

Well Name: POKER LAKE UNIT 15 TWR	Well Location: T24S / R31E / SEC 22 / NENW / 32.208728 / -103.766951	County or Parish/State: EDDY / NM
Well Number: 213H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM0506A	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number: 3001554180	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2823628

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 11/20/2024

Time Sundry Submitted: 12:43

Date proposed operation will begin: 12/04/2024

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, Proposed total Depth, and Pool. There is no new surface disturbance. FROM: TO: SHL: 501' FNL & 2252' FWL OF SECTION 22-T24S-R31E 521' FNL & 2252' FWL OF SECTION 22-T24S-R31E KOP: 501' FNL & 2252' FWL OF SECTION 22-T24S-R31E 616' FSL & 2320' FEL OF SECTION 15-T24S-R31E FTP: 330' FNL & 1870' FWL OF SECTION 22-T24S-R31E 100' FNL & 2320' FEL OF SECTION 22-T24S-R31E LTP: 2540' FNL & 1870' FWL OF SECTION 34-T24S-R31E 100' FSL & 2320' FEL OF SECTION 27-T24S-R31E BHL: 2590' FNL & 1870' FWL OF SECTION 34-T24S-R31E 50' FSL & 2320' FEL OF SECTION 27-T24S-R31E The proposed total depth is changing from 24032' MD; 10863' TVD to 20539' MD; 9543' TVD. The pool code is changing from Wildcat; Bone Spring (96403) to Cotton Draw; Bone Spring, South (96546). See attached Drilling Plan for updated cement and casing program. A saturated salt brine will be utilized while drilling through the salt formations.

NOI Attachments

Procedure Description

PLU_15_TWR_213H_Sundry_Docs_Submitted_20241210091821.pdf

Well Name: POKER LAKE UNIT 15
TRW

Well Location: T24S / R31E / SEC 22 /
NENW / 32.208728 / -103.766951

County or Parish/State: EDDY /
NM

Well Number: 213H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0506A

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number:
NMNM71016X

US Well Number: 3001554180

Operator: XTO PERMIAN OPERATING
LLC

Conditions of Approval

Additional

PLU_15_TRW_213H_COA_20241211090415.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 10, 2024 09:18 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: 02/04/2025

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
SUNDRY NOTICES AND REPORTS ON WELLS <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. NMNM0506A
		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 15 TWR/213H
2. Name of Operator XTO PERMIAN OPERATING LLC		9. API Well No. 3001554180
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 Wildcat; Bone Spring
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SEC 22/T24S/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 recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be 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 recompleation 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, Proposed total Depth, and Pool. There is no new surface disturbance.

FROM: TO:
SHL: 501' FNL & 2252' FWL OF SECTION 22-T24S-R31E 521' FNL & 2252' FWL OF SECTION 22-T24S-R31E
KOP: 501 FNL & 2252 FWL OF SECTION 22-T24S-R31E 616 FSL & 2320 FEL OF SECTION 15-T24S-R31E
FTP: 330' FNL & 1870' FWL OF SECTION 22-T24S-R31E 100' FNL & 2320' FEL OF SECTION 22-T24S-R31E
LTP: 2540' FNL & 1870' FWL OF SECTION 34-T24S-R31E 100' FSL & 2320' FEL OF SECTION 27-T24S-R31E
BHL: 2590' FNL & 1870' FWL OF SECTION 34-T24S-R31E 50' FSL & 2320' FEL OF SECTION 27-T24S-R31E

The proposed total depth is changing from 24032 MD; 10863 TVD to 20539 MD; 9543 TVD.

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 12/10/2024

THE SPACE FOR FEDERAL OR STATE OFICE USE		
Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 02/04/2025
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

The pool code is changing from Wildcat; Bone Spring (96403) to Cotton Draw; Bone Spring, South (96546).

See attached Drilling Plan for updated cement and casing program.

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

Location of Well

0. SHL: NENW / 501 FNL / 2252 FWL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.208728 / LONG: -103.766951 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 330 FNL / 1870 FWL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.209196 / LONG: -103.768186 (TVD: 10841 feet, MD: 11300 feet)

PPP: NENW / 330 FNL / 1870 FWL / TWSP: 24S / RANGE: 31E / SECTION: 27 / LAT: 32.190942 / LONG: -103.759258 (TVD: 10850 feet, MD: 16600 feet)

BHL: SENW / 2590 FNL / 1870 FWL / TWSP: 24S / RANGE: 31E / SECTION: 34 / LAT: 32.173946 / LONG: -103.768125 (TVD: 10863 feet, MD: 24032 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	NMNM0506A
LOCATION:	Sec. 22, T.24 S, R 31 E
COUNTY:	Eddy County, New Mexico ▼
WELL NAME & NO.:	Poker Lake Unit 15 TWR 231H
SURFACE HOLE FOOTAGE:	521'/N & 2252'/W
BOTTOM HOLE FOOTAGE:	50'/S & 2320'/E

*Changes approved through engineering via **Sundry 2823628** on 12-11-2024_. Any previous COAs not addressed within the updated COAs still apply.*

COA

H ₂ S	<input checked="" type="radio"/> No <input type="radio"/> Yes			
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-Q	<input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
	Choose an option (including blank option.)			
Cave / Karst	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
Additional Language	<input checked="" type="checkbox"/> Flex Hose	<input checked="" 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	

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **775** 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 7008'**
 - 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 Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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.

Engineer may elect to vary this language. Speak with Chris about implementing changes and whether that change seems reasonable.

Casing Clearance

String does not meet 0.422" clearance requirement per 43 CFR 3172. Cement tieback requirement increased 100' for Production casing tieback. Operator may contact approving engineer to discuss changing casing set depth or grade to meet clearance requirement.

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 2nd 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 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. 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 12/11/2024
575-234-5998 / zstevens@blm.gov

C-102 Submit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024
	Submittal Type:	<input type="checkbox"/> Initial Submittal
		<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled

WELL LOCATION INFORMATION

API Number 30-015- 54180	Pool Code 96546	Pool Name COTTON DRAW; BONE SPRING, SOUTH
Property Code	Property Name POKER LAKE UNIT 15 TWR	Well Number 213H
OGRID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC.	Ground Level Elevation 3,532'
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

Surface Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	22	24S	31E		521 FNL	2,252 FWL	32.208673	-103.766951	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	27	24S	31E		50 FSL	2,320 FEL	32.181206	-103.764613	EDDY

Dedicated Acres 640.00	Infill or Defining Well INFILL	Defining Well API 30-015-54186	Overlapping Spacing Unit (Y/N) N	Consolidation Code U
Order Numbers.			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	15	24S	31E		616 FSL	2,320 FEL	32.211801	-103.764648	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	22	24S	31E		100 FNL	2,320 FEL	32.209832	-103.764646	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	27	24S	31E		100 FSL	2,320 FEL	32.181343	-103.764613	EDDY

Unitized Area of Area of Interest NMNM105422429	Spacing Unit Type: <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Elevation 3,532'
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OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of heretofore entered by the division.

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 information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Samantha Weis 11/15/2024
Signature Date

Samantha Weis
Printed Name

samantha.r.bartnik@exxonmobil.com
Email Address

SURVEYOR CERTIFICATIONS

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

[Signature]
Signature and Seal of Professional Surveyor



MARK DILLON HARP 23786 10/31/2024
Certificate Number Date of Survey

DN

618,013003.14-20

Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or 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 a 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 and Last Take Point) that is closest to any outer boundary of the tract.

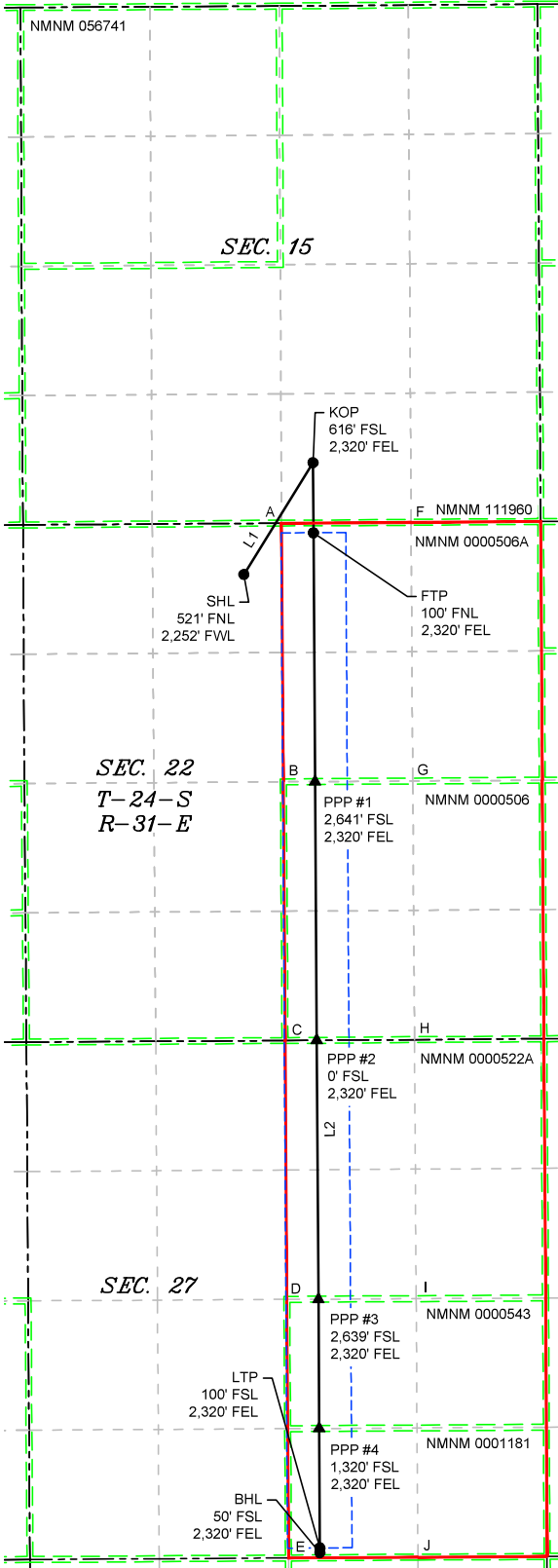
Surveyor shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	031°44'30"	1,342.24'
L2	179°38'29"	11,130.23'

LEGEND

- SECTION LINE
- PROPOSED WELL BORE
- NEW MEXICO MINERAL LEASE
- 330' BUFFER
- ALLOCATION AREA

COORDINATE TABLE					
SHL (NAD 83 NME)			SHL (NAD 27 NME)		
Y =	440,110.9	N	Y =	440,052.1	N
X =	716,511.7	E	X =	675,327.7	E
LAT. =	32.208673	°N	LAT. =	32.208549	°N
LONG. =	103.766951	°W	LONG. =	103.766468	°W
KOP (NAD 83 NME)			KOP (NAD 27 NME)		
Y =	441,252.4	N	Y =	441,193.5	N
X =	717,217.9	E	X =	676,033.9	E
LAT. =	32.211801	°N	LAT. =	32.211677	°N
LONG. =	103.764648	°W	LONG. =	103.764165	°W
FTP (NAD 83 NME)			FTP (NAD 27 NME)		
Y =	440,536.3	N	Y =	440,477.4	N
X =	717,222.3	E	X =	676,038.3	E
LAT. =	32.209832	°N	LAT. =	32.209708	°N
LONG. =	103.764646	°W	LONG. =	103.764163	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	437,995.0	N	Y =	437,936.3	N
X =	717,238.2	E	X =	676,054.1	E
LAT. =	32.202847	°N	LAT. =	32.202723	°N
LONG. =	103.764630	°W	LONG. =	103.764155	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 27 NME)		
Y =	435,354.4	N	Y =	435,295.7	N
X =	717,254.7	E	X =	676,070.4	E
LAT. =	32.195588	°N	LAT. =	32.195464	°N
LONG. =	103.764630	°W	LONG. =	103.764148	°W
PPP #3 (NAD 83 NME)			PPP #3 (NAD 27 NME)		
Y =	432,711.5	N	Y =	432,652.9	N
X =	717,272.0	E	X =	676,087.7	E
LAT. =	32.188323	°N	LAT. =	32.188199	°N
LONG. =	103.764619	°W	LONG. =	103.764137	°W
PPP #4 (NAD 83 NME)			PPP #4 (NAD 27 NME)		
Y =	431,391.9	N	Y =	431,333.3	N
X =	717,279.9	E	X =	676,095.5	E
LAT. =	32.184695	°N	LAT. =	32.184572	°N
LONG. =	103.764616	°W	LONG. =	103.764134	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	430,172.4	N	Y =	430,113.8	N
X =	717,287.3	E	X =	676,102.8	E
LAT. =	32.181343	°N	LAT. =	32.181219	°N
LONG. =	103.764613	°W	LONG. =	103.764132	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	430,122.4	N	Y =	430,063.8	N
X =	717,287.6	E	X =	676,103.1	E
LAT. =	32.181206	°N	LAT. =	32.181082	°N
LONG. =	103.764613	°W	LONG. =	103.764132	°W
CORNER COORDINATES (NAD 83 NME)					
A - Y =	440,634.3	N	A - X =	716,896.1	E
B - Y =	437,992.9	N	B - X =	716,914.3	E
C - Y =	435,352.3	N	C - X =	716,932.4	E
D - Y =	432,709.7	N	D - X =	716,950.0	E
E - Y =	430,070.5	N	E - X =	716,967.5	E
F - Y =	440,642.4	N	F - X =	718,218.9	E
G - Y =	438,001.6	N	G - X =	718,236.2	E
H - Y =	435,361.1	N	H - X =	718,253.7	E
I - Y =	432,717.2	N	I - X =	718,271.0	E
J - Y =	430,078.3	N	J - X =	718,287.6	E
CORNER COORDINATES (NAD 27 NME)					
A - Y =	440,575.5	N	A - X =	675,712.1	E
B - Y =	437,934.1	N	B - X =	675,730.1	E
C - Y =	435,293.6	N	C - X =	675,748.2	E
D - Y =	432,651.0	N	D - X =	675,765.7	E
E - Y =	430,011.9	N	E - X =	675,783.0	E
F - Y =	440,583.6	N	F - X =	677,034.8	E
G - Y =	437,942.8	N	G - X =	677,052.1	E
H - Y =	435,302.4	N	H - X =	677,069.4	E
I - Y =	432,658.6	N	I - X =	677,086.6	E
J - Y =	430,019.7	N	J - X =	677,103.2	E



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

XTO Energy Inc.
POKER LAKE UNIT 15 TWR 213H
Projected TD: 20539.45' MD / 9543' TVD
SHL: 521' FNL & 2252' FWL , Section 22, T24S, R31E
BHL: 50' FSL & 2320' FEL , Section 27, T24S, 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	656'	Water
Top of Salt	992'	Water
Base of Salt	4244'	Water
Delaware	4456'	Water
Brushy Canyon	7023'	Water/Oil/Gas
Bone Spring	8304'	Water
Avalon	8410'	Water/Oil/Gas
1st Bone Spring	9042'	Water/Oil/Gas
Target/Land Curve	9543'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 756' (236' 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 8800.67' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 20539.45 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8500.67 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 756'	9.625	40	J-55	BTC	New	1.50	8.33	20.83
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	4.00	2.57	2.13
8.75	4000' – 8800.67'	7.625	29.7	HC L-80	Flush Joint	New	2.91	2.16	2.85
6.75	0' – 8700.67'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	2.73	2.33
6.75	8700.67' - 20539.45'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	2.49	2.33

· 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 +/- 756'

Lead: 150 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft³/sx, 10.13 gal/sx water)

Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 8800.67'

1st Stage

Optional Lead: 380 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 160 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 7023

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

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft³/sx, 9.61 gal/sx water)

Tail: 790 sxs Class C (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

Top of Cement: 0

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

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (7023') 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 Semi-Flush / Talon, RY P-110 casing to be set at +/- 20539.45'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 8500.67 feet

Tail: 820 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 9000.67 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 casing, the blow out preventer equipment (BOP) will consist of 5M Hydril and 10M 3-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. .

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' - 756'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
756' - 4456'	8.75	Saturated brine	10.0-10.5	30-32	NC	Fully saturated salt across salado / salt
4456' - 8800.67'	8.75	Brine or Direct Emulsion	10-10.5	30-32	NC	Depending on well conditions
8800.67' - 20539.45'	6.75	OBM	9-9.5	50-60	NC - 20	N/A

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

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

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 160 to 180 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

10. Anticipated Starting Date and Duration of Operations

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

Well Plan Report - PLU 15 Twin Wells Ranch-213H

Measured Depth: 20539.45 ft
TVD RKB: 9543.00 ft
Location
Cartographic Reference System: New Mexico East - NAD 27
Northing: 440052.10 ft
Easting: 675327.70 ft
RKB: 3564.00 ft
Ground Level: 3532.00 ft
North Reference: Grid
Convergence Angle: 0.30 Deg

Site: Pad 2
Slot: PLU 15 Twin Wells Ranch-213H

Plan Sections PLU 15 Twin Wells Ranch-213H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build		Turn		Dogleg	
						Rate (Deg/100ft)	Rate (Deg/100ft)	Rate (Deg/100ft)	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	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1878.58	15.57	31.74	1869.03	89.42	55.32	2.00	0.00	0.00	0.00	2.00	2.00
6095.29	15.57	31.74	5930.97	1052.06	650.82	0.00	0.00	0.00	0.00	0.00	0.00
6873.87	0.00	0.00	6700.00	1141.48	706.14	-2.00	0.00	0.00	0.00	2.00	2.00
9000.67	0.00	0.00	8826.80	1141.48	706.14	0.00	0.00	0.00	0.00	0.00	0.00
10125.67	90.00	179.64	9543.00	425.30	710.60	8.00	0.00	0.00	0.00	8.00	FTP 12
20489.47	90.00	179.64	9543.00	-9938.30	775.10	0.00	0.00	0.00	0.00	0.00	LTP 12
20539.45	90.00	179.64	9543.00	-9988.28	775.41	0.00	0.00	0.00	0.00	0.00	BHL 12

Position Uncertainty PLU 15 Twin Wells Ranch-213H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	of Bias (ft)	Error (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	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.310	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.326	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.348	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.375	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.408	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.446	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.488	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.535	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.585	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.639	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	31.742	1199.980	5.277	0.000	4.235	0.000	2.696	0.000	0.000	5.301	4.208	130.272	MWD+IFR1+MS
1300.000	4.000	31.742	1299.838	6.028	0.000	4.624	0.000	2.756	0.000	0.000	6.081	4.567	132.121	MWD+IFR1+MS
1400.000	6.000	31.742	1399.452	6.708	0.000	5.008	0.000	2.822	0.000	0.000	6.790	4.924	132.978	MWD+IFR1+MS
1500.000	8.000	31.742	1498.702	7.334	0.000	5.388	0.000	2.895	0.000	0.000	7.447	5.281	133.465	MWD+IFR1+MS
1600.000	10.000	31.742	1597.465	7.919	0.000	5.766	0.000	2.979	0.000	0.000	8.063	5.639	133.778	MWD+IFR1+MS
1700.000	12.000	31.742	1695.623	8.469	0.000	6.142	0.000	3.073	0.000	0.000	8.647	5.998	133.999	MWD+IFR1+MS
1800.000	14.000	31.742	1793.055	8.990	0.000	6.520	0.000	3.181	0.000	0.000	9.203	6.361	134.167	MWD+IFR1+MS
1878.581	15.572	31.742	1869.032	9.297	0.000	6.810	0.000	3.259	0.000	0.000	9.542	6.649	134.191	MWD+IFR1+MS
1900.000	15.572	31.742	1889.665	9.355	0.000	6.886	0.000	3.272	0.000	0.000	9.599	6.727	134.159	MWD+IFR1+MS
2000.000	15.572	31.742	1985.994	9.628	0.000	7.254	0.000	3.359	0.000	0.000	9.859	7.103	134.182	MWD+IFR1+MS
2100.000	15.572	31.742	2082.324	9.921	0.000	7.641	0.000	3.453	0.000	0.000	10.144	7.491	134.453	MWD+IFR1+MS
2200.000	15.572	31.742	2178.653	10.222	0.000	8.029	0.000	3.550	0.000	0.000	10.435	7.881	134.723	MWD+IFR1+MS
2300.000	15.572	31.742	2274.983	10.530	0.000	8.420	0.000	3.651	0.000	0.000	10.733	8.273	134.992	MWD+IFR1+MS
2400.000	15.572	31.742	2371.312	10.844	0.000	8.812	0.000	3.756	0.000	0.000	11.036	8.666	-44.738	MWD+IFR1+MS
2500.000	15.572	31.742	2467.642	11.165	0.000	9.205	0.000	3.863	0.000	0.000	11.345	9.060	-44.469	MWD+IFR1+MS
2600.000	15.572	31.742	2563.971	11.490	0.000	9.599	0.000	3.973	0.000	0.000	11.659	9.455	-44.198	MWD+IFR1+MS
2700.000	15.572	31.742	2660.301	11.821	0.000	9.994	0.000	4.086	0.000	0.000	11.978	9.851	-43.926	MWD+IFR1+MS
2800.000	15.572	31.742	2756.631	12.156	0.000	10.390	0.000	4.201	0.000	0.000	12.301	10.248	-43.653	MWD+IFR1+MS
2900.000	15.572	31.742	2852.960	12.496	0.000	10.787	0.000	4.318	0.000	0.000	12.628	10.645	-43.378	MWD+IFR1+MS

3000.000	15.572	31.742	2949.290	12.839	0.000	11.185	0.000	4.438	0.000	0.000	12.959	11.044	-43.100	MWD+IFR1+MS
3100.000	15.572	31.742	3045.619	13.186	0.000	11.583	0.000	4.560	0.000	0.000	13.293	11.442	-42.819	MWD+IFR1+MS
3200.000	15.572	31.742	3141.949	13.536	0.000	11.982	0.000	4.683	0.000	0.000	13.630	11.842	-42.535	MWD+IFR1+MS
3300.000	15.572	31.742	3238.278	13.889	0.000	12.381	0.000	4.809	0.000	0.000	13.970	12.241	-42.247	MWD+IFR1+MS
3400.000	15.572	31.742	3334.608	14.246	0.000	12.781	0.000	4.937	0.000	0.000	14.312	12.642	-41.955	MWD+IFR1+MS
3500.000	15.572	31.742	3430.938	14.604	0.000	13.181	0.000	5.066	0.000	0.000	14.658	13.042	-41.659	MWD+IFR1+MS
3600.000	15.572	31.742	3527.267	14.965	0.000	13.582	0.000	5.197	0.000	0.000	15.005	13.443	-41.356	MWD+IFR1+MS
3700.000	15.572	31.742	3623.597	15.328	0.000	13.983	0.000	5.329	0.000	0.000	15.355	13.844	-41.048	MWD+IFR1+MS
3800.000	15.572	31.742	3719.926	15.694	0.000	14.384	0.000	5.464	0.000	0.000	15.707	14.246	-40.734	MWD+IFR1+MS
3900.000	15.572	31.742	3816.256	16.061	0.000	14.786	0.000	5.599	0.000	0.000	16.061	14.647	-40.413	MWD+IFR1+MS
4000.000	15.572	31.742	3912.585	16.430	0.000	15.188	0.000	5.737	0.000	0.000	16.416	15.049	-40.084	MWD+IFR1+MS
4100.000	15.572	31.742	4008.915	16.801	0.000	15.590	0.000	5.876	0.000	0.000	16.774	15.451	-39.747	MWD+IFR1+MS
4200.000	15.572	31.742	4105.245	17.174	0.000	15.992	0.000	6.016	0.000	0.000	17.133	15.854	-39.400	MWD+IFR1+MS
4300.000	15.572	31.742	4201.574	17.548	0.000	16.394	0.000	6.158	0.000	0.000	17.493	16.256	-39.044	MWD+IFR1+MS
4400.000	15.572	31.742	4297.904	17.923	0.000	16.797	0.000	6.301	0.000	0.000	17.855	16.659	-38.678	MWD+IFR1+MS
4500.000	15.572	31.742	4394.233	18.299	0.000	17.200	0.000	6.446	0.000	0.000	18.218	17.061	-38.300	MWD+IFR1+MS
4600.000	15.572	31.742	4490.563	18.677	0.000	17.603	0.000	6.592	0.000	0.000	18.583	17.464	-37.909	MWD+IFR1+MS
4700.000	15.572	31.742	4586.892	19.056	0.000	18.006	0.000	6.740	0.000	0.000	18.948	17.867	-37.505	MWD+IFR1+MS
4800.000	15.572	31.742	4683.222	19.436	0.000	18.410	0.000	6.889	0.000	0.000	19.315	18.270	-37.087	MWD+IFR1+MS
4900.000	15.572	31.742	4779.551	19.818	0.000	18.813	0.000	7.040	0.000	0.000	19.683	18.673	-36.653	MWD+IFR1+MS
5000.000	15.572	31.742	4875.881	20.200	0.000	19.217	0.000	7.193	0.000	0.000	20.052	19.077	-36.203	MWD+IFR1+MS
5100.000	15.572	31.742	4972.211	20.583	0.000	19.621	0.000	7.346	0.000	0.000	20.422	19.480	-35.734	MWD+IFR1+MS
5200.000	15.572	31.742	5068.540	20.966	0.000	20.025	0.000	7.502	0.000	0.000	20.793	19.883	-35.246	MWD+IFR1+MS
5300.000	15.572	31.742	5164.870	21.351	0.000	20.429	0.000	7.659	0.000	0.000	21.165	20.286	-34.737	MWD+IFR1+MS
5400.000	15.572	31.742	5261.199	21.737	0.000	20.833	0.000	7.817	0.000	0.000	21.538	20.690	-34.205	MWD+IFR1+MS
5500.000	15.572	31.742	5357.529	22.123	0.000	21.237	0.000	7.977	0.000	0.000	21.911	21.093	-33.649	MWD+IFR1+MS
5600.000	15.572	31.742	5453.858	22.510	0.000	21.641	0.000	8.139	0.000	0.000	22.286	21.496	-33.066	MWD+IFR1+MS
5700.000	15.572	31.742	5550.188	22.897	0.000	22.046	0.000	8.302	0.000	0.000	22.661	21.900	-32.455	MWD+IFR1+MS
5800.000	15.572	31.742	5646.518	23.285	0.000	22.450	0.000	8.466	0.000	0.000	23.037	22.303	-31.813	MWD+IFR1+MS
5900.000	15.572	31.742	5742.847	23.674	0.000	22.855	0.000	8.633	0.000	0.000	23.414	22.706	-31.139	MWD+IFR1+MS
6000.000	15.572	31.742	5839.177	24.064	0.000	23.259	0.000	8.801	0.000	0.000	23.791	23.109	-30.429	MWD+IFR1+MS
6095.289	15.572	31.742	5930.968	24.434	0.000	23.644	0.000	8.962	0.000	0.000	24.150	23.493	-29.750	MWD+IFR1+MS
6100.000	15.477	31.742	5935.507	24.455	0.000	23.663	0.000	8.970	0.000	0.000	24.168	23.512	-29.731	MWD+IFR1+MS

6200.000	13.477	31.742	6032.327	24.898	0.000	24.057	0.000	9.143	0.000	24.559	23.910	-30.014	MWD+IFR1+MS
6300.000	11.477	31.742	6129.960	25.382	0.000	24.446	0.000	9.321	0.000	25.021	24.302	-31.855	MWD+IFR1+MS
6400.000	9.477	31.742	6228.288	25.826	0.000	24.824	0.000	9.487	0.000	25.476	24.683	-33.442	MWD+IFR1+MS
6500.000	7.477	31.742	6327.190	26.230	0.000	25.192	0.000	9.644	0.000	25.924	25.052	-34.798	MWD+IFR1+MS
6600.000	5.477	31.742	6426.547	26.593	0.000	25.549	0.000	9.793	0.000	26.363	25.409	-35.948	MWD+IFR1+MS
6700.000	3.477	31.742	6526.237	26.916	0.000	25.895	0.000	9.935	0.000	26.793	25.755	-36.915	MWD+IFR1+MS
6800.000	1.477	31.742	6626.138	27.197	0.000	26.230	0.000	10.071	0.000	27.213	26.089	-37.725	MWD+IFR1+MS
6873.870	0.000	0.000	6700.000	26.781	0.000	27.038	0.000	10.168	0.000	27.474	26.333	-38.484	MWD+IFR1+MS
6900.000	0.000	0.000	6726.130	26.865	0.000	27.118	0.000	10.203	0.000	27.553	26.418	-38.551	MWD+IFR1+MS
7000.000	0.000	0.000	6826.130	27.184	0.000	27.427	0.000	10.335	0.000	27.860	26.741	-38.729	MWD+IFR1+MS
7100.000	0.000	0.000	6926.130	27.509	0.000	27.741	0.000	10.470	0.000	28.175	27.064	-38.952	MWD+IFR1+MS
7200.000	0.000	0.000	7026.130	27.834	0.000	28.056	0.000	10.609	0.000	28.491	27.389	-39.172	MWD+IFR1+MS
7300.000	0.000	0.000	7126.130	28.160	0.000	28.373	0.000	10.750	0.000	28.808	27.714	-39.391	MWD+IFR1+MS
7400.000	0.000	0.000	7226.130	28.487	0.000	28.690	0.000	10.893	0.000	29.126	28.040	-39.608	MWD+IFR1+MS
7500.000	0.000	0.000	7326.130	28.815	0.000	29.008	0.000	11.040	0.000	29.446	28.367	-39.823	MWD+IFR1+MS
7600.000	0.000	0.000	7426.130	29.143	0.000	29.327	0.000	11.190	0.000	29.766	28.695	-40.037	MWD+IFR1+MS
7700.000	0.000	0.000	7526.130	29.472	0.000	29.647	0.000	11.343	0.000	30.087	29.023	-40.248	MWD+IFR1+MS
7800.000	0.000	0.000	7626.130	29.802	0.000	29.968	0.000	11.499	0.000	30.409	29.352	-40.458	MWD+IFR1+MS
7900.000	0.000	0.000	7726.130	30.132	0.000	30.290	0.000	11.658	0.000	30.731	29.682	-40.667	MWD+IFR1+MS
8000.000	0.000	0.000	7826.130	30.463	0.000	30.613	0.000	11.820	0.000	31.055	30.012	-40.873	MWD+IFR1+MS
8100.000	0.000	0.000	7926.130	30.795	0.000	30.936	0.000	11.985	0.000	31.379	30.343	-41.078	MWD+IFR1+MS
8200.000	0.000	0.000	8026.130	31.127	0.000	31.260	0.000	12.153	0.000	31.704	30.675	-41.280	MWD+IFR1+MS
8300.000	0.000	0.000	8126.130	31.460	0.000	31.585	0.000	12.324	0.000	32.030	31.007	-41.481	MWD+IFR1+MS
8400.000	0.000	0.000	8226.130	31.793	0.000	31.911	0.000	12.498	0.000	32.357	31.339	-41.681	MWD+IFR1+MS
8500.000	0.000	0.000	8326.130	32.127	0.000	32.237	0.000	12.676	0.000	32.684	31.673	-41.878	MWD+IFR1+MS
8600.000	0.000	0.000	8426.130	32.462	0.000	32.564	0.000	12.856	0.000	33.012	32.006	-42.074	MWD+IFR1+MS
8700.000	0.000	0.000	8526.130	32.797	0.000	32.892	0.000	13.040	0.000	33.340	32.340	-42.268	MWD+IFR1+MS
8800.000	0.000	0.000	8626.130	33.132	0.000	33.220	0.000	13.227	0.000	33.669	32.675	-42.460	MWD+IFR1+MS
8900.000	0.000	0.000	8726.130	33.468	0.000	33.549	0.000	13.417	0.000	33.999	33.010	-42.651	MWD+IFR1+MS
9000.673	0.000	0.000	8826.803	33.807	0.000	33.881	0.000	13.611	0.000	34.332	33.348	-42.841	MWD+IFR1+MS
9100.000	7.946	179.643	8925.812	33.534	0.000	34.188	-0.000	13.814	0.000	34.758	33.784	129.521	MWD+IFR1+MS
9200.000	15.946	179.643	9023.567	33.699	0.000	34.462	-0.000	14.121	0.000	35.962	34.266	109.311	MWD+IFR1+MS
9300.000	23.946	179.643	9117.492	33.366	0.000	34.711	-0.000	14.632	0.000	37.157	34.563	103.187	MWD+IFR1+MS

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9400.000	31.946	179.643	9205.759	32.600	0.000	34.932	-0.000	15.415	0.000	0.000	38.189	34.801	100.708	MWD+IFR1+MS
9500.000	39.946	179.643	9286.650	31.502	0.000	35.126	-0.000	16.493	0.000	0.000	39.029	35.000	99.529	MWD+IFR1+MS
9600.000	47.946	179.643	9358.591	30.204	0.000	35.293	-0.000	17.850	0.000	0.000	39.672	35.167	98.982	MWD+IFR1+MS
9700.000	55.946	179.643	9420.181	28.869	0.000	35.434	-0.000	19.437	0.000	0.000	40.131	35.303	98.812	MWD+IFR1+MS
9800.000	63.946	179.643	9470.221	27.690	0.000	35.551	-0.000	21.192	0.000	0.000	40.426	35.412	98.903	MWD+IFR1+MS
9900.000	71.946	179.643	9507.739	26.875	0.000	35.645	-0.000	23.044	0.000	0.000	40.588	35.495	99.182	MWD+IFR1+MS
10000.000	79.946	179.643	9532.002	26.612	0.000	35.717	-0.000	24.927	0.000	0.000	40.656	35.554	99.585	MWD+IFR1+MS
10100.000	87.946	179.643	9542.540	27.025	0.000	35.766	-0.000	26.780	0.000	0.000	40.675	35.589	100.032	MWD+IFR1+MS
10125.673	90.000	179.643	9543.000	26.875	0.000	35.773	-0.000	26.875	0.000	0.000	40.679	35.592	100.132	MWD+IFR1+MS
10200.000	90.000	179.643	9543.000	27.055	0.000	35.798	-0.000	27.055	0.000	0.000	40.688	35.608	100.443	MWD+IFR1+MS
10300.000	90.000	179.643	9543.000	27.294	0.000	35.857	-0.000	27.294	0.000	0.000	40.702	35.651	100.910	MWD+IFR1+MS
10400.000	90.000	179.643	9543.000	27.554	0.000	35.937	-0.000	27.554	0.000	0.000	40.718	35.715	101.429	MWD+IFR1+MS
10500.000	90.000	179.643	9543.000	27.834	0.000	36.040	-0.000	27.834	0.000	0.000	40.736	35.799	102.004	MWD+IFR1+MS
10600.000	90.000	179.643	9543.000	28.133	0.000	36.163	-0.000	28.133	0.000	0.000	40.756	35.902	102.644	MWD+IFR1+MS
10700.000	90.000	179.643	9543.000	28.450	0.000	36.307	-0.000	28.450	0.000	0.000	40.779	36.024	103.358	MWD+IFR1+MS
10800.000	90.000	179.643	9543.000	28.785	0.000	36.472	-0.000	28.785	0.000	0.000	40.806	36.163	104.157	MWD+IFR1+MS
10900.000	90.000	179.643	9543.000	29.138	0.000	36.658	-0.000	29.138	0.000	0.000	40.835	36.321	105.055	MWD+IFR1+MS
11000.000	90.000	179.643	9543.000	29.507	0.000	36.863	-0.000	29.507	0.000	0.000	40.869	36.494	106.069	MWD+IFR1+MS
11100.000	90.000	179.643	9543.000	29.893	0.000	37.089	-0.000	29.893	0.000	0.000	40.908	36.684	107.218	MWD+IFR1+MS
11200.000	90.000	179.643	9543.000	30.293	0.000	37.334	-0.000	30.293	0.000	0.000	40.953	36.887	108.526	MWD+IFR1+MS
11300.000	90.000	179.643	9543.000	30.709	0.000	37.597	-0.000	30.709	0.000	0.000	41.005	37.103	110.019	MWD+IFR1+MS
11400.000	90.000	179.643	9543.000	31.139	0.000	37.880	-0.000	31.139	0.000	0.000	41.065	37.329	111.730	MWD+IFR1+MS
11500.000	90.000	179.643	9543.000	31.582	0.000	38.180	-0.000	31.582	0.000	0.000	41.135	37.564	113.692	MWD+IFR1+MS
11600.000	90.000	179.643	9543.000	32.039	0.000	38.499	-0.000	32.039	0.000	0.000	41.219	37.805	115.943	MWD+IFR1+MS
11700.000	90.000	179.643	9543.000	32.508	0.000	38.835	-0.000	32.508	0.000	0.000	41.317	38.048	118.514	MWD+IFR1+MS
11800.000	90.000	179.643	9543.000	32.989	0.000	39.188	-0.000	32.989	0.000	0.000	41.435	38.290	121.427	MWD+IFR1+MS
11900.000	90.000	179.643	9543.000	33.482	0.000	39.557	-0.000	33.482	0.000	0.000	41.575	38.526	124.682	MWD+IFR1+MS
12000.000	90.000	179.643	9543.000	33.985	0.000	39.942	-0.000	33.985	0.000	0.000	41.742	38.751	128.243	MWD+IFR1+MS
12100.000	90.000	179.643	9543.000	34.499	0.000	40.343	-0.000	34.499	0.000	0.000	41.940	38.962	132.030	MWD+IFR1+MS
12200.000	90.000	179.643	9543.000	35.023	0.000	40.759	-0.000	35.023	0.000	0.000	42.171	39.156	-44.075	MWD+IFR1+MS
12300.000	90.000	179.643	9543.000	35.557	0.000	41.189	-0.000	35.557	0.000	0.000	42.438	39.329	-40.214	MWD+IFR1+MS
12400.000	90.000	179.643	9543.000	36.100	0.000	41.634	-0.000	36.100	0.000	0.000	42.739	39.481	-36.520	MWD+IFR1+MS
12500.000	90.000	179.643	9543.000	36.652	0.000	42.092	-0.000	36.652	0.000	0.000	43.075	39.614	-33.096	MWD+IFR1+MS

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12600.000	90.000	179.643	9543.000	37.212	0.000	42.564	-0.000	37.212	0.000	0.000	43.442	39.730	-30.000	MWD+IFR1+MS
12700.000	90.000	179.643	9543.000	37.780	0.000	43.048	-0.000	37.780	0.000	0.000	43.838	39.830	-27.247	MWD+IFR1+MS
12800.000	90.000	179.643	9543.000	38.355	0.000	43.545	-0.000	38.355	0.000	0.000	44.260	39.917	-24.828	MWD+IFR1+MS
12900.000	90.000	179.643	9543.000	38.938	0.000	44.054	-0.000	38.938	0.000	0.000	44.705	39.993	-22.714	MWD+IFR1+MS
13000.000	90.000	179.643	9543.000	39.528	0.000	44.575	-0.000	39.528	0.000	0.000	45.171	40.060	-20.871	MWD+IFR1+MS
13100.000	90.000	179.643	9543.000	40.125	0.000	45.107	-0.000	40.125	0.000	0.000	45.656	40.121	-19.261	MWD+IFR1+MS
13200.000	90.000	179.643	9543.000	40.728	0.000	45.649	-0.000	40.728	0.000	0.000	46.158	40.176	-17.852	MWD+IFR1+MS
13300.000	90.000	179.643	9543.000	41.337	0.000	46.202	-0.000	41.337	0.000	0.000	46.675	40.226	-16.615	MWD+IFR1+MS
13400.000	90.000	179.643	9543.000	41.952	0.000	46.765	-0.000	41.952	0.000	0.000	47.207	40.272	-15.523	MWD+IFR1+MS
13500.000	90.000	179.643	9543.000	42.573	0.000	47.338	-0.000	42.573	0.000	0.000	47.752	40.315	-14.556	MWD+IFR1+MS
13600.000	90.000	179.643	9543.000	43.198	0.000	47.920	-0.000	43.198	0.000	0.000	48.310	40.356	-13.694	MWD+IFR1+MS
13700.000	90.000	179.643	9543.000	43.829	0.000	48.511	-0.000	43.829	0.000	0.000	48.879	40.394	-12.924	MWD+IFR1+MS
13800.000	90.000	179.643	9543.000	44.465	0.000	49.111	-0.000	44.465	0.000	0.000	49.459	40.431	-12.232	MWD+IFR1+MS
13900.000	90.000	179.643	9543.000	45.106	0.000	49.719	-0.000	45.106	0.000	0.000	50.050	40.466	-11.607	MWD+IFR1+MS
14000.000	90.000	179.643	9543.000	45.751	0.000	50.335	-0.000	45.751	0.000	0.000	50.650	40.501	-11.041	MWD+IFR1+MS
14100.000	90.000	179.643	9543.000	46.400	0.000	50.959	-0.000	46.400	0.000	0.000	51.259	40.534	-10.527	MWD+IFR1+MS
14200.000	90.000	179.643	9543.000	47.054	0.000	51.590	-0.000	47.054	0.000	0.000	51.877	40.567	-10.057	MWD+IFR1+MS
14300.000	90.000	179.643	9543.000	47.711	0.000	52.229	-0.000	47.711	0.000	0.000	52.503	40.599	-9.627	MWD+IFR1+MS
14400.000	90.000	179.643	9543.000	48.373	0.000	52.874	-0.000	48.373	0.000	0.000	53.138	40.631	-9.232	MWD+IFR1+MS
14500.000	90.000	179.643	9543.000	49.038	0.000	53.527	-0.000	49.038	0.000	0.000	53.780	40.663	-8.868	MWD+IFR1+MS
14600.000	90.000	179.643	9543.000	49.706	0.000	54.185	-0.000	49.706	0.000	0.000	54.429	40.694	-8.532	MWD+IFR1+MS
14700.000	90.000	179.643	9543.000	50.378	0.000	54.850	-0.000	50.378	0.000	0.000	55.085	40.725	-8.220	MWD+IFR1+MS
14800.000	90.000	179.643	9543.000	51.053	0.000	55.521	-0.000	51.053	0.000	0.000	55.747	40.756	-7.930	MWD+IFR1+MS
14900.000	90.000	179.643	9543.000	51.731	0.000	56.198	-0.000	51.731	0.000	0.000	56.416	40.787	-7.660	MWD+IFR1+MS
15000.000	90.000	179.643	9543.000	52.412	0.000	56.880	-0.000	52.412	0.000	0.000	57.091	40.818	-7.408	MWD+IFR1+MS
15100.000	90.000	179.643	9543.000	53.096	0.000	57.568	-0.000	53.096	0.000	0.000	57.772	40.849	-7.173	MWD+IFR1+MS
15200.000	90.000	179.643	9543.000	53.782	0.000	58.261	-0.000	53.782	0.000	0.000	58.459	40.880	-6.952	MWD+IFR1+MS
15300.000	90.000	179.643	9543.000	54.472	0.000	58.959	-0.000	54.472	0.000	0.000	59.150	40.911	-6.745	MWD+IFR1+MS
15400.000	90.000	179.643	9543.000	55.164	0.000	59.662	-0.000	55.164	0.000	0.000	59.847	40.942	-6.550	MWD+IFR1+MS
15500.000	90.000	179.643	9543.000	55.858	0.000	60.369	-0.000	55.858	0.000	0.000	60.549	40.974	-6.366	MWD+IFR1+MS
15600.000	90.000	179.643	9543.000	56.555	0.000	61.081	-0.000	56.555	0.000	0.000	61.256	41.006	-6.192	MWD+IFR1+MS
15700.000	90.000	179.643	9543.000	57.254	0.000	61.798	-0.000	57.254	0.000	0.000	61.968	41.038	-6.029	MWD+IFR1+MS
15800.000	90.000	179.643	9543.000	57.955	0.000	62.518	-0.000	57.955	0.000	0.000	62.684	41.070	-5.873	MWD+IFR1+MS

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15900.000	90.000	179.643	9543.000	58.658	0.000	63.243	-0.000	58.658	0.000	63.404	41.102	-5.726	MWD+IFR1+MS
16000.000	90.000	179.643	9543.000	59.364	0.000	63.971	-0.000	59.364	0.000	64.128	41.135	-5.587	MWD+IFR1+MS
16100.000	90.000	179.643	9543.000	60.071	0.000	64.703	-0.000	60.071	0.000	64.856	41.168	-5.454	MWD+IFR1+MS
16200.000	90.000	179.643	9543.000	60.780	0.000	65.439	-0.000	60.780	0.000	65.588	41.202	-5.328	MWD+IFR1+MS
16300.000	90.000	179.643	9543.000	61.491	0.000	66.179	-0.000	61.491	0.000	66.324	41.236	-5.207	MWD+IFR1+MS
16400.000	90.000	179.643	9543.000	62.204	0.000	66.922	-0.000	62.204	0.000	67.064	41.270	-5.093	MWD+IFR1+MS
16500.000	90.000	179.643	9543.000	62.919	0.000	67.668	-0.000	62.919	0.000	67.807	41.304	-4.983	MWD+IFR1+MS
16600.000	90.000	179.643	9543.000	63.635	0.000	68.417	-0.000	63.635	0.000	68.553	41.339	-4.879	MWD+IFR1+MS
16700.000	90.000	179.643	9543.000	64.352	0.000	69.170	-0.000	64.352	0.000	69.302	41.374	-4.779	MWD+IFR1+MS
16800.000	90.000	179.643	9543.000	65.072	0.000	69.925	-0.000	65.072	0.000	70.055	41.410	-4.683	MWD+IFR1+MS
16900.000	90.000	179.643	9543.000	65.793	0.000	70.683	-0.000	65.793	0.000	70.810	41.446	-4.591	MWD+IFR1+MS
17000.000	90.000	179.643	9543.000	66.515	0.000	71.445	-0.000	66.515	0.000	71.569	41.482	-4.503	MWD+IFR1+MS
17100.000	90.000	179.643	9543.000	67.239	0.000	72.208	-0.000	67.239	0.000	72.330	41.518	-4.418	MWD+IFR1+MS
17200.000	90.000	179.643	9543.000	67.964	0.000	72.975	-0.000	67.964	0.000	73.094	41.556	-4.337	MWD+IFR1+MS
17300.000	90.000	179.643	9543.000	68.690	0.000	73.744	-0.000	68.690	0.000	73.861	41.593	-4.259	MWD+IFR1+MS
17400.000	90.000	179.643	9543.000	69.418	0.000	74.515	-0.000	69.418	0.000	74.630	41.631	-4.184	MWD+IFR1+MS
17500.000	90.000	179.643	9543.000	70.147	0.000	75.289	-0.000	70.147	0.000	75.402	41.669	-4.112	MWD+IFR1+MS
17600.000	90.000	179.643	9543.000	70.877	0.000	76.066	-0.000	70.877	0.000	76.176	41.708	-4.042	MWD+IFR1+MS
17700.000	90.000	179.643	9543.000	71.608	0.000	76.844	-0.000	71.608	0.000	76.952	41.747	-3.975	MWD+IFR1+MS
17800.000	90.000	179.643	9543.000	72.340	0.000	77.625	-0.000	72.340	0.000	77.731	41.786	-3.910	MWD+IFR1+MS
17900.000	90.000	179.643	9543.000	73.074	0.000	78.408	-0.000	73.074	0.000	78.512	41.826	-3.847	MWD+IFR1+MS
18000.000	90.000	179.643	9543.000	73.808	0.000	79.193	-0.000	73.808	0.000	79.295	41.866	-3.787	MWD+IFR1+MS
18100.000	90.000	179.643	9543.000	74.544	0.000	79.979	-0.000	74.544	0.000	80.080	41.907	-3.729	MWD+IFR1+MS
18200.000	90.000	179.643	9543.000	75.280	0.000	80.768	-0.000	75.280	0.000	80.867	41.948	-3.672	MWD+IFR1+MS
18300.000	90.000	179.643	9543.000	76.017	0.000	81.559	-0.000	76.017	0.000	81.656	41.989	-3.618	MWD+IFR1+MS
18400.000	90.000	179.643	9543.000	76.756	0.000	82.351	-0.000	76.756	0.000	82.447	42.031	-3.565	MWD+IFR1+MS
18500.000	90.000	179.643	9543.000	77.495	0.000	83.146	-0.000	77.495	0.000	83.240	42.073	-3.513	MWD+IFR1+MS
18600.000	90.000	179.643	9543.000	78.235	0.000	83.942	-0.000	78.235	0.000	84.034	42.116	-3.464	MWD+IFR1+MS
18700.000	90.000	179.643	9543.000	78.976	0.000	84.739	-0.000	78.976	0.000	84.830	42.159	-3.416	MWD+IFR1+MS
18800.000	90.000	179.643	9543.000	79.718	0.000	85.539	-0.000	79.718	0.000	85.628	42.202	-3.369	MWD+IFR1+MS
18900.000	90.000	179.643	9543.000	80.461	0.000	86.339	-0.000	80.461	0.000	86.428	42.246	-3.324	MWD+IFR1+MS
19000.000	90.000	179.643	9543.000	81.205	0.000	87.142	-0.000	81.205	0.000	87.229	42.291	-3.280	MWD+IFR1+MS
19100.000	90.000	179.643	9543.000	81.949	0.000	87.946	-0.000	81.949	0.000	88.031	42.335	-3.237	MWD+IFR1+MS

19200.000	90.000	179.643	9543.000	82.694	0.000	88.751	-0.000	82.694	0.000	88.835	42.381	-3.196	MWD+IFR1+MS
19300.000	90.000	179.643	9543.000	83.440	0.000	89.558	-0.000	83.440	0.000	89.641	42.426	-3.155	MWD+IFR1+MS
19400.000	90.000	179.643	9543.000	84.186	0.000	90.366	-0.000	84.186	0.000	90.448	42.472	-3.116	MWD+IFR1+MS
19500.000	90.000	179.643	9543.000	84.933	0.000	91.176	-0.000	84.933	0.000	91.256	42.518	-3.078	MWD+IFR1+MS
19600.000	90.000	179.643	9543.000	85.681	0.000	91.986	-0.000	85.681	0.000	92.066	42.565	-3.041	MWD+IFR1+MS
19700.000	90.000	179.643	9543.000	86.430	0.000	92.799	-0.000	86.430	0.000	92.877	42.613	-3.005	MWD+IFR1+MS
19800.000	90.000	179.643	9543.000	87.179	0.000	93.612	-0.000	87.179	0.000	93.689	42.660	-2.970	MWD+IFR1+MS
19900.000	90.000	179.643	9543.000	87.928	0.000	94.426	-0.000	87.928	0.000	94.503	42.708	-2.936	MWD+IFR1+MS
20000.000	90.000	179.643	9543.000	88.679	0.000	95.242	-0.000	88.679	0.000	95.317	42.757	-2.902	MWD+IFR1+MS
20100.000	90.000	179.643	9543.000	89.430	0.000	96.059	-0.000	89.430	0.000	96.133	42.806	-2.870	MWD+IFR1+MS
20200.000	90.000	179.643	9543.000	90.181	0.000	96.877	-0.000	90.181	0.000	96.950	42.855	-2.838	MWD+IFR1+MS
20300.000	90.000	179.643	9543.000	90.933	0.000	97.696	-0.000	90.933	0.000	97.768	42.904	-2.807	MWD+IFR1+MS
20400.000	90.000	179.643	9543.000	91.686	0.000	98.516	-0.000	91.686	0.000	98.587	42.955	-2.777	MWD+IFR1+MS
20489.474	90.000	179.643	9543.000	92.359	0.000	99.250	-0.000	92.359	0.000	99.321	43.000	-2.751	MWD+IFR1+MS
20500.000	90.000	179.643	9543.000	92.439	0.000	99.336	-0.000	92.439	0.000	99.407	43.005	-2.748	MWD+IFR1+MS
20539.455	90.000	179.643	9543.000	92.735	0.000	99.659	-0.000	92.735	0.000	99.729	43.025	-2.736	MWD+IFR1+MS

PLU 15 Twin Wells Ranch-213H

Plan Targets											Grid Northing	Grid Easting	TVD MSL	Target Shape
Target Name											(ft)	(ft)	(ft)	
FTP 12											440477.40	676038.30	5979.00	CIRCLE
LTP 12											430113.80	676102.80	5979.00	CIRCLE
BHL 12											430063.80	676103.10	5979.00	CIRCLE

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

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

Background

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

Supporting Documentation

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



Figure 1: Winch System attached to BOP Stack

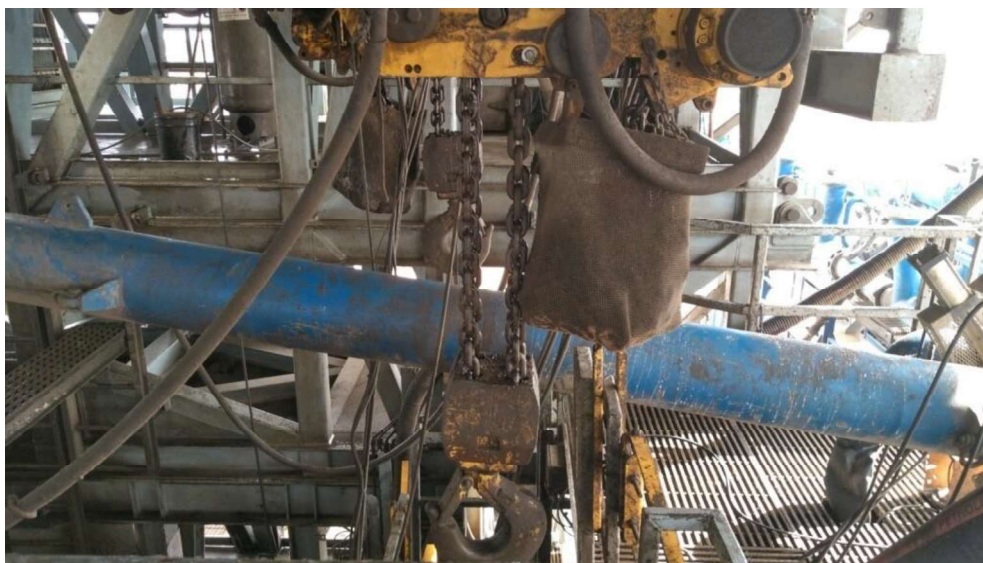


Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. CFR Title 43 Part 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.

62 API STANDARD 53			
Table C.4—Initial Pressure Testing, Surface BOP Stacks			
Component to be Pressure Tested	Pressure Test—Low Pressure ^{a,c} psig (MPa)	Pressure Test—High Pressure ^{a,c}	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer ^b	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 ^{b,d}	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 ^e	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^e	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	
^a 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. ^b Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program. ^c 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. ^d 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. ^e 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

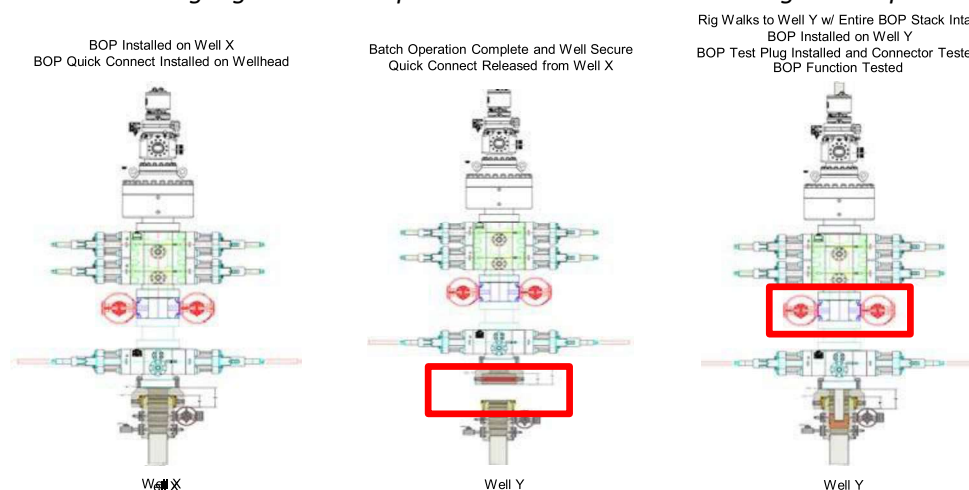
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

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



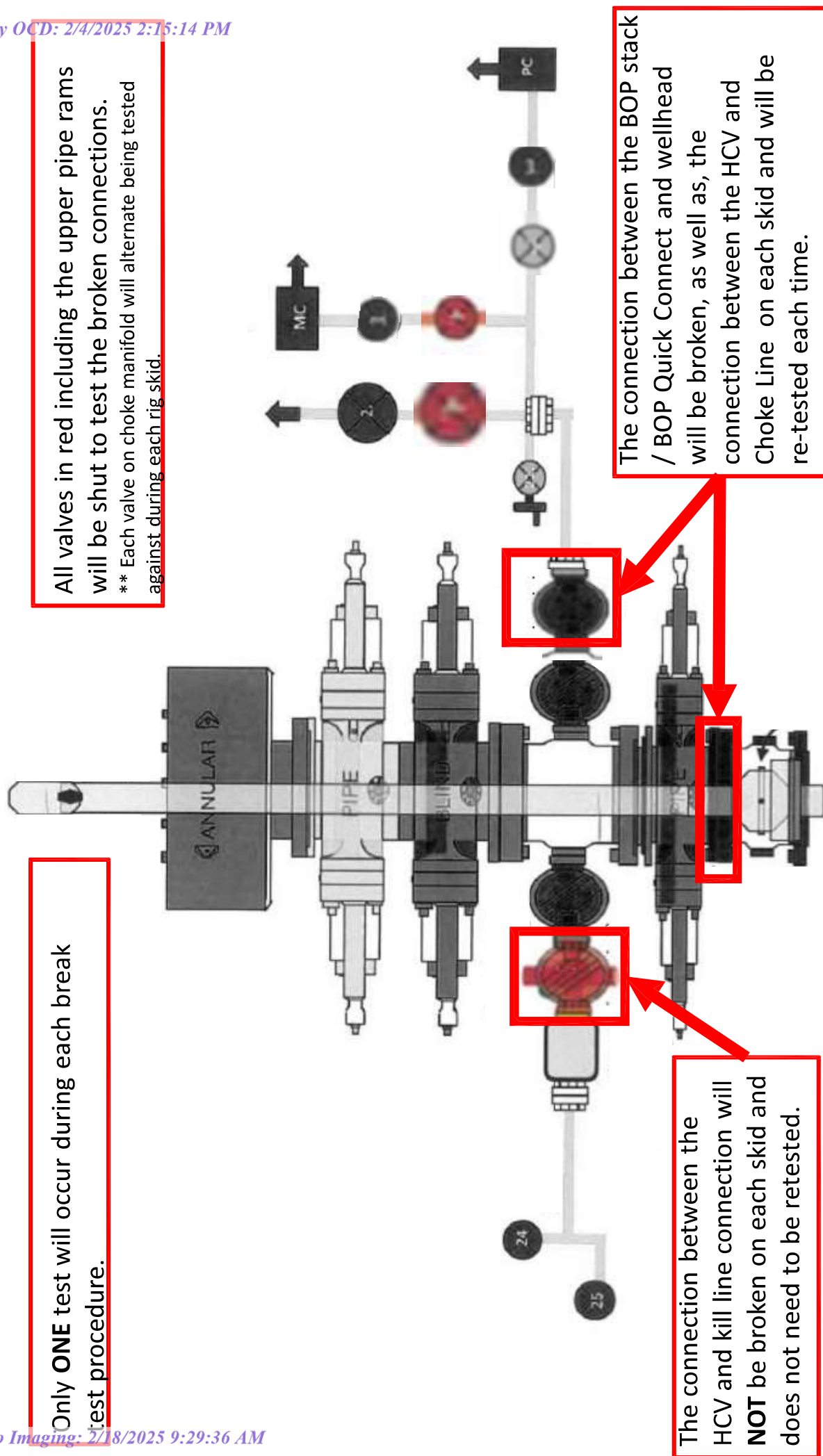
Summary

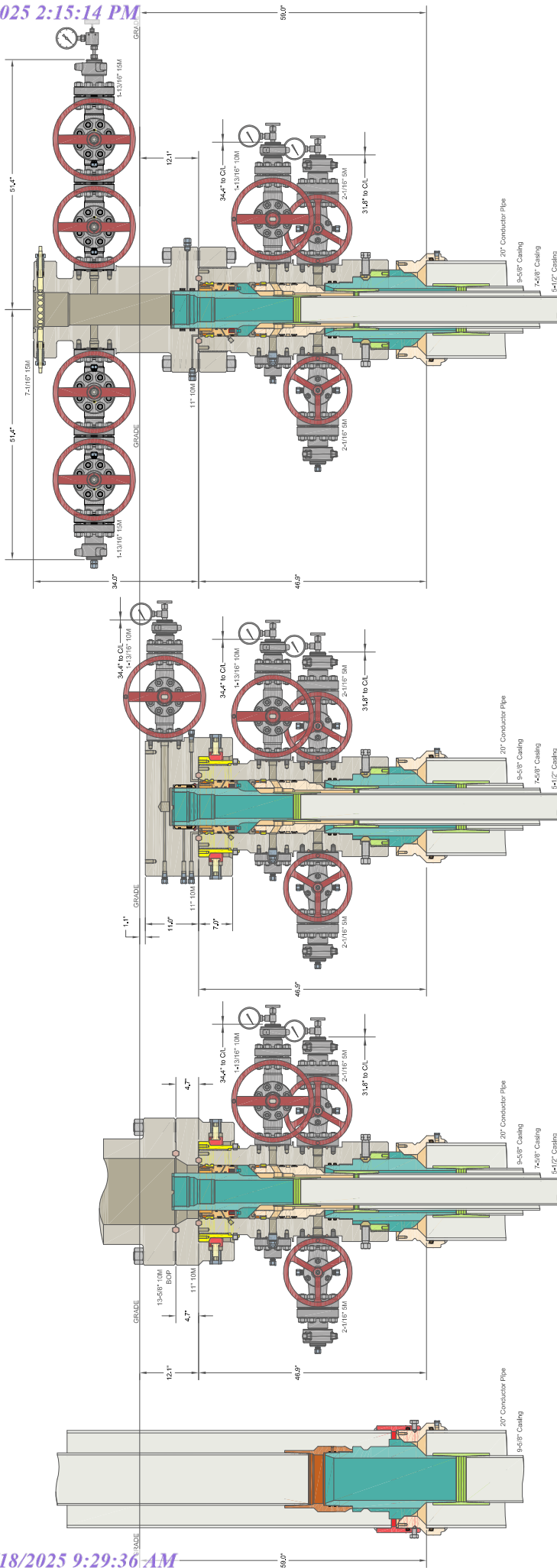
A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required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

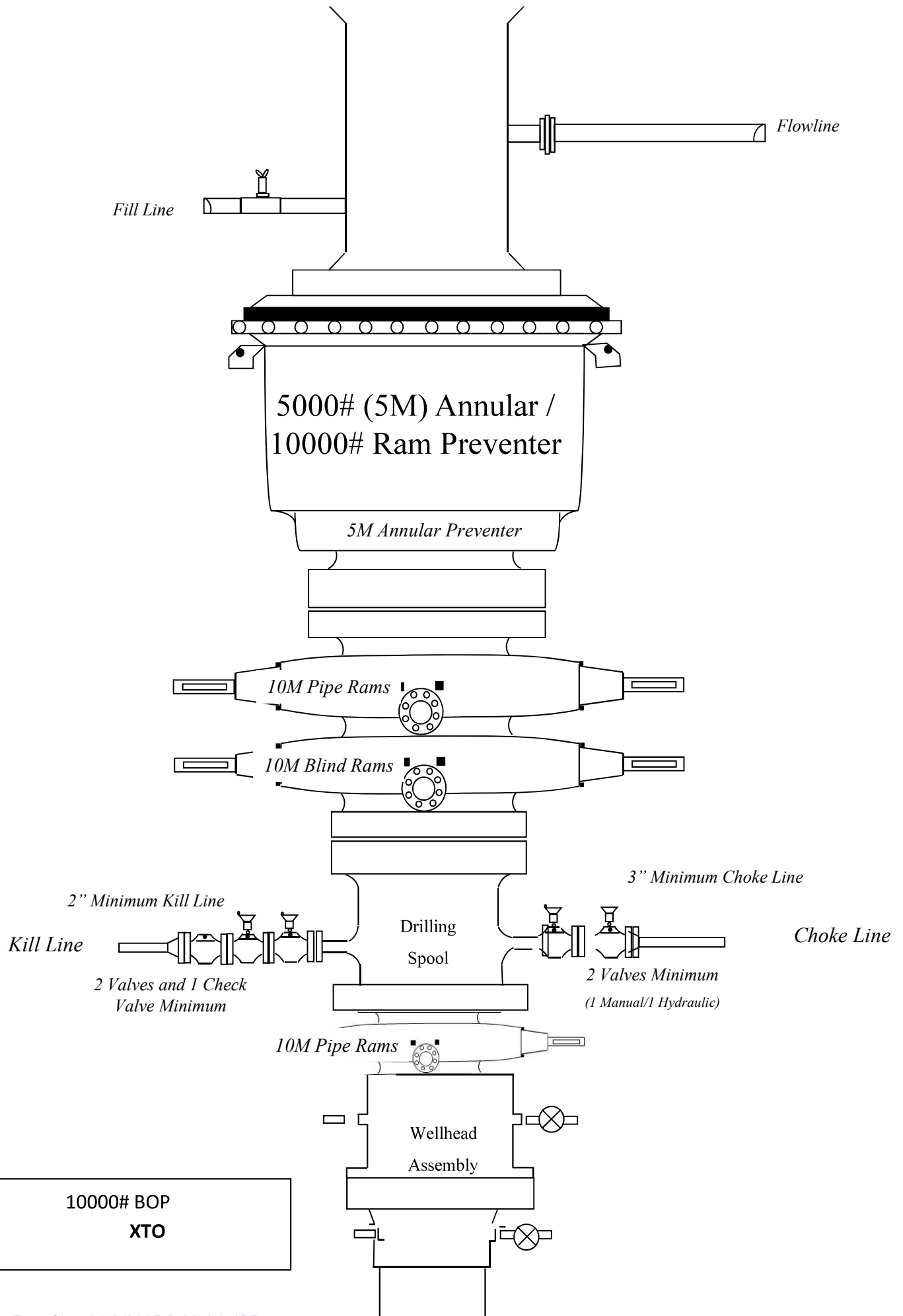
1. After a full BOP test is conducted on the first well on the pad.
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
4. Full BOP test will be required prior to drilling the production hole.



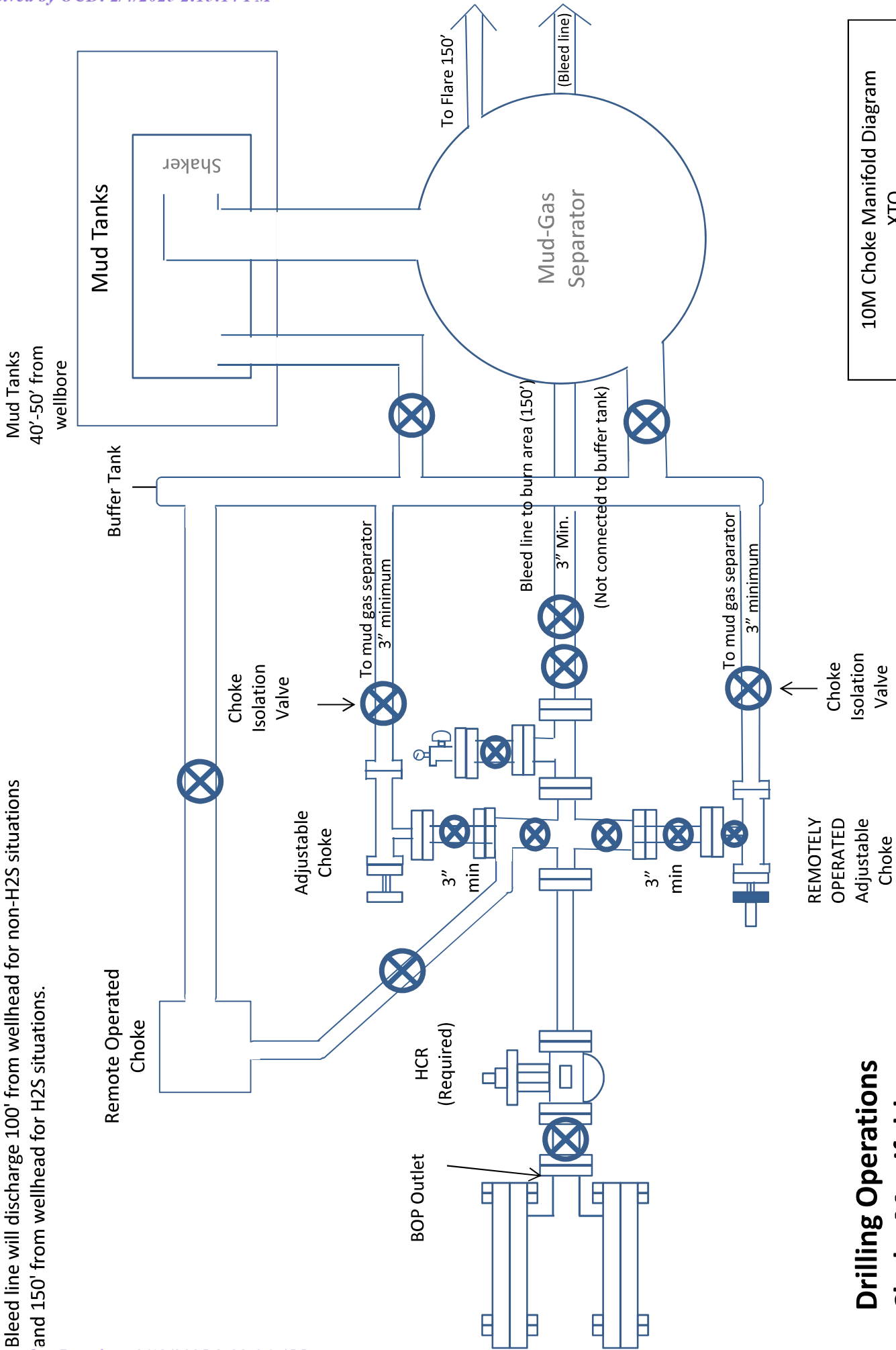


ALL DIMENSIONS APPROXIMATE			
XTO ENERGY INC DELAWARE BASIN		CACTUS WELLHEAD LLC	
DRAWN	VJK	20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers	
APPROV			
DRAWING NO. HBE0000479		31MAR22	

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



**Drilling Operations
Choke Manifold
10M Service**

10M Choke Manifold Diagram
XTO



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

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

XTO Permian Operating, LLC Offline Cementing Variance Request

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

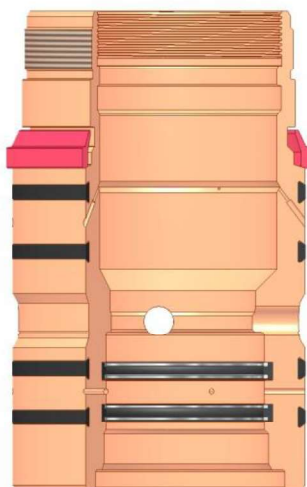
1. Cement Program

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

2. Offline Cementing Procedure

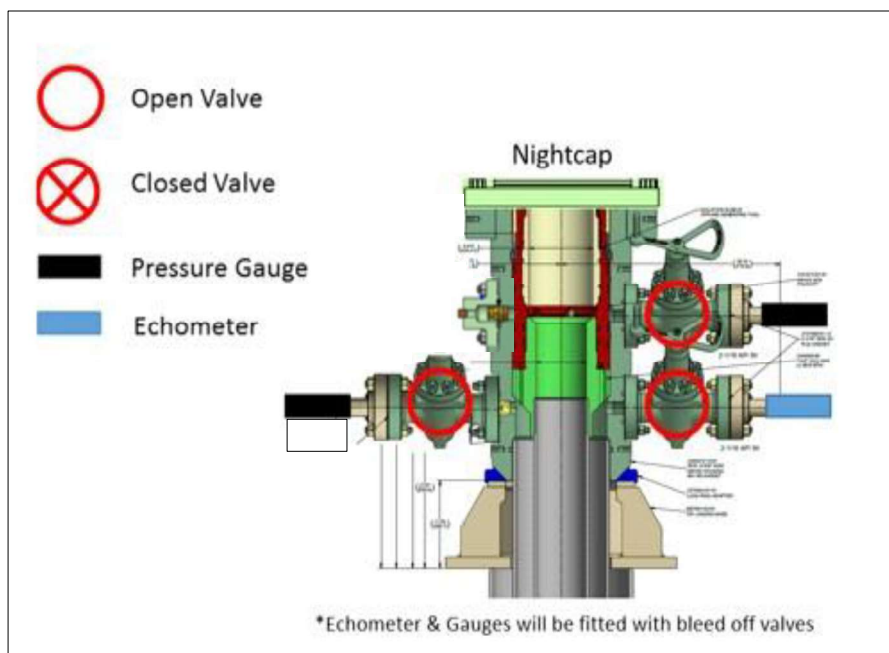
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
 - a. If any barrier fails to test, the BOP stack will not be nippedled 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.



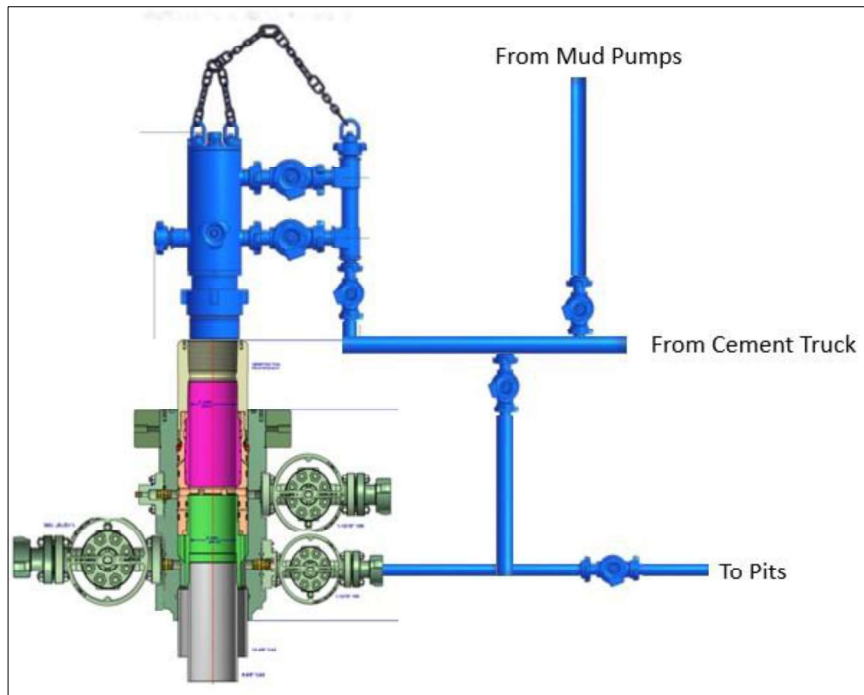
Annular packoff with both external and internal seals

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 3rd 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:

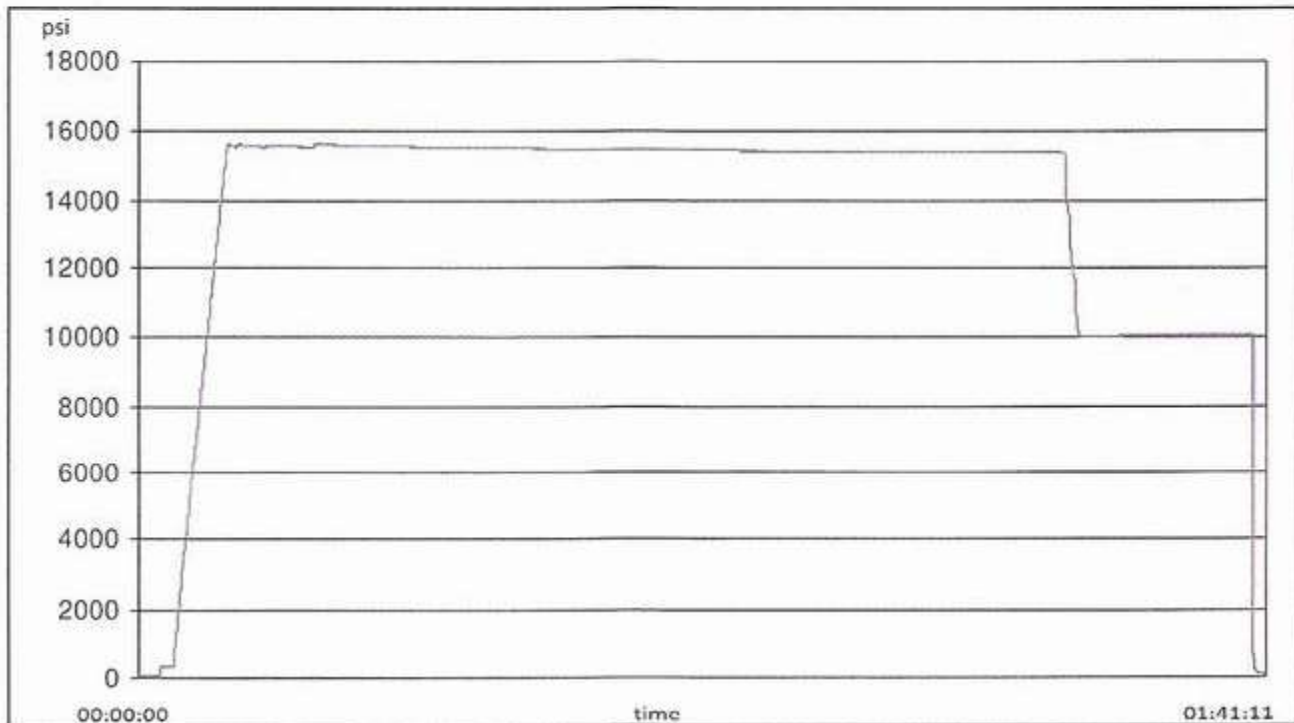
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/1b

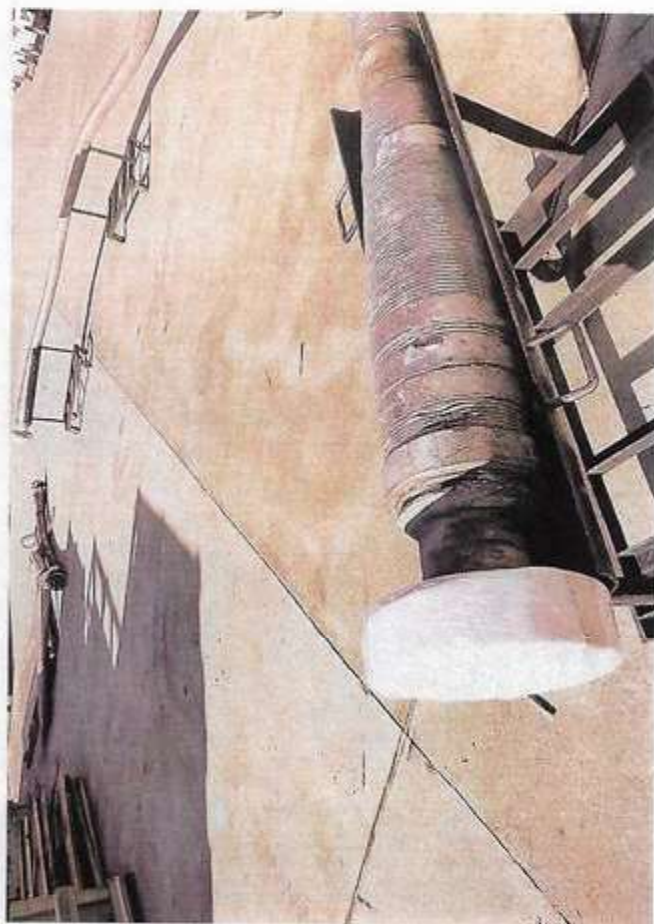
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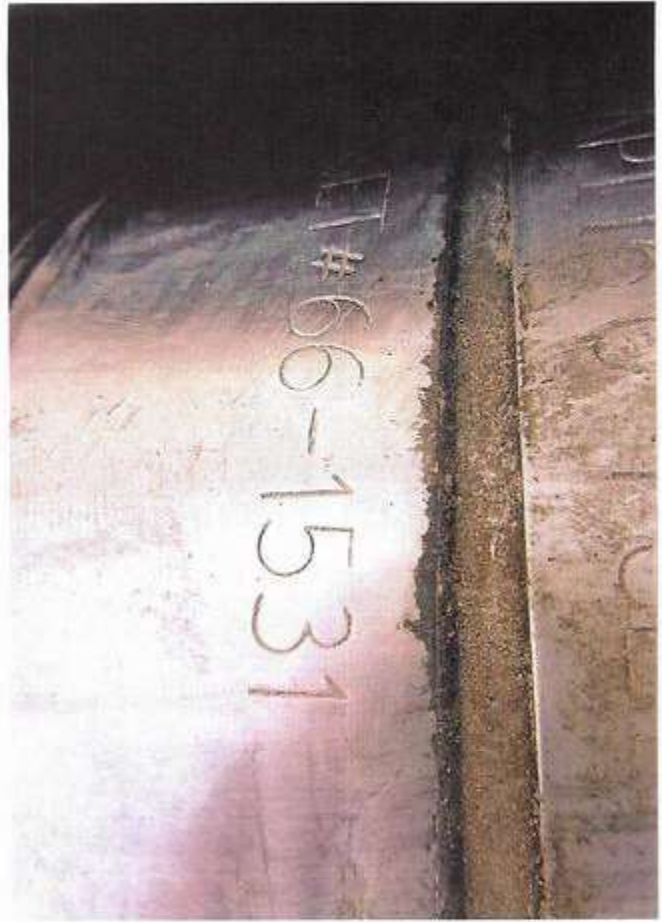
TEST REPORT

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





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

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Phone: (505) 629-6116

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

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

CONDITIONS

Action 428189

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 428189
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Administrative order required for non-standard spacing unit prior to production.	2/18/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	2/18/2025