT 28 BS/406H	
2. Name of Operator XTO PERMIAN OPERATING LLC	9. API Well No.	
3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,	3b. Phone No. (include area code) (432) 683-2277	10. Field and Pool or Exploratory Area JENNINGS/BONE SPRING, WEST
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 28/T25S/R31E/NMP		11. Country or Parish, State EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, KOP, FTP, LTP, BHL, and Proposed total Depth.  
No additional surface disturbance.

FROM: TO:  
SHL: 2435' FNL & 719' FEL OF SECTION 28-T25S-R31E 2435 FNL & 719 FEL OF SECTION 28-T25S-R31E  
KOP: 2435' FNL & 719' FEL OF SECTION 28-T25S-R31E 2033 FNL & 1127 FEL OF SECTION 28-T25S-R31E  
FTP: 2435' FNL & 1210' FEL OF SECTION 28-T25S-R31E 2551' FSL & 1123' FEL OF SECTION 28-T25S-R31E  
LTP: 100' FSL & 1210' FEL OF SECTION 4-T26S-R31E 100' FSL & 1112' FEL OF SECTION 4-T26S-R31E  
BHL: 50' FSL & 1210' FEL OF SECTION 4-T26S-R31E 50' FSL & 1112' FEL OF SECTION 4-T26S-R31E

The proposed total depth is changing from 24843 MD; 11039 TVD (Bone Spring 3 Shale) to 23778 MD; 10210 TVD (Bone Spring 2 Sand).  
Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) TERRA SEBASTIAN / Ph: (432) 999-3107	Title Regulatory Advisor
Signature (Electronic Submission)	Date 12/09/2024

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 12/16/2024
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD	

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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



**Additional Information****Additional Remarks**

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

**Location of Well**

0. SHL: SENE / 2435 FNL / 719 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101858 / LONG: -103.776861 ( TVD: 0 feet, MD: 0 feet )

PPP: SENE / 2435 FNL / 1210 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101861 / LONG: -103.778447 ( TVD: 11039 feet, MD: 11500 feet )

PPP: NENE / 1324 FNL / 1201 FEL / TWSP: 25S / RANGE: 31E / SECTION: 33 / LAT: 32.090346 / LONG: -103.77855 ( TVD: 11039 feet, MD: 15800 feet )

PPP: SENE / 2649 FNL / 1209 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101272 / LONG: -103.778449 ( TVD: 11039 feet, MD: 11900 feet )

PPP: NENE / 0 FNL / 1198 FEL / TWSP: 25S / RANGE: 31E / SECTION: 33 / LAT: 32.093985 / LONG: -103.778469 ( TVD: 11039 feet, MD: 14500 feet )

BHL: SESE / 50 FSL / 1210 FEL / TWSP: 26S / RANGE: 31E / SECTION: 4 / LAT: 32.064905 / LONG: -103.77855 ( TVD: 11039 feet, MD: 24843 feet )

CONFIDENTIAL

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	XTO
<b>LEASE NO.:</b>	NMLC062140
<b>LOCATION:</b>	Sec. 28, T.25 S, R 31 E
<b>COUNTY:</b>	Eddy County, New Mexico ▼
<b>WELL NAME &amp; NO.:</b>	Poker Lake Unit 28 BS 406H
<b>SURFACE HOLE FOOTAGE:</b>	2435'/N & 719'/E
<b>BOTTOM HOLE FOOTAGE:</b>	50'/S & 1112'/E

<b>WELL NAME &amp; NO.:</b>	Poker Lake Unit 28 BS 407H
<b>SURFACE HOLE FOOTAGE:</b>	2435'/N & 689'/E
<b>BOTTOM HOLE FOOTAGE:</b>	50'/S & 600'/E

<b>WELL NAME &amp; NO.:</b>	Poker Lake Unit 28 BS 408H
<b>SURFACE HOLE FOOTAGE:</b>	2435'/N & 659'/E
<b>BOTTOM HOLE FOOTAGE:</b>	50'/S & 1600'/W

COA

H <sub>2</sub> S	<input checked="" type="radio"/> No	<input type="radio"/> Yes
<b>Potash / WIPP</b>	<input checked="" type="radio"/> None <input type="radio"/> Secretary <input type="radio"/> R-111-Q <input type="checkbox"/> Open Annulus <span style="color: red;">Choose an option (including blank option.)</span>	<input type="checkbox"/> WIPP
<b>Cave / Karst</b>	<input type="radio"/> Low <input type="radio"/> Medium <input checked="" type="radio"/> High	<input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional <input checked="" type="radio"/> Multibowl <input type="radio"/> Both	<input type="radio"/> Diverter
<b>Cementing</b>	<input checked="" type="checkbox"/> Primary Squeeze <input type="checkbox"/> Cont. Squeeze <input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
<b>Special Req</b>	<input type="checkbox"/> Capitan Reef <input type="checkbox"/> Water Disposal <input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
<b>Waste Prev.</b>	<input type="radio"/> Self-Certification <input type="radio"/> Waste Min. Plan <input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
<b>Additional Language</b>	<input checked="" type="checkbox"/> Flex Hose <input type="checkbox"/> Casing Clearance <input type="checkbox"/> Pilot Hole <input checked="" type="checkbox"/> Break Testing <input type="checkbox"/> Four-String <input checked="" type="checkbox"/> Offline Cementing <input type="checkbox"/> 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 (H<sub>2</sub>S) monitors shall be installed prior to drilling out the surface shoe. If H<sub>2</sub>S 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 High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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](mailto: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](mailto: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).
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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).
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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](mailto:zstevens@blm.gov)

<b>C-102</b>  Submit Electronically Via OCD Permitting	<b>State of New Mexico</b> <b>Energy, Minerals &amp; Natural Resources Department</b> <b>OIL CONSERVATION DIVISION</b>	Revised July 9, 2024																							
		Submittal Type: <input type="checkbox"/> Initial Submittal <input checked="" type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled																							
apd id: 10400094973																									
<b>WELL LOCATION INFORMATION</b>																									
API Number 30-015	Pool Code 97860	Pool Name Jennings; Bone Spring; West																							
Property Code	Property Name POKER LAKE UNIT 28 BS	Well Number 406H																							
ORGID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC.	Ground Level Elevation 3,337'																							
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal																							
<b>Surface Location</b>																									
UL H	Section 28	Township 25 S	Range 31 E	Lot	Ft. from N/S 2,435' FNL	Ft. from E/W 719' FEL	Latitude 32.101858	Longitude -103.776861	County EDDY																
<b>Bottom Hole Location</b>																									
UL P	Section 4	Township 26 S	Range 31 E	Lot	Ft. from N/S 50' FSL	Ft. from E/W 1,112' FEL	Latitude 32.064906	Longitude -103.778234	County EDDY																
Dedicated Acres 800	Infill or Defining Well defining	Defining Well API	Overlapping Spacing Unit (Y/N) yes	Consolidation Code U																					
Order Numbers. N/A			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																						
<b>Kick Off Point (KOP)</b>																									
UL H	Section 28	Township 25 S	Range 31 E	Lot	Ft. from N/S 2,033' FNL	Ft. from E/W 1,127' FEL	Latitude 32.102965	Longitude -103.778169	County EDDY																
<b>First Take Point (FTP)</b>																									
UL I	Section 28	Township 25 S	Range 31 E	Lot	Ft. from N/S 2,551' FSL	Ft. from E/W 1,123' FEL	Latitude 32.100997	Longitude -103.778173	County EDDY																
<b>Last Take Point (LTP)</b>																									
UL P	Section 4	Township 26 S	Range 31 E	Lot	Ft. from N/S 100' FSL	Ft. from E/W 1,112' FEL	Latitude 32.065043	Longitude -103.778234	County EDDY																
Unitized Area or Area of Uniform Interest NM NM-071016X		Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical				Ground Floor Elevation: 3,337'																			
<b>OPERATOR CERTIFICATIONS</b>  <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i>  <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling form the division.</i>  Terra Sebastian 10/30/2024  Signature Date  Terra Sebastian  Printed Name terra.b.sebastian@exxonmobil.com Email Address					<b>SURVEYOR CERTIFICATIONS</b>  <i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.  30 Sept 2024  TIM C. PAPPAS REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 21209  Signature and Seal of Professional Surveyor  Certificate Number TIMC. PAPPAS 21209 Date of Survey 9/28/2024																				
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.																									
<div style="display: flex; justify-content: space-between; align-items: center;"><div style="text-align: left;"><b>FSC INC</b> SURVEYORS+ENGINEERS</div><div style="text-align: center;"><b>2821 West 7th Street., Ste 200 - Fort Worth, TX 76107</b> Ph: 817.349.9800 - Fax: 979.732.5271 TBPE Firm 17957   TBPLS Firm 10193887 <a href="http://www.fscinc.net">www.fscinc.net</a></div><div style="text-align: right;"><table border="0"><tr><td>DATE:</td><td>9-28-2024</td><td>PROJECT NO:</td><td>2023040167</td></tr><tr><td>DRAWN BY:</td><td>LM</td><td>SCALE:</td><td></td></tr><tr><td>CHECKED BY:</td><td>CH</td><td>SHEET:</td><td>1 OF 2</td></tr><tr><td>FIELD CREW:</td><td>IR</td><td>REVISION:</td><td>NO</td></tr></table></div></div> <p style="font-size: small; text-align: center;">© COPYRIGHT 2024 - ALL RIGHTS RESERVED</p>										DATE:	9-28-2024	PROJECT NO:	2023040167	DRAWN BY:	LM	SCALE:		CHECKED BY:	CH	SHEET:	1 OF 2	FIELD CREW:	IR	REVISION:	NO
DATE:	9-28-2024	PROJECT NO:	2023040167																						
DRAWN BY:	LM	SCALE:																							
CHECKED BY:	CH	SHEET:	1 OF 2																						
FIELD CREW:	IR	REVISION:	NO																						

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.

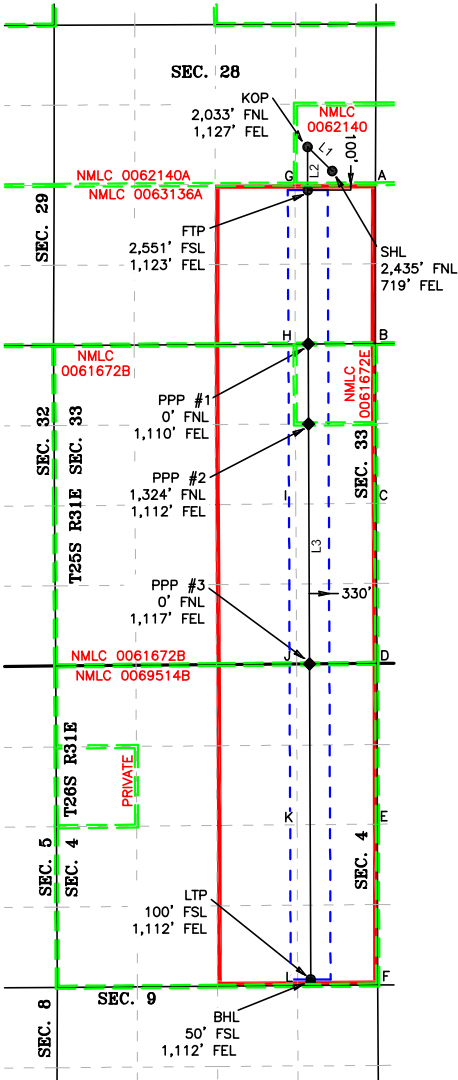
Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

LEGEND

- SECTION LINE
- PROPOSED WELLBORE
- NEW MEXICO MINERAL LEASE LINE
- 330' BUFFER
- DEDICATED ACREAGE

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	314° 32'10"	571.16'
L2	179° 47'41"	716.14'
L3	179° 47'14"	13,129.20'



COORDINATE TABLE

COORDINATE TABLE					
SHL (NAD 83 NME)			FTP (NAD 83 NME)		
Y =	401,237.3	N	Y =	400,921.7	N
X =	713,647.4	E	X =	713,242.9	E
LAT. =	32.101858	°N	LAT. =	32.100997	°N
LONG. =	103.776861	°W	LONG. =	103.778173	°W
KOP (NAD 83 NME)					
Y =	401,637.9	N			
X =	713,240.3	E			
LAT. =	32.102965	°N			
LONG. =	103.778169	°W			
LTP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	387,842.6	N	Y =	387,792.6	N
X =	713,291.3	E	X =	713,291.6	E
LAT. =	32.065043	°N	LAT. =	32.064906	°N
LONG. =	103.778234	°W	LONG. =	103.778234	°W
SHL (NAD 27 NME)			FTP (NAD 27 NME)		
Y =	401,179.4	N	Y =	400,863.8	N
X =	672,461.6	E	X =	672,057.1	E
LAT. =	32.101734	°N	LAT. =	32.100872	°N
LONG. =	103.776384	°W	LONG. =	103.777695	°W
KOP (NAD 27 NME)					
Y =	401,580.0	N			
X =	672,054.6	E			
LAT. =	32.102841	°N			
LONG. =	103.777692	°W			
LTP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	387,785.1	N	Y =	387,735.1	N
X =	672,105.1	E	X =	672,105.4	E
LAT. =	32.064919	°N	LAT. =	32.064781	°N
LONG. =	103.777758	°W	LONG. =	103.777758	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	398,371.2	N	Y =	398,313.4	N
X =	713,252.3	E	X =	672,066.4	E
LAT. =	32.093985	°N	LAT. =	32.093861	°N
LONG. =	103.778185	°W	LONG. =	103.777708	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 27 NME)		
Y =	397,047.5	N	Y =	396,989.7	N
X =	713,257.2	E	X =	672,071.3	E
LAT. =	32.090347	°N	LAT. =	32.090222	°N
LONG. =	103.778191	°W	LONG. =	103.777714	°W
PPP #3 (NAD 83 NME)			PPP #3 (NAD 27 NME)		
Y =	393,071.9	N	Y =	393,014.2	N
X =	713,272.0	E	X =	672,086.0	E
LAT. =	32.079418	°N	LAT. =	32.079294	°N
LONG. =	103.778209	°W	LONG. =	103.777733	°W

CORNER COORDINATES (NAD83 NME)

A - Y =	401,027.1	N	A - X =	714,365.8	E
B - Y =	398,377.8	N	B - X =	714,362.6	E
C - Y =	395,732.5	N	C - X =	714,375.6	E
D - Y =	393,080.5	N	D - X =	714,388.8	E
E - Y =	390,416.3	N	E - X =	714,396.8	E
F - Y =	387,751.0	N	F - X =	714,403.8	E
G - Y =	401,020.7	N	G - X =	713,036.5	E
H - Y =	398,369.9	N	H - X =	713,031.4	E
I - Y =	395,722.1	N	I - X =	713,045.2	E
J - Y =	393,070.2	N	J - X =	713,059.0	E
K - Y =	390,405.5	N	K - X =	713,067.5	E
L - Y =	387,741.0	N	L - X =	713,075.6	E

CORNER COORDINATES (NAD27 NME)

A - Y =	400,969.2	N	A - X =	673,180.0	E
B - Y =	398,320.0	N	B - X =	673,176.7	E
C - Y =	395,674.8	N	C - X =	673,189.6	E
D - Y =	393,022.8	N	D - X =	673,202.7	E
E - Y =	390,358.7	N	E - X =	673,210.6	E
F - Y =	387,693.5	N	F - X =	673,217.6	E
G - Y =	400,962.8	N	G - X =	671,850.7	E
H - Y =	398,312.1	N	H - X =	671,845.5	E
I - Y =	395,664.4	N	I - X =	671,859.3	E
J - Y =	393,012.5	N	J - X =	671,873.0	E
K - Y =	390,347.9	N	K - X =	671,881.4	E
L - Y =	387,683.5	N	L - X =	671,889.4	E



2821 West 7th Street, Suite 200  
Fort Worth, TX 76107  
Ph: 817.349.9800 - Fax: 979.732.5271  
TBPE Firm 17957 | TBPLS Firm 10193887  
www.fscinc.net  
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DATE: 9-28-2024 PROJECT NO: 2023040167  
DRAWN BY: LM SCALE: 1" = 2,500'  
CHECKED BY: CH SHEET: 2 OF 2  
FIELD CREW: IR REVISION: NO

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

XTO Energy Inc.  
POKER LAKE UNIT 28 BS 406H  
Projected TD: 23777.73' MD / 10210' TVD  
SHL: 2435' FNL & 719' FEL , Section 28, T25S, R31E  
BHL: 50' FSL & 1112' FEL , Section 4, T26S, 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	854'	Water
Top of Salt	1221'	Water
Base of Salt	4067'	Water
Delaware	4258'	Water
Brushy Canyon	6920'	Water/Oil/Gas
Bone Spring	8188'	Water
Avalon	8326'	Water/Oil/Gas
1st Bone Spring	8949'	Water/Oil/Gas
2nd Bone Spring	9475'	Water/Oil/Gas
<b>Target/Land Curve</b>	<b>10210'</b>	<b>Water/Oil/Gas</b>

\*\*\* Hydrocarbons @ Brushy Canyon

\*\*\* Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 954' (267' 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 9323.94' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23777.73 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9023.94 feet).

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 954'	9.625	40	J-55	BTC	New	1.71	6.60	16.51
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.66	2.86	2.02
8.75	4000' – 9323.94'	7.625	29.7	HC L-80	Flush Joint	New	2.66	2.46	2.57
6.75	0' – 9223.94'	5.5	20	RY P-110	Freedom/Semi-Permium	New	1.05	2.54	2.10
6.75	9223.94' - 23777.73'	5.5	20	RY P-110	Talon/Semi-Flush	New	1.05	2.30	2.10

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

**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 +/- 954'**Lead: 210 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft<sup>3</sup>/sx, 10.13 gal/sx water)Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/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 +/- 9323.94'**1st StageOptional Lead: 370 sxs Class C (mixed at 10.5 ppg, 2.77 ft<sup>3</sup>/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 220 sxs Class C (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6920

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd StageLead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft<sup>3</sup>/sx, 9.61 gal/sx water)Tail: 780 sxs Class C (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/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 (6920') 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 +/- 23777.73'**

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 9023.94 feet  
Tail: 1020 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 9523.94 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 (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Additional Comments
0' - 954'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
954' - 9323.94'	8.75	Saturated brine for salt interval / Direct Emulsion	9-9.5	30-32	NC	Fully saturated salt across salado / salt
9323.94' - 23777.73'	6.75	OBM	9.1-9.6	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 165 to 185 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 - Poker Lake Unit 28 BS 406H

Measured Depth: 23777.73 ft  
TVD RKB: 10210.00 ft  
Location  
Cartographic Reference System: New Mexico East - NAD 27  
Northing: 401179.40 ft  
Easting: 672461.60 ft  
RKB: 3369.00 ft  
Ground Level: 3337.00 ft  
North Reference: Grid  
Convergence Angle: 0.30 Deg

Plan Sections  
Poker Lake Unit 28 BS 406H

Measured	Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD		Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn		Dogleg	
				RKB	(ft)				Rate (Deg/100ft)		Rate (Deg/100ft)	Target
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00
	1408.02	6.16	314.54	1407.43	11.60	11.60	-11.79	2.00	0.00		2.00	2.00
	6422.12	6.16	314.54	6392.57	388.99	388.99	-395.34	0.00	0.00		0.00	0.00
	6730.14	0.00	0.00	6700.00	400.59	400.59	-407.13	-2.00	0.00		2.00	2.00
	9523.94	0.00	0.00	9493.80	400.59	400.59	-407.13	0.00	0.00		0.00	0.00
	10648.94	90.00	179.79	10210.00	-315.60	-315.60	-404.50	8.00	0.00		8.00	FTP 16
	23727.73	90.00	179.79	10210.00	-13394.30	-13394.30	-356.50	0.00	0.00		0.00	LTP 16
	23777.73	90.00	179.79	10210.00	-13444.30	-13444.30	-356.32	0.00	0.00		0.00	BHL 10

Position Uncertainty  
Poker Lake Unit 28 BS 406H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-Tool
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Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	of Bias (ft)	Error (ft)	Azimuth (°)	Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	XOMR2_OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.358	90.000	XOMR2_OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.310	0.000	0.717	90.000	XOMR2_OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.325	0.000	1.075	90.000	XOMR2_OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.347	0.000	1.434	90.000	XOMR2_OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.374	0.000	1.792	90.000	XOMR2_OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.406	0.000	2.151	90.000	XOMR2_OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.443	0.000	2.509	90.000	XOMR2_OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.485	0.000	2.868	90.000	XOMR2_OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.531	0.000	3.226	90.000	XOMR2_OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.581	0.000	3.585	90.000	XOMR2_OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.634	0.000	3.943	90.000	XOMR2_OWSG MWD+IFR1+MS
1200.000	2.000	314.536	1199.980	4.207	0.000	4.212	0.000	2.690	0.000	4.299	89.921	XOMR2_OWSG MWD+IFR1+MS
1300.000	4.000	314.536	1299.838	4.555	0.000	4.565	0.000	2.747	0.000	4.654	89.612	XOMR2_OWSG MWD+IFR1+MS
1408.022	6.160	314.536	1407.429	4.925	0.000	4.947	0.000	2.810	0.000	5.039	89.279	XOMR2_OWSG MWD+IFR1+MS
1500.000	6.160	314.536	1498.876	5.252	0.000	5.274	0.000	2.868	0.000	5.368	89.208	XOMR2_OWSG MWD+IFR1+MS
1600.000	6.160	314.536	1598.298	5.609	0.000	5.630	0.000	2.936	0.000	5.724	89.434	XOMR2_OWSG MWD+IFR1+MS
1700.000	6.160	314.536	1697.721	5.967	0.000	5.987	0.000	3.008	0.000	6.082	89.604	XOMR2_OWSG MWD+IFR1+MS
1800.000	6.160	314.536	1797.143	6.326	0.000	6.345	0.000	3.082	0.000	6.441	89.730	XOMR2_OWSG MWD+IFR1+MS

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Well Plan Report														
1900.000	6.160	314.536	1896.566	6.686	0.000	6.703	0.000	3.158	0.000	0.000	6.800	6.602	89.819	XOMR2_OWSG MWD+IFR1+MS
2000.000	6.160	314.536	1995.988	7.046	0.000	7.062	0.000	3.236	0.000	0.000	7.160	6.959	89.878	XOMR2_OWSG MWD+IFR1+MS
2100.000	6.160	314.536	2095.411	7.407	0.000	7.421	0.000	3.316	0.000	0.000	7.521	7.317	89.912	XOMR2_OWSG MWD+IFR1+MS
2200.000	6.160	314.536	2194.833	7.769	0.000	7.781	0.000	3.398	0.000	0.000	7.882	7.675	89.926	XOMR2_OWSG MWD+IFR1+MS
2300.000	6.160	314.536	2294.256	8.131	0.000	8.140	0.000	3.482	0.000	0.000	8.243	8.034	89.922	XOMR2_OWSG MWD+IFR1+MS
2400.000	6.160	314.536	2393.678	8.494	0.000	8.501	0.000	3.568	0.000	0.000	8.605	8.393	89.904	XOMR2_OWSG MWD+IFR1+MS
2500.000	6.160	314.536	2493.101	8.856	0.000	8.861	0.000	3.655	0.000	0.000	8.966	8.752	89.873	XOMR2_OWSG MWD+IFR1+MS
2600.000	6.160	314.536	2592.524	9.219	0.000	9.222	0.000	3.744	0.000	0.000	9.329	9.111	89.832	XOMR2_OWSG MWD+IFR1+MS
2700.000	6.160	314.536	2691.946	9.583	0.000	9.583	0.000	3.835	0.000	0.000	9.691	9.471	89.782	XOMR2_OWSG MWD+IFR1+MS
2800.000	6.160	314.536	2791.369	9.946	0.000	9.944	0.000	3.926	0.000	0.000	10.054	9.831	89.725	XOMR2_OWSG MWD+IFR1+MS
2900.000	6.160	314.536	2890.791	10.310	0.000	10.305	0.000	4.020	0.000	0.000	10.417	10.191	89.661	XOMR2_OWSG MWD+IFR1+MS
3000.000	6.160	314.536	2990.214	10.674	0.000	10.666	0.000	4.115	0.000	0.000	10.780	10.552	89.593	XOMR2_OWSG MWD+IFR1+MS
3100.000	6.160	314.536	3089.636	11.038	0.000	11.028	0.000	4.211	0.000	0.000	11.143	10.912	89.519	XOMR2_OWSG MWD+IFR1+MS
3200.000	6.160	314.536	3189.059	11.402	0.000	11.390	0.000	4.309	0.000	0.000	11.506	11.273	89.442	XOMR2_OWSG MWD+IFR1+MS
3300.000	6.160	314.536	3288.481	11.767	0.000	11.751	0.000	4.408	0.000	0.000	11.869	11.633	89.361	XOMR2_OWSG MWD+IFR1+MS
3400.000	6.160	314.536	3387.904	12.131	0.000	12.113	0.000	4.508	0.000	0.000	12.233	11.994	89.278	XOMR2_OWSG MWD+IFR1+MS
3500.000	6.160	314.536	3487.326	12.496	0.000	12.475	0.000	4.610	0.000	0.000	12.597	12.355	89.192	XOMR2_OWSG MWD+IFR1+MS
3600.000	6.160	314.536	3586.749	12.860	0.000	12.837	0.000	4.713	0.000	0.000	12.960	12.716	89.104	XOMR2_OWSG MWD+IFR1+MS
3700.000	6.160	314.536	3686.171	13.225	0.000	13.199	0.000	4.818	0.000	0.000	13.324	13.077	89.015	XOMR2_OWSG MWD+IFR1+MS
3800.000	6.160	314.536	3785.594	13.590	0.000	13.561	0.000	4.924	0.000	0.000	13.688	13.439	88.924	XOMR2_OWSG MWD+IFR1+MS

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Well Plan Report														
3900.000	6.160	314.536	3885.016	13.955	0.000	13.923	0.000	5.032	0.000	0.000	14.052	13.800	88.833	XOMR2_OWSG MWD+IFR1+MS
4000.000	6.160	314.536	3984.439	14.320	0.000	14.286	0.000	5.141	0.000	0.000	14.416	14.161	88.740	XOMR2_OWSG MWD+IFR1+MS
4100.000	6.160	314.536	4083.862	14.685	0.000	14.648	0.000	5.252	0.000	0.000	14.780	14.523	88.647	XOMR2_OWSG MWD+IFR1+MS
4200.000	6.160	314.536	4183.284	15.051	0.000	15.010	0.000	5.364	0.000	0.000	15.144	14.884	88.553	XOMR2_OWSG MWD+IFR1+MS
4300.000	6.160	314.536	4282.707	15.416	0.000	15.373	0.000	5.478	0.000	0.000	15.509	15.246	88.459	XOMR2_OWSG MWD+IFR1+MS
4400.000	6.160	314.536	4382.129	15.781	0.000	15.735	0.000	5.593	0.000	0.000	15.873	15.607	88.364	XOMR2_OWSG MWD+IFR1+MS
4500.000	6.160	314.536	4481.552	16.147	0.000	16.098	0.000	5.710	0.000	0.000	16.237	15.969	88.269	XOMR2_OWSG MWD+IFR1+MS
4600.000	6.160	314.536	4580.974	16.512	0.000	16.460	0.000	5.829	0.000	0.000	16.602	16.330	88.175	XOMR2_OWSG MWD+IFR1+MS
4700.000	6.160	314.536	4680.397	16.878	0.000	16.823	0.000	5.949	0.000	0.000	16.966	16.692	88.080	XOMR2_OWSG MWD+IFR1+MS
4800.000	6.160	314.536	4779.819	17.243	0.000	17.185	0.000	6.071	0.000	0.000	17.330	17.054	87.985	XOMR2_OWSG MWD+IFR1+MS
4900.000	6.160	314.536	4879.242	17.609	0.000	17.548	0.000	6.195	0.000	0.000	17.695	17.416	87.891	XOMR2_OWSG MWD+IFR1+MS
5000.000	6.160	314.536	4978.664	17.974	0.000	17.910	0.000	6.321	0.000	0.000	18.059	17.777	87.796	XOMR2_OWSG MWD+IFR1+MS
5100.000	6.160	314.536	5078.087	18.340	0.000	18.273	0.000	6.449	0.000	0.000	18.424	18.139	87.702	XOMR2_OWSG MWD+IFR1+MS
5200.000	6.160	314.536	5177.509	18.706	0.000	18.636	0.000	6.578	0.000	0.000	18.789	18.501	87.608	XOMR2_OWSG MWD+IFR1+MS
5300.000	6.160	314.536	5276.932	19.071	0.000	18.999	0.000	6.709	0.000	0.000	19.153	18.863	87.514	XOMR2_OWSG MWD+IFR1+MS
5400.000	6.160	314.536	5376.354	19.437	0.000	19.361	0.000	6.842	0.000	0.000	19.518	19.225	87.421	XOMR2_OWSG MWD+IFR1+MS
5500.000	6.160	314.536	5475.777	19.803	0.000	19.724	0.000	6.977	0.000	0.000	19.883	19.587	87.328	XOMR2_OWSG MWD+IFR1+MS
5600.000	6.160	314.536	5575.199	20.169	0.000	20.087	0.000	7.115	0.000	0.000	20.248	19.949	87.235	XOMR2_OWSG MWD+IFR1+MS
5700.000	6.160	314.536	5674.622	20.534	0.000	20.450	0.000	7.254	0.000	0.000	20.612	20.311	87.142	XOMR2_OWSG MWD+IFR1+MS
5800.000	6.160	314.536	5774.045	20.900	0.000	20.812	0.000	7.395	0.000	0.000	20.977	20.673	87.050	XOMR2_OWSG MWD+IFR1+MS



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Well Plan Report														
5900.000	6.160	314.536	5873.467	21.266	0.000	21.175	0.000	7.538	0.000	0.000	21.342	21.035	86.958	XOMR2_OWSG MWD+IFR1+MS
6000.000	6.160	314.536	5972.890	21.632	0.000	21.538	0.000	7.684	0.000	0.000	21.707	21.397	86.867	XOMR2_OWSG MWD+IFR1+MS
6100.000	6.160	314.536	6072.312	21.998	0.000	21.901	0.000	7.831	0.000	0.000	22.072	21.759	86.776	XOMR2_OWSG MWD+IFR1+MS
6200.000	6.160	314.536	6171.735	22.364	0.000	22.264	0.000	7.981	0.000	0.000	22.437	22.121	86.685	XOMR2_OWSG MWD+IFR1+MS
6300.000	6.160	314.536	6271.157	22.730	0.000	22.627	0.000	8.133	0.000	0.000	22.802	22.484	86.595	XOMR2_OWSG MWD+IFR1+MS
6400.000	6.160	314.536	6370.580	23.096	0.000	22.990	0.000	8.287	0.000	0.000	23.166	22.846	86.505	XOMR2_OWSG MWD+IFR1+MS
6422.119	6.160	314.536	6392.571	23.177	0.000	23.070	0.000	8.321	0.000	0.000	23.247	22.926	86.484	XOMR2_OWSG MWD+IFR1+MS
6500.000	4.603	314.536	6470.106	23.464	0.000	23.352	0.000	8.443	0.000	0.000	23.530	23.207	86.435	XOMR2_OWSG MWD+IFR1+MS
6600.000	2.603	314.536	6569.904	23.807	0.000	23.710	0.000	8.600	0.000	0.000	23.890	23.565	86.389	XOMR2_OWSG MWD+IFR1+MS
6700.000	0.603	314.536	6669.859	24.120	0.000	24.066	0.000	8.756	0.000	0.000	24.246	23.920	86.376	XOMR2_OWSG MWD+IFR1+MS
6730.141	0.000	0.000	6700.000	24.351	0.000	24.027	0.000	8.803	0.000	0.000	24.352	24.026	86.412	XOMR2_OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6769.859	24.595	0.000	24.271	0.000	8.912	0.000	0.000	24.596	24.270	86.563	XOMR2_OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6869.859	24.945	0.000	24.621	0.000	9.069	0.000	0.000	24.946	24.620	86.774	XOMR2_OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6969.859	25.295	0.000	24.970	0.000	9.230	0.000	0.000	25.296	24.970	86.979	XOMR2_OWSG MWD+IFR1+MS
7100.000	0.000	0.000	7069.859	25.646	0.000	25.320	0.000	9.393	0.000	0.000	25.646	25.320	87.178	XOMR2_OWSG MWD+IFR1+MS
7200.000	0.000	0.000	7169.859	25.996	0.000	25.671	0.000	9.558	0.000	0.000	25.997	25.670	87.371	XOMR2_OWSG MWD+IFR1+MS
7300.000	0.000	0.000	7269.859	26.347	0.000	26.021	0.000	9.726	0.000	0.000	26.348	26.020	87.558	XOMR2_OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7369.859	26.698	0.000	26.372	0.000	9.897	0.000	0.000	26.699	26.371	87.740	XOMR2_OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7469.859	27.050	0.000	26.722	0.000	10.071	0.000	0.000	27.050	26.722	87.917	XOMR2_OWSG MWD+IFR1+MS
7600.000	0.000	0.000	7569.859	27.401	0.000	27.073	0.000	10.247	0.000	0.000	27.402	27.073	88.089	XOMR2_OWSG MWD+IFR1+MS

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7700.000	0.000	0.000	7669.859	27.753	0.000	27.425	0.000	10.426	0.000	0.000	27.753	27.424	88.257	XOMR2_OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7769.859	28.105	0.000	27.776	0.000	10.608	0.000	0.000	28.105	27.776	88.420	XOMR2_OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7869.859	28.457	0.000	28.128	0.000	10.793	0.000	0.000	28.457	28.127	88.578	XOMR2_OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7969.859	28.809	0.000	28.479	0.000	10.980	0.000	0.000	28.809	28.479	88.732	XOMR2_OWSG MWD+IFR1+MS
8100.000	0.000	0.000	8069.859	29.161	0.000	28.831	0.000	11.170	0.000	0.000	29.161	28.831	88.883	XOMR2_OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8169.859	29.514	0.000	29.183	0.000	11.363	0.000	0.000	29.514	29.183	89.029	XOMR2_OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8269.859	29.866	0.000	29.536	0.000	11.559	0.000	0.000	29.866	29.536	89.171	XOMR2_OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8369.859	30.219	0.000	29.888	0.000	11.758	0.000	0.000	30.219	29.888	89.310	XOMR2_OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8469.859	30.572	0.000	30.241	0.000	11.959	0.000	0.000	30.572	30.240	89.446	XOMR2_OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8569.859	30.925	0.000	30.593	0.000	12.164	0.000	0.000	30.925	30.593	89.578	XOMR2_OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8669.859	31.278	0.000	30.946	0.000	12.371	0.000	0.000	31.278	30.946	89.707	XOMR2_OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8769.859	31.631	0.000	31.299	0.000	12.581	0.000	0.000	31.631	31.299	89.832	XOMR2_OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8869.859	31.985	0.000	31.652	0.000	12.795	0.000	0.000	31.985	31.652	89.955	XOMR2_OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8969.859	32.338	0.000	32.005	0.000	13.011	0.000	0.000	32.338	32.005	90.075	XOMR2_OWSG MWD+IFR1+MS
9100.000	0.000	0.000	9069.859	32.692	0.000	32.358	0.000	13.230	0.000	0.000	32.692	32.358	90.192	XOMR2_OWSG MWD+IFR1+MS
9200.000	0.000	0.000	9169.859	33.046	0.000	32.712	0.000	13.452	0.000	0.000	33.046	32.712	90.306	XOMR2_OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9269.859	33.399	0.000	33.065	0.000	13.676	0.000	0.000	33.399	33.065	90.417	XOMR2_OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9369.859	33.753	0.000	33.419	0.000	13.904	0.000	0.000	33.753	33.419	90.526	XOMR2_OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9469.859	34.107	0.000	33.773	0.000	14.135	0.000	0.000	34.107	33.773	90.633	XOMR2_OWSG MWD+IFR1+MS
9523.944	0.000	0.000	9493.803	34.192	0.000	33.857	0.000	14.191	0.000	0.000	34.192	33.857	90.658	XOMR2_OWSG MWD+IFR1+MS

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9600.000	6.084	179.790	9569.716	34.150	0.000	34.112	-0.000	14.366	0.000	0.000	34.445	34.112	90.806	XOMR2_OWSG MWD+IFR1+MS
9700.000	14.084	179.790	9668.091	33.584	0.000	34.420	-0.000	14.588	0.000	0.000	34.747	34.420	91.211	XOMR2_OWSG MWD+IFR1+MS
9800.000	22.084	179.790	9763.074	32.476	0.000	34.710	-0.000	14.794	0.000	0.000	35.023	34.710	91.838	XOMR2_OWSG MWD+IFR1+MS
9900.000	30.084	179.790	9852.816	30.866	0.000	34.980	-0.000	14.984	0.000	0.000	35.268	34.979	92.651	XOMR2_OWSG MWD+IFR1+MS
10000.000	38.084	179.790	9935.570	28.818	0.000	35.226	-0.000	15.158	0.000	0.000	35.476	35.225	93.630	XOMR2_OWSG MWD+IFR1+MS
10100.000	46.084	179.790	10009.725	26.425	0.000	35.447	-0.000	15.320	0.000	0.000	35.645	35.445	94.781	XOMR2_OWSG MWD+IFR1+MS
10200.000	54.084	179.790	10073.839	23.818	0.000	35.642	-0.000	15.477	0.000	0.000	35.775	35.640	96.196	XOMR2_OWSG MWD+IFR1+MS
10300.000	62.084	179.790	10126.662	21.187	0.000	35.811	-0.000	15.637	0.000	0.000	35.867	35.809	98.526	XOMR2_OWSG MWD+IFR1+MS
10400.000	70.084	179.790	10167.168	18.802	0.000	35.952	-0.000	15.808	0.000	0.000	35.952	35.925	4.382	XOMR2_OWSG MWD+IFR1+MS
10500.000	78.084	179.790	10194.568	17.024	0.000	36.065	-0.000	15.998	0.000	0.000	36.068	35.954	9.050	XOMR2_OWSG MWD+IFR1+MS
10600.000	86.084	179.790	10208.328	16.251	0.000	36.150	-0.000	16.211	0.000	0.000	36.158	35.964	11.638	XOMR2_OWSG MWD+IFR1+MS
10648.944	90.000	179.790	10210.000	16.323	0.000	36.180	-0.000	16.323	0.000	0.000	36.192	35.963	13.116	XOMR2_OWSG MWD+IFR1+MS
10700.000	90.000	179.790	10210.000	16.447	0.000	36.209	-0.000	16.447	0.000	0.000	36.226	35.961	14.364	XOMR2_OWSG MWD+IFR1+MS
10800.000	90.000	179.790	10210.000	16.716	0.000	36.281	-0.000	16.716	0.000	0.000	36.306	35.957	15.393	XOMR2_OWSG MWD+IFR1+MS
10900.000	90.000	179.790	10210.000	17.017	0.000	36.369	-0.000	17.017	0.000	0.000	36.401	35.955	15.485	XOMR2_OWSG MWD+IFR1+MS
11000.000	90.000	179.790	10210.000	17.348	0.000	36.472	-0.000	17.348	0.000	0.000	36.511	35.955	15.127	XOMR2_OWSG MWD+IFR1+MS
11100.000	90.000	179.790	10210.000	17.708	0.000	36.591	-0.000	17.708	0.000	0.000	36.635	35.956	14.560	XOMR2_OWSG MWD+IFR1+MS
11200.000	90.000	179.790	10210.000	18.094	0.000	36.726	-0.000	18.094	0.000	0.000	36.774	35.959	13.907	XOMR2_OWSG MWD+IFR1+MS
11300.000	90.000	179.790	10210.000	18.506	0.000	36.876	-0.000	18.506	0.000	0.000	36.928	35.963	13.233	XOMR2_OWSG MWD+IFR1+MS
11400.000	90.000	179.790	10210.000	18.942	0.000	37.042	-0.000	18.942	0.000	0.000	37.096	35.968	12.571	XOMR2_OWSG MWD+IFR1+MS

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11500.000	90.000	179.790	10210.000	19.399	0.000	37.222	-0.000	19.399	0.000	0.000	37.279	35.975	11.939	XOMR2_OWSG MWD+IFR1+MS
11600.000	90.000	179.790	10210.000	19.877	0.000	37.417	-0.000	19.877	0.000	0.000	37.476	35.982	11.343	XOMR2_OWSG MWD+IFR1+MS
11700.000	90.000	179.790	10210.000	20.374	0.000	37.627	-0.000	20.374	0.000	0.000	37.687	35.991	10.787	XOMR2_OWSG MWD+IFR1+MS
11800.000	90.000	179.790	10210.000	20.888	0.000	37.850	-0.000	20.888	0.000	0.000	37.912	36.000	10.270	XOMR2_OWSG MWD+IFR1+MS
11900.000	90.000	179.790	10210.000	21.419	0.000	38.088	-0.000	21.419	0.000	0.000	38.151	36.010	9.790	XOMR2_OWSG MWD+IFR1+MS
12000.000	90.000	179.790	10210.000	21.966	0.000	38.340	-0.000	21.966	0.000	0.000	38.404	36.021	9.346	XOMR2_OWSG MWD+IFR1+MS
12100.000	90.000	179.790	10210.000	22.526	0.000	38.605	-0.000	22.526	0.000	0.000	38.670	36.033	8.934	XOMR2_OWSG MWD+IFR1+MS
12200.000	90.000	179.790	10210.000	23.099	0.000	38.884	-0.000	23.099	0.000	0.000	38.949	36.046	8.553	XOMR2_OWSG MWD+IFR1+MS
12300.000	90.000	179.790	10210.000	23.685	0.000	39.175	-0.000	23.685	0.000	0.000	39.241	36.059	8.198	XOMR2_OWSG MWD+IFR1+MS
12400.000	90.000	179.790	10210.000	24.282	0.000	39.479	-0.000	24.282	0.000	0.000	39.545	36.074	7.869	XOMR2_OWSG MWD+IFR1+MS
12500.000	90.000	179.790	10210.000	24.889	0.000	39.796	-0.000	24.889	0.000	0.000	39.862	36.089	7.563	XOMR2_OWSG MWD+IFR1+MS
12600.000	90.000	179.790	10210.000	25.506	0.000	40.124	-0.000	25.506	0.000	0.000	40.190	36.104	7.277	XOMR2_OWSG MWD+IFR1+MS
12700.000	90.000	179.790	10210.000	26.132	0.000	40.465	-0.000	26.132	0.000	0.000	40.530	36.120	7.010	XOMR2_OWSG MWD+IFR1+MS
12800.000	90.000	179.790	10210.000	26.766	0.000	40.816	-0.000	26.766	0.000	0.000	40.882	36.138	6.761	XOMR2_OWSG MWD+IFR1+MS
12900.000	90.000	179.790	10210.000	27.408	0.000	41.179	-0.000	27.408	0.000	0.000	41.245	36.155	6.527	XOMR2_OWSG MWD+IFR1+MS
13000.000	90.000	179.790	10210.000	28.057	0.000	41.553	-0.000	28.057	0.000	0.000	41.619	36.174	6.308	XOMR2_OWSG MWD+IFR1+MS
13100.000	90.000	179.790	10210.000	28.713	0.000	41.938	-0.000	28.713	0.000	0.000	42.003	36.193	6.102	XOMR2_OWSG MWD+IFR1+MS
13200.000	90.000	179.790	10210.000	29.376	0.000	42.333	-0.000	29.376	0.000	0.000	42.398	36.212	5.908	XOMR2_OWSG MWD+IFR1+MS
13300.000	90.000	179.790	10210.000	30.044	0.000	42.738	-0.000	30.044	0.000	0.000	42.802	36.233	5.725	XOMR2_OWSG MWD+IFR1+MS
13400.000	90.000	179.790	10210.000	30.718	0.000	43.152	-0.000	30.718	0.000	0.000	43.217	36.254	5.552	XOMR2_OWSG MWD+IFR1+MS

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13500.000	90.000	179.790	10210.000	31.397	0.000	43.576	-0.000	31.397	0.000	0.000	43.641	36.276	5.389	XOMR2_OWSG MWD+IFR1+MS
13600.000	90.000	179.790	10210.000	32.081	0.000	44.010	-0.000	32.081	0.000	0.000	44.073	36.298	5.234	XOMR2_OWSG MWD+IFR1+MS
13700.000	90.000	179.790	10210.000	32.769	0.000	44.452	-0.000	32.769	0.000	0.000	44.515	36.321	5.088	XOMR2_OWSG MWD+IFR1+MS
13800.000	90.000	179.790	10210.000	33.461	0.000	44.903	-0.000	33.461	0.000	0.000	44.966	36.345	4.949	XOMR2_OWSG MWD+IFR1+MS
13900.000	90.000	179.790	10210.000	34.158	0.000	45.362	-0.000	34.158	0.000	0.000	45.425	36.369	4.816	XOMR2_OWSG MWD+IFR1+MS
14000.000	90.000	179.790	10210.000	34.858	0.000	45.830	-0.000	34.858	0.000	0.000	45.892	36.394	4.691	XOMR2_OWSG MWD+IFR1+MS
14100.000	90.000	179.790	10210.000	35.562	0.000	46.305	-0.000	35.562	0.000	0.000	46.367	36.420	4.571	XOMR2_OWSG MWD+IFR1+MS
14200.000	90.000	179.790	10210.000	36.269	0.000	46.788	-0.000	36.269	0.000	0.000	46.849	36.446	4.457	XOMR2_OWSG MWD+IFR1+MS
14300.000	90.000	179.790	10210.000	36.980	0.000	47.279	-0.000	36.980	0.000	0.000	47.339	36.473	4.348	XOMR2_OWSG MWD+IFR1+MS
14400.000	90.000	179.790	10210.000	37.693	0.000	47.776	-0.000	37.693	0.000	0.000	47.837	36.500	4.244	XOMR2_OWSG MWD+IFR1+MS
14500.000	90.000	179.790	10210.000	38.409	0.000	48.281	-0.000	38.409	0.000	0.000	48.341	36.528	4.144	XOMR2_OWSG MWD+IFR1+MS
14600.000	90.000	179.790	10210.000	39.128	0.000	48.792	-0.000	39.128	0.000	0.000	48.852	36.557	4.049	XOMR2_OWSG MWD+IFR1+MS
14700.000	90.000	179.790	10210.000	39.849	0.000	49.310	-0.000	39.849	0.000	0.000	49.369	36.587	3.958	XOMR2_OWSG MWD+IFR1+MS
14800.000	90.000	179.790	10210.000	40.572	0.000	49.835	-0.000	40.572	0.000	0.000	49.893	36.617	3.870	XOMR2_OWSG MWD+IFR1+MS
14900.000	90.000	179.790	10210.000	41.298	0.000	50.365	-0.000	41.298	0.000	0.000	50.423	36.647	3.786	XOMR2_OWSG MWD+IFR1+MS
15000.000	90.000	179.790	10210.000	42.026	0.000	50.902	-0.000	42.026	0.000	0.000	50.959	36.678	3.706	XOMR2_OWSG MWD+IFR1+MS
15100.000	90.000	179.790	10210.000	42.756	0.000	51.444	-0.000	42.756	0.000	0.000	51.501	36.710	3.628	XOMR2_OWSG MWD+IFR1+MS
15200.000	90.000	179.790	10210.000	43.488	0.000	51.992	-0.000	43.488	0.000	0.000	52.048	36.743	3.554	XOMR2_OWSG MWD+IFR1+MS
15300.000	90.000	179.790	10210.000	44.221	0.000	52.545	-0.000	44.221	0.000	0.000	52.601	36.776	3.482	XOMR2_OWSG MWD+IFR1+MS
15400.000	90.000	179.790	10210.000	44.957	0.000	53.104	-0.000	44.957	0.000	0.000	53.159	36.810	3.413	XOMR2_OWSG MWD+IFR1+MS

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15500.000	90.000	179.790	10210.000	45.694	0.000	53.667	-0.000	45.694	0.000	0.000	53.722	36.844	3.347	XOMR2_OWSG MWD+IFR1+MS
15600.000	90.000	179.790	10210.000	46.432	0.000	54.236	-0.000	46.432	0.000	0.000	54.290	36.879	3.282	XOMR2_OWSG MWD+IFR1+MS
15700.000	90.000	179.790	10210.000	47.172	0.000	54.809	-0.000	47.172	0.000	0.000	54.863	36.914	3.220	XOMR2_OWSG MWD+IFR1+MS
15800.000	90.000	179.790	10210.000	47.914	0.000	55.387	-0.000	47.914	0.000	0.000	55.440	36.951	3.161	XOMR2_OWSG MWD+IFR1+MS
15900.000	90.000	179.790	10210.000	48.657	0.000	55.969	-0.000	48.657	0.000	0.000	56.022	36.987	3.103	XOMR2_OWSG MWD+IFR1+MS
16000.000	90.000	179.790	10210.000	49.401	0.000	56.556	-0.000	49.401	0.000	0.000	56.608	37.025	3.047	XOMR2_OWSG MWD+IFR1+MS
16100.000	90.000	179.790	10210.000	50.146	0.000	57.147	-0.000	50.146	0.000	0.000	57.199	37.063	2.993	XOMR2_OWSG MWD+IFR1+MS
16200.000	90.000	179.790	10210.000	50.893	0.000	57.742	-0.000	50.893	0.000	0.000	57.793	37.101	2.941	XOMR2_OWSG MWD+IFR1+MS
16300.000	90.000	179.790	10210.000	51.640	0.000	58.341	-0.000	51.640	0.000	0.000	58.392	37.140	2.890	XOMR2_OWSG MWD+IFR1+MS
16400.000	90.000	179.790	10210.000	52.389	0.000	58.944	-0.000	52.389	0.000	0.000	58.994	37.180	2.841	XOMR2_OWSG MWD+IFR1+MS
16500.000	90.000	179.790	10210.000	53.139	0.000	59.550	-0.000	53.139	0.000	0.000	59.600	37.220	2.794	XOMR2_OWSG MWD+IFR1+MS
16600.000	90.000	179.790	10210.000	53.890	0.000	60.161	-0.000	53.890	0.000	0.000	60.210	37.261	2.748	XOMR2_OWSG MWD+IFR1+MS
16700.000	90.000	179.790	10210.000	54.642	0.000	60.774	-0.000	54.642	0.000	0.000	60.823	37.303	2.703	XOMR2_OWSG MWD+IFR1+MS
16800.000	90.000	179.790	10210.000	55.394	0.000	61.391	-0.000	55.394	0.000	0.000	61.440	37.345	2.660	XOMR2_OWSG MWD+IFR1+MS
16900.000	90.000	179.790	10210.000	56.148	0.000	62.012	-0.000	56.148	0.000	0.000	62.060	37.387	2.618	XOMR2_OWSG MWD+IFR1+MS
17000.000	90.000	179.790	10210.000	56.902	0.000	62.635	-0.000	56.902	0.000	0.000	62.683	37.431	2.577	XOMR2_OWSG MWD+IFR1+MS
17100.000	90.000	179.790	10210.000	57.657	0.000	63.262	-0.000	57.657	0.000	0.000	63.309	37.475	2.537	XOMR2_OWSG MWD+IFR1+MS
17200.000	90.000	179.790	10210.000	58.413	0.000	63.891	-0.000	58.413	0.000	0.000	63.938	37.519	2.498	XOMR2_OWSG MWD+IFR1+MS
17300.000	90.000	179.790	10210.000	59.170	0.000	64.524	-0.000	59.170	0.000	0.000	64.570	37.564	2.461	XOMR2_OWSG MWD+IFR1+MS
17400.000	90.000	179.790	10210.000	59.928	0.000	65.159	-0.000	59.928	0.000	0.000	65.205	37.609	2.424	XOMR2_OWSG MWD+IFR1+MS

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17500.000	90.000	179.790	10210.000	60.686	0.000	65.798	-0.000	60.686	0.000	0.000	65.843	37.655	2.389	XOMR2_OWSG MWD+IFR1+MS
17600.000	90.000	179.790	10210.000	61.445	0.000	66.438	-0.000	61.445	0.000	0.000	66.483	37.702	2.354	XOMR2_OWSG MWD+IFR1+MS
17700.000	90.000	179.790	10210.000	62.204	0.000	67.082	-0.000	62.204	0.000	0.000	67.126	37.749	2.320	XOMR2_OWSG MWD+IFR1+MS
17800.000	90.000	179.790	10210.000	62.964	0.000	67.728	-0.000	62.964	0.000	0.000	67.772	37.797	2.287	XOMR2_OWSG MWD+IFR1+MS
17900.000	90.000	179.790	10210.000	63.725	0.000	68.376	-0.000	63.725	0.000	0.000	68.420	37.846	2.255	XOMR2_OWSG MWD+IFR1+MS
18000.000	90.000	179.790	10210.000	64.486	0.000	69.027	-0.000	64.486	0.000	0.000	69.070	37.894	2.224	XOMR2_OWSG MWD+IFR1+MS
18100.000	90.000	179.790	10210.000	65.248	0.000	69.680	-0.000	65.248	0.000	0.000	69.723	37.944	2.194	XOMR2_OWSG MWD+IFR1+MS
18200.000	90.000	179.790	10210.000	66.010	0.000	70.335	-0.000	66.010	0.000	0.000	70.378	37.994	2.164	XOMR2_OWSG MWD+IFR1+MS
18300.000	90.000	179.790	10210.000	66.773	0.000	70.993	-0.000	66.773	0.000	0.000	71.035	38.044	2.135	XOMR2_OWSG MWD+IFR1+MS
18400.000	90.000	179.790	10210.000	67.537	0.000	71.652	-0.000	67.537	0.000	0.000	71.694	38.096	2.107	XOMR2_OWSG MWD+IFR1+MS
18500.000	90.000	179.790	10210.000	68.301	0.000	72.314	-0.000	68.301	0.000	0.000	72.356	38.147	2.079	XOMR2_OWSG MWD+IFR1+MS
18600.000	90.000	179.790	10210.000	69.065	0.000	72.978	-0.000	69.065	0.000	0.000	73.019	38.199	2.052	XOMR2_OWSG MWD+IFR1+MS
18700.000	90.000	179.790	10210.000	69.830	0.000	73.643	-0.000	69.830	0.000	0.000	73.684	38.252	2.026	XOMR2_OWSG MWD+IFR1+MS
18800.000	90.000	179.790	10210.000	70.595	0.000	74.311	-0.000	70.595	0.000	0.000	74.352	38.305	2.000	XOMR2_OWSG MWD+IFR1+MS
18900.000	90.000	179.790	10210.000	71.361	0.000	74.981	-0.000	71.361	0.000	0.000	75.021	38.359	1.975	XOMR2_OWSG MWD+IFR1+MS
19000.000	90.000	179.790	10210.000	72.127	0.000	75.652	-0.000	72.127	0.000	0.000	75.692	38.414	1.951	XOMR2_OWSG MWD+IFR1+MS
19100.000	90.000	179.790	10210.000	72.893	0.000	76.325	-0.000	72.893	0.000	0.000	76.364	38.469	1.927	XOMR2_OWSG MWD+IFR1+MS
19200.000	90.000	179.790	10210.000	73.660	0.000	77.000	-0.000	73.660	0.000	0.000	77.039	38.524	1.903	XOMR2_OWSG MWD+IFR1+MS
19300.000	90.000	179.790	10210.000	74.427	0.000	77.676	-0.000	74.427	0.000	0.000	77.715	38.580	1.880	XOMR2_OWSG MWD+IFR1+MS
19400.000	90.000	179.790	10210.000	75.195	0.000	78.354	-0.000	75.195	0.000	0.000	78.393	38.636	1.858	XOMR2_OWSG MWD+IFR1+MS



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19500.000	90.000	179.790	10210.000	75.963	0.000	79.034	-0.000	75.963	0.000	0.000	79.072	38.693	1.836	XOMR2_OWSG MWD+IFR1+MS
19600.000	90.000	179.790	10210.000	76.731	0.000	79.715	-0.000	76.731	0.000	0.000	79.753	38.751	1.814	XOMR2_OWSG MWD+IFR1+MS
19700.000	90.000	179.790	10210.000	77.500	0.000	80.397	-0.000	77.500	0.000	0.000	80.435	38.809	1.793	XOMR2_OWSG MWD+IFR1+MS
19800.000	90.000	179.790	10210.000	78.269	0.000	81.081	-0.000	78.269	0.000	0.000	81.119	38.867	1.772	XOMR2_OWSG MWD+IFR1+MS
19900.000	90.000	179.790	10210.000	79.038	0.000	81.767	-0.000	79.038	0.000	0.000	81.804	38.927	1.752	XOMR2_OWSG MWD+IFR1+MS
20000.000	90.000	179.790	10210.000	79.807	0.000	82.454	-0.000	79.807	0.000	0.000	82.491	38.986	1.732	XOMR2_OWSG MWD+IFR1+MS
20100.000	90.000	179.790	10210.000	80.577	0.000	83.142	-0.000	80.577	0.000	0.000	83.179	39.046	1.713	XOMR2_OWSG MWD+IFR1+MS
20200.000	90.000	179.790	10210.000	81.347	0.000	83.832	-0.000	81.347	0.000	0.000	83.868	39.107	1.694	XOMR2_OWSG MWD+IFR1+MS
20300.000	90.000	179.790	10210.000	82.118	0.000	84.523	-0.000	82.118	0.000	0.000	84.559	39.168	1.675	XOMR2_OWSG MWD+IFR1+MS
20400.000	90.000	179.790	10210.000	82.888	0.000	85.215	-0.000	82.888	0.000	0.000	85.251	39.230	1.657	XOMR2_OWSG MWD+IFR1+MS
20500.000	90.000	179.790	10210.000	83.659	0.000	85.908	-0.000	83.659	0.000	0.000	85.944	39.292	1.639	XOMR2_OWSG MWD+IFR1+MS
20600.000	90.000	179.790	10210.000	84.431	0.000	86.603	-0.000	84.431	0.000	0.000	86.638	39.354	1.621	XOMR2_OWSG MWD+IFR1+MS
20700.000	90.000	179.790	10210.000	85.202	0.000	87.299	-0.000	85.202	0.000	0.000	87.334	39.417	1.604	XOMR2_OWSG MWD+IFR1+MS
20800.000	90.000	179.790	10210.000	85.974	0.000	87.996	-0.000	85.974	0.000	0.000	88.030	39.481	1.587	XOMR2_OWSG MWD+IFR1+MS
20900.000	90.000	179.790	10210.000	86.746	0.000	88.694	-0.000	86.746	0.000	0.000	88.728	39.545	1.570	XOMR2_OWSG MWD+IFR1+MS
21000.000	90.000	179.790	10210.000	87.518	0.000	89.393	-0.000	87.518	0.000	0.000	89.427	39.610	1.554	XOMR2_OWSG MWD+IFR1+MS
21100.000	90.000	179.790	10210.000	88.290	0.000	90.093	-0.000	88.290	0.000	0.000	90.127	39.675	1.538	XOMR2_OWSG MWD+IFR1+MS
21200.000	90.000	179.790	10210.000	89.063	0.000	90.794	-0.000	89.063	0.000	0.000	90.828	39.740	1.522	XOMR2_OWSG MWD+IFR1+MS
21300.000	90.000	179.790	10210.000	89.835	0.000	91.496	-0.000	89.835	0.000	0.000	91.530	39.806	1.506	XOMR2_OWSG MWD+IFR1+MS
21400.000	90.000	179.790	10210.000	90.609	0.000	92.200	-0.000	90.609	0.000	0.000	92.233	39.873	1.491	XOMR2_OWSG MWD+IFR1+MS

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21500.000	90.000	179.790	10210.000	91.382	0.000	92.904	-0.000	91.382	0.000	0.000	92.937	39.940	1.476	XOMR2_OWSG MWD+IFR1+MS
21600.000	90.000	179.790	10210.000	92.155	0.000	93.609	-0.000	92.155	0.000	0.000	93.642	40.007	1.461	XOMR2_OWSG MWD+IFR1+MS
21700.000	90.000	179.790	10210.000	92.929	0.000	94.315	-0.000	92.929	0.000	0.000	94.348	40.075	1.447	XOMR2_OWSG MWD+IFR1+MS
21800.000	90.000	179.790	10210.000	93.702	0.000	95.022	-0.000	93.702	0.000	0.000	95.054	40.143	1.433	XOMR2_OWSG MWD+IFR1+MS
21900.000	90.000	179.790	10210.000	94.476	0.000	95.730	-0.000	94.476	0.000	0.000	95.762	40.212	1.419	XOMR2_OWSG MWD+IFR1+MS
22000.000	90.000	179.790	10210.000	95.251	0.000	96.439	-0.000	95.251	0.000	0.000	96.471	40.281	1.405	XOMR2_OWSG MWD+IFR1+MS
22100.000	90.000	179.790	10210.000	96.025	0.000	97.148	-0.000	96.025	0.000	0.000	97.180	40.351	1.392	XOMR2_OWSG MWD+IFR1+MS
22200.000	90.000	179.790	10210.000	96.799	0.000	97.859	-0.000	96.799	0.000	0.000	97.890	40.422	1.378	XOMR2_OWSG MWD+IFR1+MS
22300.000	90.000	179.790	10210.000	97.574	0.000	98.570	-0.000	97.574	0.000	0.000	98.601	40.492	1.365	XOMR2_OWSG MWD+IFR1+MS
22400.000	90.000	179.790	10210.000	98.349	0.000	99.282	-0.000	98.349	0.000	0.000	99.313	40.563	1.352	XOMR2_OWSG MWD+IFR1+MS
22500.000	90.000	179.790	10210.000	99.124	0.000	99.995	-0.000	99.124	0.000	0.000	100.026	40.635	1.340	XOMR2_OWSG MWD+IFR1+MS
22600.000	90.000	179.790	10210.000	99.899	0.000	100.709	-0.000	99.899	0.000	0.000	100.739	40.707	1.327	XOMR2_OWSG MWD+IFR1+MS
22700.000	90.000	179.790	10210.000	100.674	0.000	101.423	-0.000	100.674	0.000	0.000	101.453	40.779	1.315	XOMR2_OWSG MWD+IFR1+MS
22800.000	90.000	179.790	10210.000	101.450	0.000	102.138	-0.000	101.450	0.000	0.000	102.168	40.852	1.303	XOMR2_OWSG MWD+IFR1+MS
22900.000	90.000	179.790	10210.000	102.225	0.000	102.854	-0.000	102.225	0.000	0.000	102.884	40.926	1.291	XOMR2_OWSG MWD+IFR1+MS
23000.000	90.000	179.790	10210.000	103.001	0.000	103.570	-0.000	103.001	0.000	0.000	103.600	41.000	1.280	XOMR2_OWSG MWD+IFR1+MS
23100.000	90.000	179.790	10210.000	103.777	0.000	104.287	-0.000	103.777	0.000	0.000	104.317	41.074	1.268	XOMR2_OWSG MWD+IFR1+MS
23200.000	90.000	179.790	10210.000	104.553	0.000	105.005	-0.000	104.553	0.000	0.000	105.034	41.149	1.257	XOMR2_OWSG MWD+IFR1+MS
23300.000	90.000	179.790	10210.000	105.329	0.000	105.724	-0.000	105.329	0.000	0.000	105.753	41.224	1.246	XOMR2_OWSG MWD+IFR1+MS
23400.000	90.000	179.790	10210.000	106.105	0.000	106.443	-0.000	106.105	0.000	0.000	106.472	41.299	1.235	XOMR2_OWSG MWD+IFR1+MS

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23500.000	90.000	179.790	10210.000	106.881	0.000	107.163	-0.000	106.881	0.000	0.000	107.191	41.375	1.224	XOMR2_OWSG MWD+IFR1+MS
23600.000	90.000	179.790	10210.000	107.658	0.000	107.883	-0.000	107.658	0.000	0.000	107.911	41.452	1.213	XOMR2_OWSG MWD+IFR1+MS
23700.000	90.000	179.790	10210.000	108.434	0.000	108.604	-0.000	108.434	0.000	0.000	108.632	41.528	1.203	XOMR2_OWSG MWD+IFR1+MS
23727.732	90.000	179.790	10210.000	108.650	0.000	108.804	-0.000	108.650	0.000	0.000	108.832	41.550	1.200	XOMR2_OWSG MWD+IFR1+MS
23777.729	90.000	179.790	10210.000	109.038	0.000	109.164	-0.000	109.038	0.000	0.000	109.192	41.588	1.195	XOMR2_OWSG MWD+IFR1+MS

Plan Targets		Poker Lake Unit 28 BS 406H											
Target Name		Measured Depth			Grid Northing			Grid Easting			TVD MSL Target Shape		
		(ft)			(ft)			(ft)			(ft)		
FTP 16		10648.93			400863.80			672057.10			6841.00 CIRCLE		
LTP 16		23727.73			387785.10			672105.10			6841.00 CIRCLE		
BHL 10		23777.85			387735.10			672105.40			6841.00 CIRCLE		



HB E0000479

CACTUS WELLHEAD LLC

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead  
With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head  
and 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers

**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



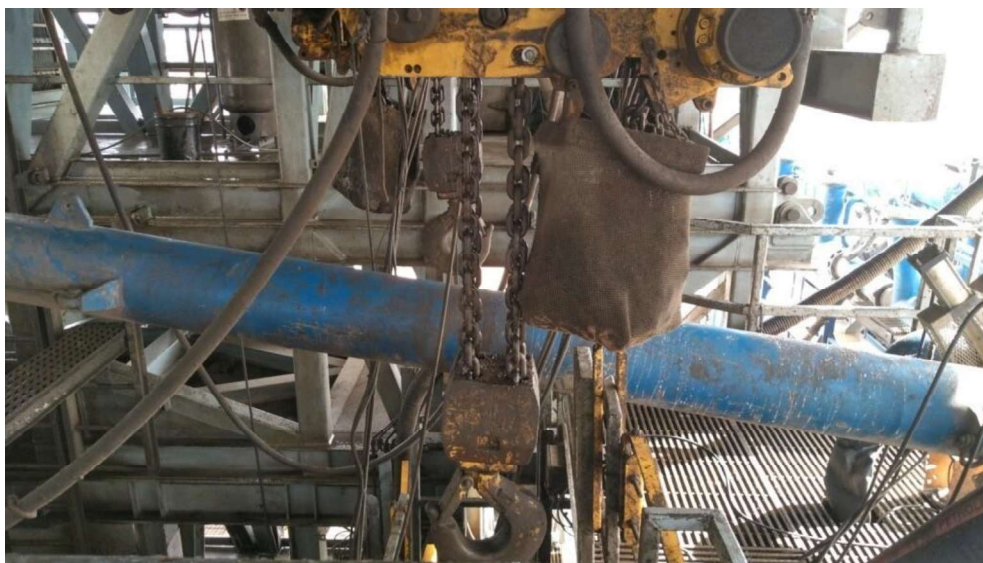


Figure 2: BOP Winch System

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 3170 recognizes 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.

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API STANDARD 53

Table C.4—Initial Pressure Testing, Surface BOP Stacks

Component to be Pressure Tested	Pressure Test—Low Pressure <sup>a,c</sup> psig (MPa)	Pressure Test—High Pressure <sup>a,c</sup>	
		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>b,d</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 chokes <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

<sup>a</sup> Pressure test evaluation periods shall be a minimum of five minutes.

No visible leaks.

The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

<sup>b</sup> Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

<sup>c</sup> For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

<sup>d</sup> For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

<sup>e</sup> Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

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 0and 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.

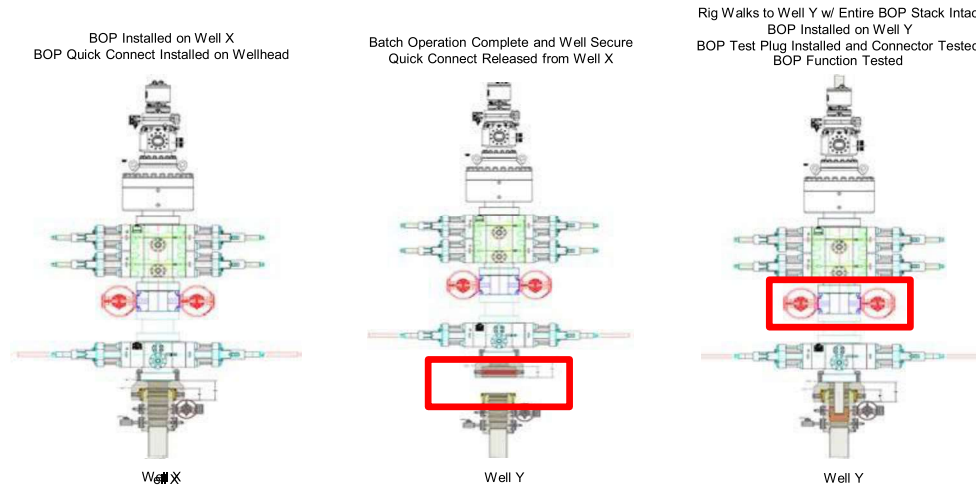
### **Procedures**

1. 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*



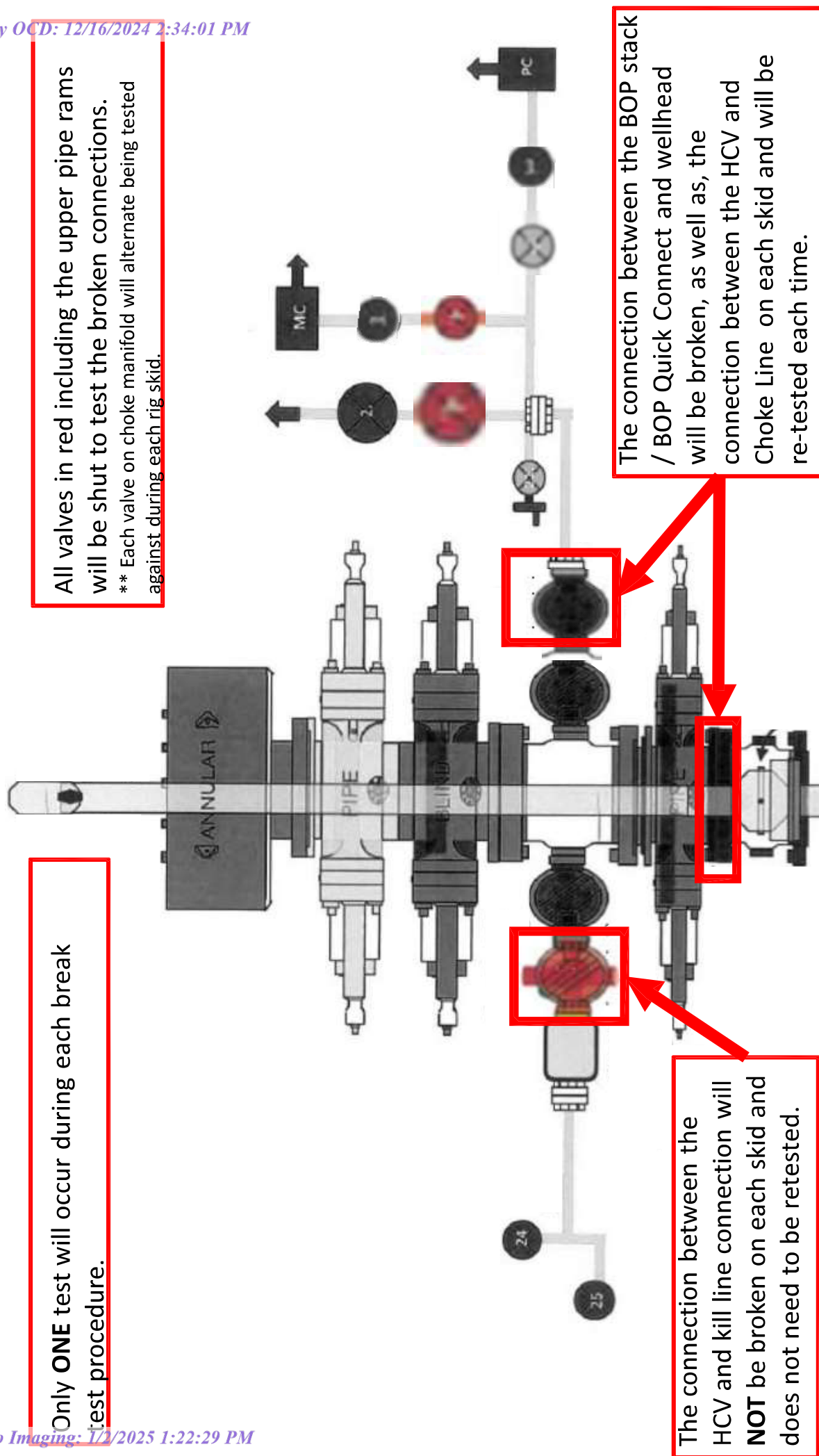
### Summary

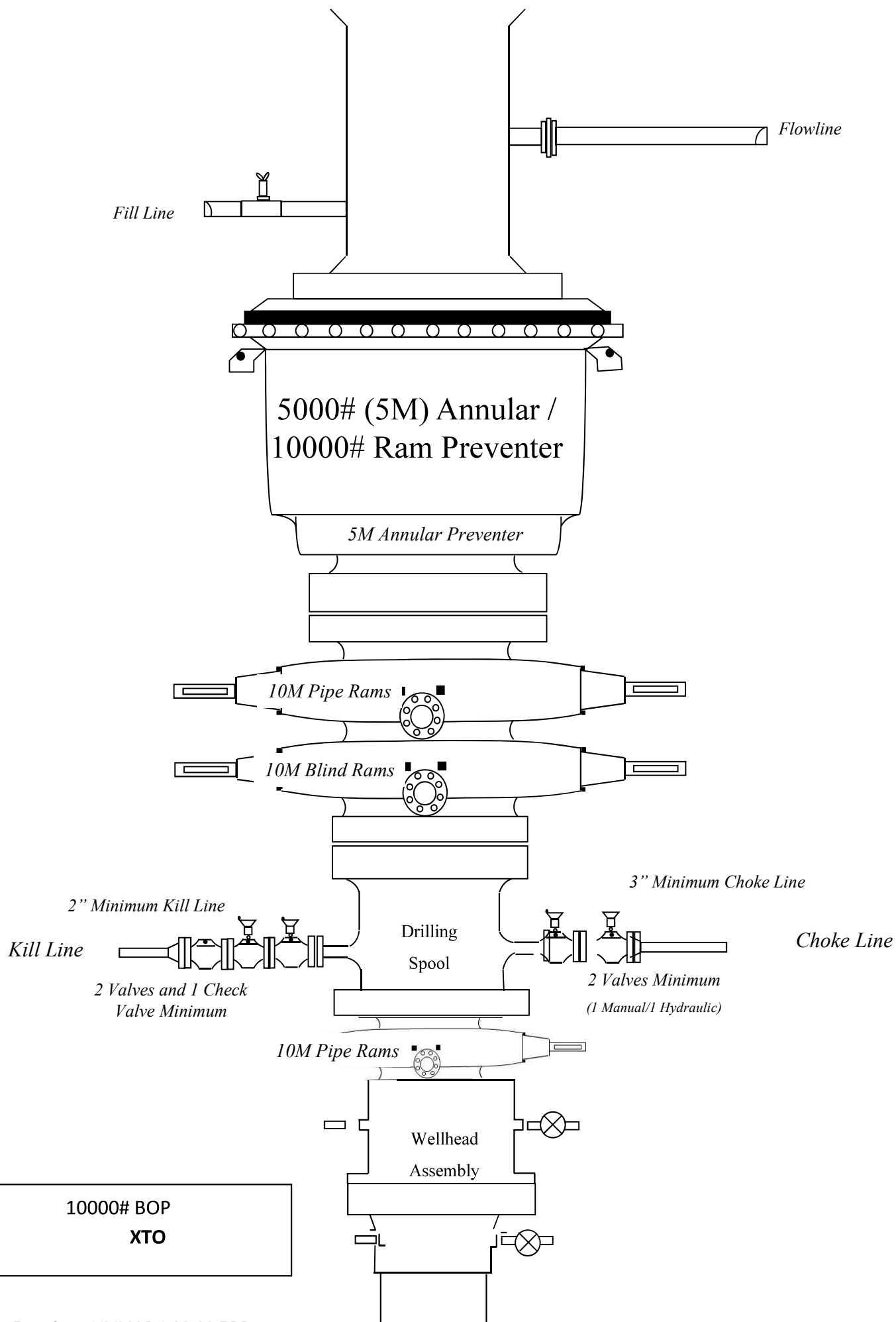
A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required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

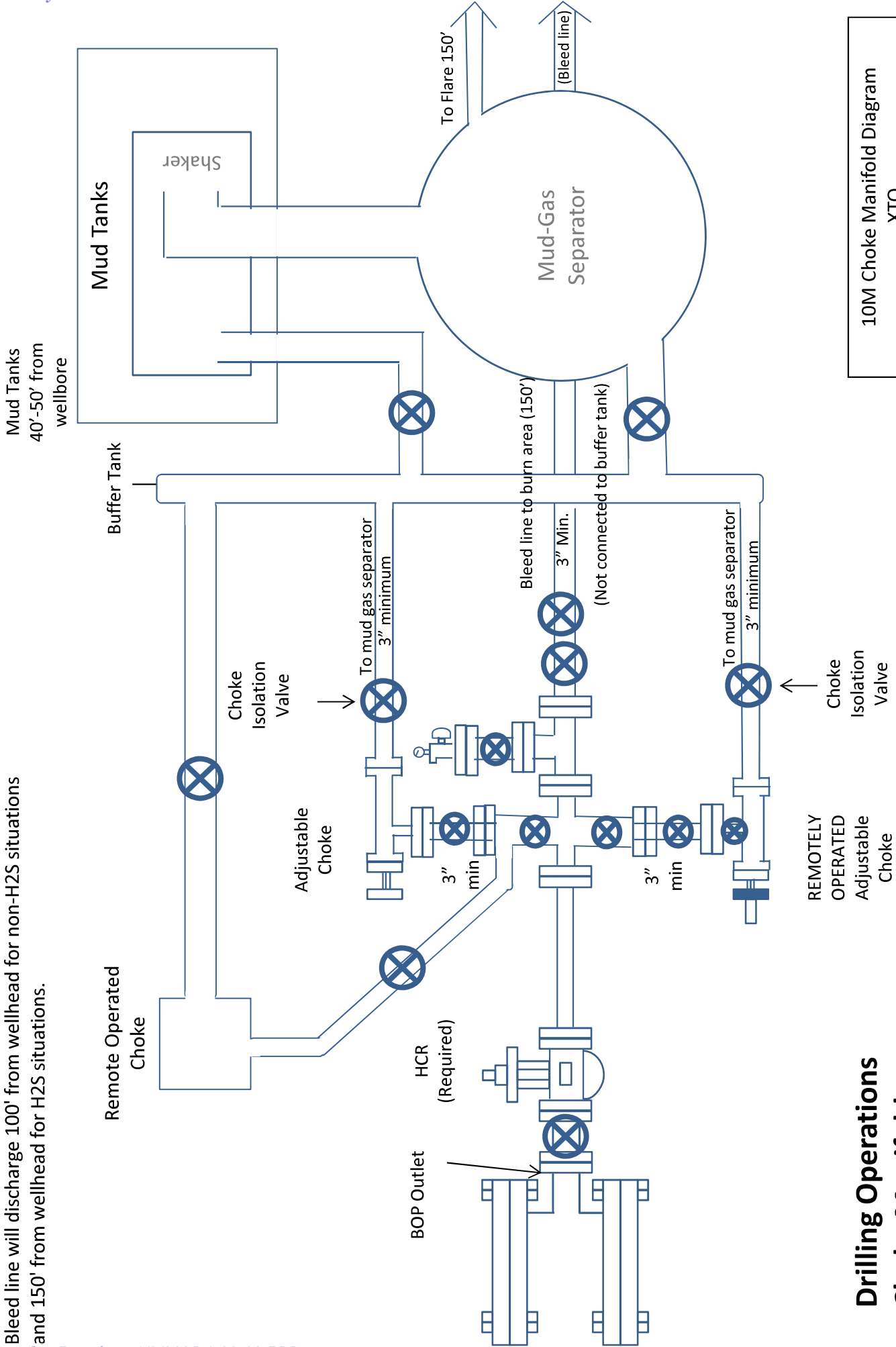
Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met:

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.





Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



10M Choke Manifold Diagram  
XTO

**Drilling Operations  
Choke Manifold  
10M Service**



U. S. Steel Tubular Products

5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®

11/8/2023 1:08:50 PM



MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ®		--
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-FREEDOM HTQ®		--
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	--
SECTION AREA	Pipe	USS-FREEDOM HTQ®		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	Pipe	USS-FREEDOM HTQ®		--
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	lb	--
Reference Length [4]	--	21,370	ft	--
Maximum Uniaxial Bend Rating [2]	--	91.7	deg/100 ft	--
MAKE-UP DATA	Pipe	USS-FREEDOM HTQ®		--
Make-Up Loss	--	4.13	in.	--
Minimum Make-Up Torque [3]	--	15,000	ft-lb	--
Maximum Make-Up Torque [3]	--	21,000	ft-lb	--
Maximum Operating Torque[3]	--	29,500	ft-lb	--

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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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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.

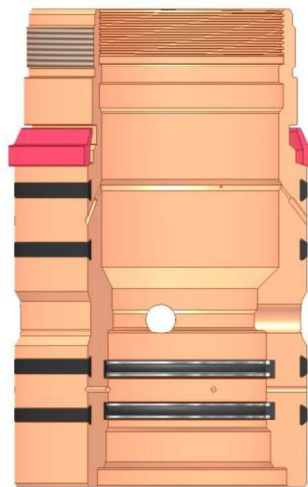
**1. Cement Program**

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

**2. Offline Cementing Procedure**

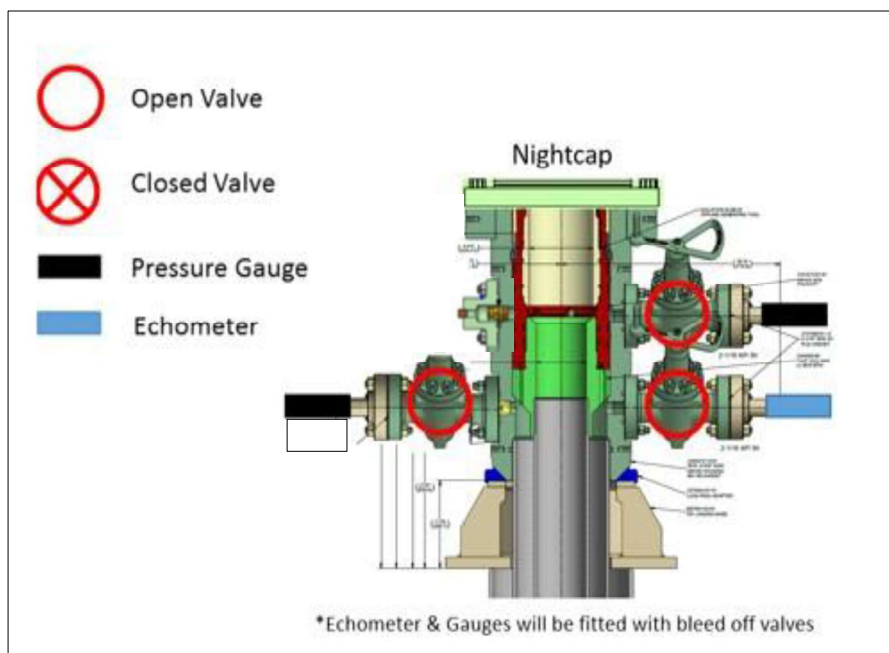
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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 nipped 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

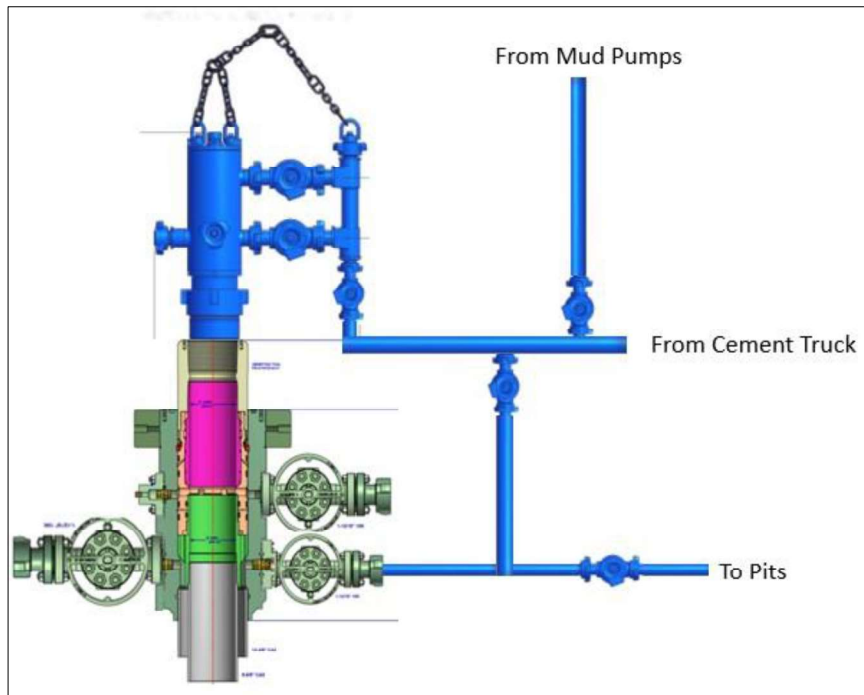
## XTO Permian Operating, LLC Offline Cementing Variance Request



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 nipping 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:

1. 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).
  - b. 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 nipped 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) P110 RY USS-TALON HTQ™ RD

11/29/2021 4:16:04 PM

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	lb	--
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-lb	[4]
Maximum Make-Up Torque	--	20,000	ft-lb	[4]
Maximum Operating Torque	--	39,500	ft-lb	[4]

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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  
INSTALLED 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.

**CUSTOMER:** 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:***F. OSMOS***TITLE:****QUALITY ASSURANCE****DATE:****1/25/2024**



H3-15/16

1/25/2024 11:48:06 AM

# TEST REPORT

**CUSTOMER**

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

**TEST OBJECT**

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

**TEST INFORMATION**

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K

Part number:

Description:

Fitting 2: 3.0 x 4-1/16 10K

Part number:

Description:

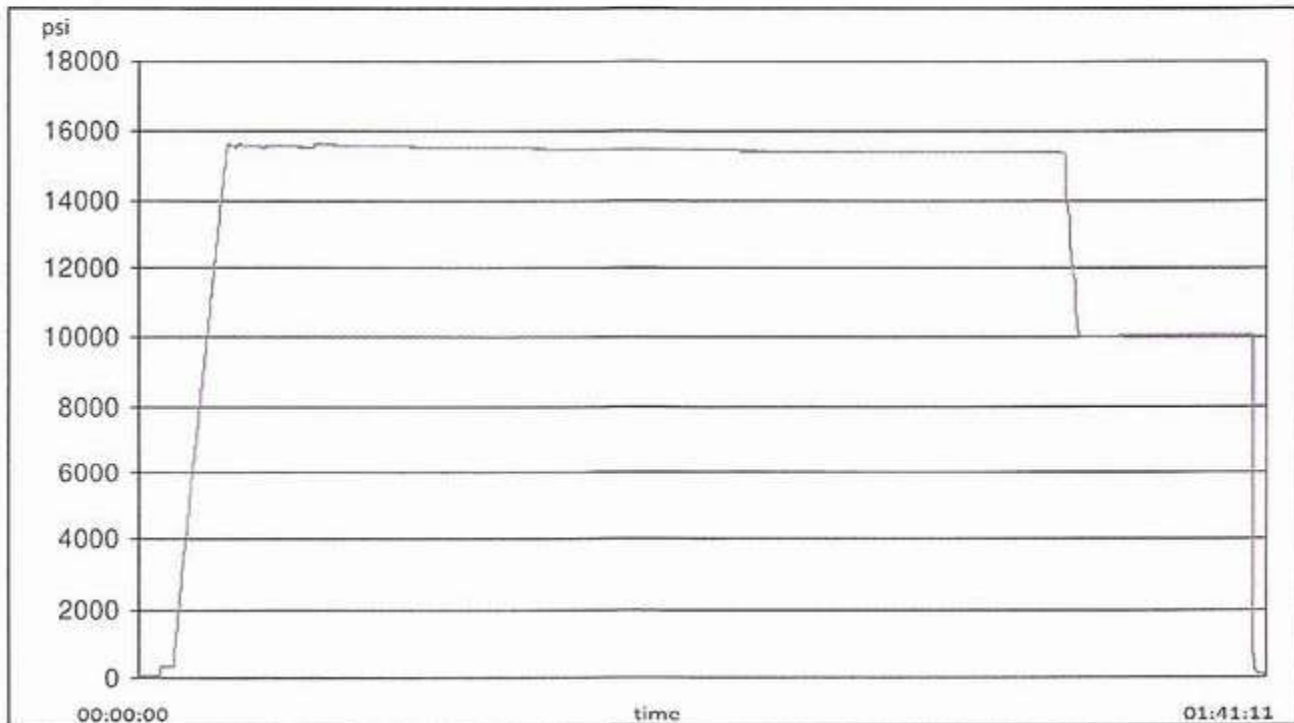
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/1b

1/25/2024 11:48:06 AM

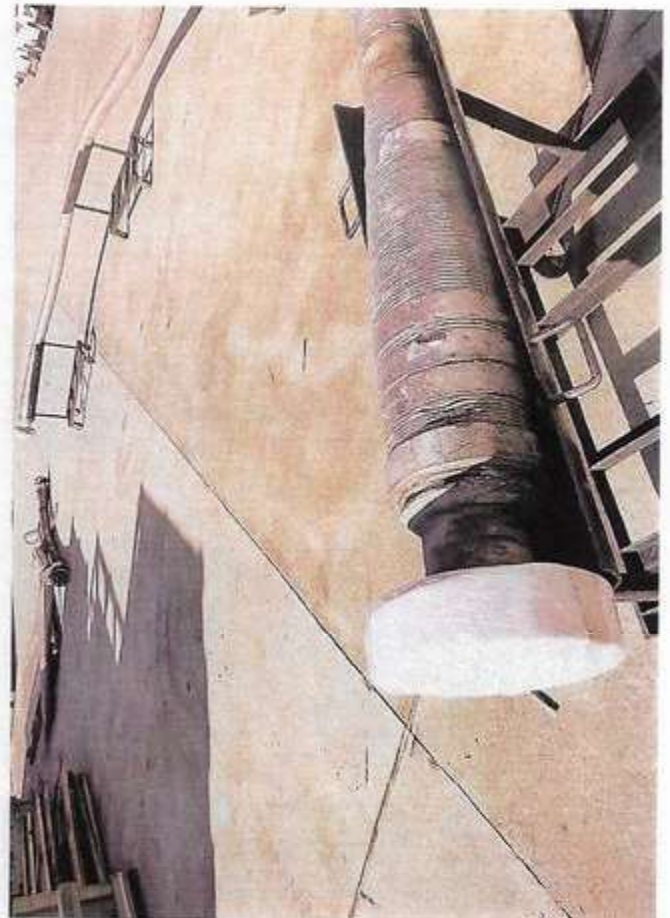
## TEST REPORT

### GAUGE TRACEABILITY

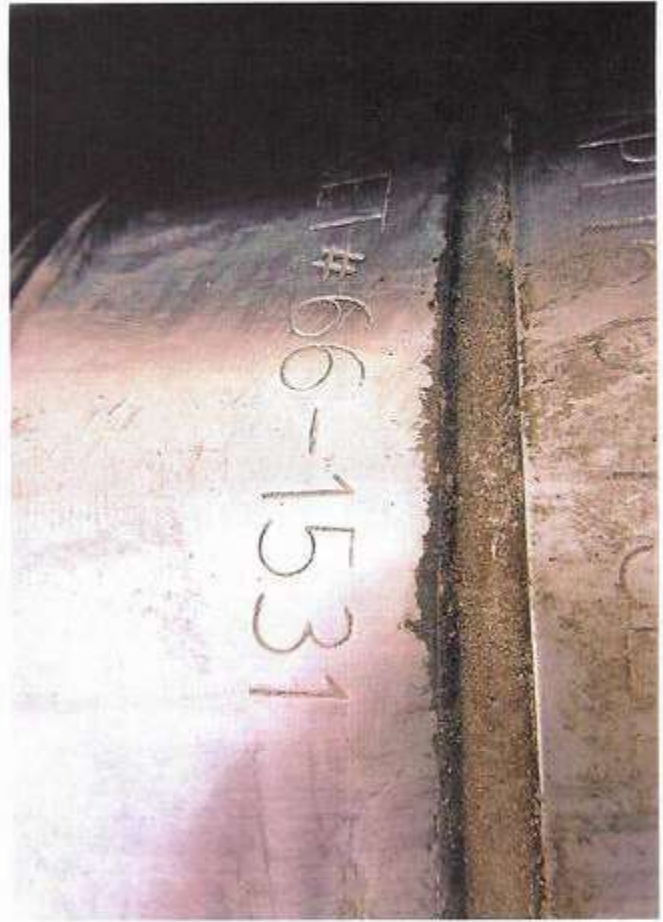
Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

### Comment











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<https://www.emnrd.nm.gov/oed/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 412452

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 412452
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

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