Well Number: 306H

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: 3001554189

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2823631

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 11/20/2024

Time Sundry Submitted: 12:47

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. There is a dedicated change. FROM: TO: SHL: 462' FNL & 1169' FEL OF SECTION 22-T24S-R31E 461' FNL & 1319' FEL OF SECTION 22-T24S-R31E KOP: 462' FNL & 1169' FEL OF SECTION 22-T24S-R31E 616' FSL & 530' FEL OF SECTION 15-T24S-R31E FTP: 330' FNL & 330' FEL OF SECTION 22-T24S-R31E 100' FNL & 530' FEL OF SECTION 22-T24S-R31E LTP: 330' FSL & 330' FEL OF SECTION 27-T24S-R31E 100' FSL & 530' FEL OF SECTION 27-T24S-R31E BHL: 200' FSL & 330' FEL OF SECTION 27-T24S-R31E 50' FSL & 530' FEL OF SECTION 27-T24S-R31E The proposed total depth is changing from 20806' MD; 10388' TVD to 19919' MD; 8924' 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_306H_Sundry_Docs_Submitted_20241210092200.pdf

NMNM71016X

US Well Number: 3001554189 **Operator:** XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

PLU_15_TWR_114H_306H_214H_COA_20241212103039.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 09:22 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Advisor

Street Address: 6401 HOLIDAY HILL ROAD SUITE 200

City: MIDLAND **State:** TX

Phone: (432) 999-3107

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

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

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

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

Disposition: Approved **Disposition Date:** 12/13/2024

Signature: Chris Walls

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM0506A

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No. POKER LAKE UNIT/NMNM71016X

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No. POKER LAKE UNIT 15 TWR/306H

2. Name of Operator XTO PERMIAN OPERATING LLC

9. API Well No. 3001554189

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

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

XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, KOP, FTP, LTP, BHL, Proposed total Depth, and Pool. There is no new surface disturbance. There is a dedicated change.

FROM: TO:
SHL: 462' FNL & 1169' FEL OF SECTION 22-T24S-R31E 461' FNL & 1319' FEL OF SECTION 22-T24S-R31E
KOP: 462 FNL & 1169 FEL OF SECTION 22-T24S-R31E 616 FSL & 530 FEL OF SECTION 15-T24S-R31E
FTP: 330' FNL & 330' FEL OF SECTION 22-T24S-R31E 100' FNL & 530' FEL OF SECTION 22-T24S-R31E
LTP: 330' FSL & 330' FEL OF SECTION 27-T24S-R31E 100' FSL & 530' FEL OF SECTION 27-T24S-R31E
BHL: 200' FSL & 330' FEL OF SECTION 27-T24S-R31E 50' FSL & 530' FEL OF SECTION 27-T24S-R31E

The proposed total depth is changing from 20806 MD; 10388 TVD to 19919 MD; 8924 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 12/13/2024

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

Office CARLSBAD

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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: NENE / 462 FNL / 1169 FEL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.208841 / LONG: -103.760923 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 330 FNL / 330 FEL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.209204 / LONG: -103.758211 (TVD: 10370 feet, MD: 10800 feet)

PPP: NESE / 330 FNL / 330 FWL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.206204 / LONG: -103.758201 (TVD: 10375 feet, MD: 13500 feet)

PPP: NENE / 330 FNL / 330 FWL / TWSP: 24S / RANGE: 31E / SECTION: 27 / LAT: 32.203112 / LONG: -103.758191 (TVD: 10379 feet, MD: 16100 feet)

PPP: NESE / 330 FNL / 330 FWL / TWSP: 24S / RANGE: 31E / SECTION: 27 / LAT: 32.20034 / LONG: -103.758187 (TVD: 10384 feet, MD: 18800 feet)

BHL: SESE / 200 FSL / 330 FEL / TWSP: 24S / RANGE: 31E / SECTION: 27 / LAT: 32.181621 / LONG: -103.758182 (TVD: 10388 feet, MD: 20806 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 114H
SURFACE HOLE FOOTAGE:	510'/N & 490'/W
BOTTOM HOLE FOOTAGE:	50'/S & 290'/E

WELL NAME & NO.:	Poker Lake Unit 15 TWR 306H
SURFACE HOLE FOOTAGE:	461'/N & 1319'/E
BOTTOM HOLE FOOTAGE:	50'/S & 530'/E

WELL NAME & NO.:	Poker Lake Unit 15 TWR 214H
SURFACE HOLE FOOTAGE:	521'/N & 2282'/W
BOTTOM HOLE FOOTAGE:	50'/S & 1660'/E

*Changes approved through engineering via **Sundry 2823639,2823631,2823630,** on 12-12-2024_. Any previous COAs not addressed within the updated COAs still apply.*

COA

H_2S	○ No		○ Yes	
Potash / WIPP	◉ None	○ Secretary	○ R-111-Q	☐ Open Annulus
	Choose an option (including blank option.)			☐ WIPP
Cave / Karst	○ Low	◉ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☑ Primary Squeeze	☐ Cont. Squeeze	☑ Echo Meter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	☐ COM	☑ Unit
Waste Prev.	○ Self-Certification	○ Waste Min. Plan	◉ APD Submitted prior to 06/10/2024	
Additional Language	☑ Flex Hose	☑ Casing Clearance	☐ Pilot Hole	☑ Break Testing
	☐ Four-String	☑ Offline Cementing	☐ 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 6994-7028' .**

    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; (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 12/12/2024
575-234-5998 / zstevens@blm.gov

Type: ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015- 54189	96546	COTTON DRAW; BONE SPRING, SOUTH

Property Code	Property Name	Well Number
	POKER LAKE UNIT 15 TWR	306H

OGRID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,532'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	22	24S	31E		461 FNL	1,319 FEL	32.208843	-103.761408	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	27	24S	31E		50 FSL	530 FEL	32.181209	-103.758828	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640.00	INFILL	30-015-54186	N	U

Order Numbers.

Well Setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	15	24S	31E		616 FSL	530 FEL	32.211805	-103.758861	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	22	24S	31E		100 FNL	530 FEL	32.209836	-103.758859	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	27	24S	31E		100 FSL	530 FEL	32.181346	-103.758828	EDDY

Unitized Area of Area of Interest	Spacing Unit Type :	Ground Elevation
NMNM105422429	☒ Horizontal ☐ Vertical	3,532'

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

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

MARK DILLON HARP 23786

Certificate Number

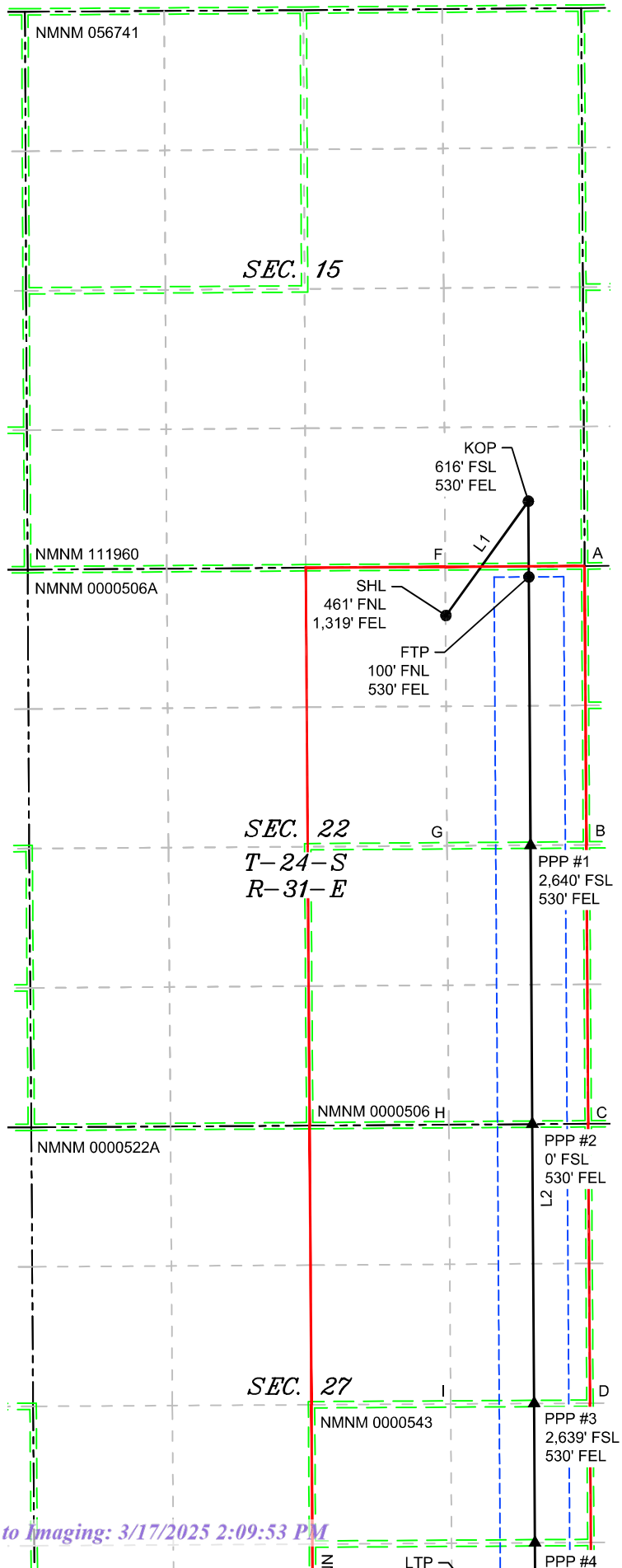
10/31/2024

Date of Survey

not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	035°51'59"	1,334.77'
L2	179°38'28"	11,130.66'



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 =	440,181.7	N	Y =	440,122.9	N
X =	718,225.8	E	X =	677,041.7	E
LAT. =	32.208843	°N	LAT. =	32.208719	°N
LONG. =	103.761408	°W	LONG. =	103.760925	°W
KOP (NAD 83 NME)			**KOP (NAD 27 NME)**		
Y =	441,263.4	N	Y =	441,204.6	N
X =	719,007.8	E	X =	677,823.8	E
LAT. =	32.211805	°N	LAT. =	32.211681	°N
LONG. =	103.758861	°W	LONG. =	103.758378	°W
FTP (NAD 83 NME)			**FTP (NAD 27 NME)**		
Y =	440,547.3	N	Y =	440,488.4	N
X =	719,012.3	E	X =	677,828.2	E
LAT. =	32.209836	°N	LAT. =	32.209712	°N
LONG. =	103.758859	°W	LONG. =	103.758376	°W
PPP #1 (NAD 83 NME)			**PPP #1 (NAD 27 NME)**		
Y =	438,006.8	N	Y =	437,948.0	N
X =	719,028.2	E	X =	677,844.0	E
LAT. =	32.202853	°N	LAT. =	32.202729	°N
LONG. =	103.758851	°W	LONG. =	103.758369	°W
PPP #2 (NAD 83 NME)			**PPP #2 (NAD 27 NME)**		
Y =	435,366.4	N	Y =	435,307.7	N
X =	719,044.7	E	X =	677,860.5	E
LAT. =	32.195595	°N	LAT. =	32.195471	°N
LONG. =	103.758843	°W	LONG. =	103.758361	°W
PPP #3 (NAD 83 NME)			**PPP #3 (NAD 27 NME)**		
Y =	432,721.7	N	Y =	432,663.1	N
X =	719,062.0	E	X =	677,877.6	E
LAT. =	32.188325	°N	LAT. =	32.188201	°N
LONG. =	103.758833	°W	LONG. =	103.758351	°W
PPP #4 (NAD 83 NME)			**PPP #4 (NAD 27 NME)**		
Y =	431,402.3	N	Y =	431,343.7	N
X =	719,069.9	E	X =	677,885.5	E
LAT. =	32.184698	°N	LAT. =	32.184574	°N
LONG. =	103.758831	°W	LONG. =	103.758349	°W
LTP (NAD 83 NME)			**LTP (NAD 27 NME)**		
Y =	430,183.0	N	Y =	430,124.4	N
X =	719,077.2	E	X =	677,892.8	E
LAT. =	32.181346	°N	LAT. =	32.181222	°N
LONG. =	103.758828	°W	LONG. =	103.758346	°W
BHL (NAD 83 NME)			**BHL (NAD 27 NME)**		
Y =	430,133.0	N	Y =	430,074.4	N
X =	719,077.5	E	X =	677,893.1	E
LAT. =	32.181209	°N	LAT. =	32.181085	°N
LONG. =	103.758828	°W	LONG. =	103.758346	°W
CORNER COORDINATES (NAD 83 NME)					
A - Y =	440,650.5	N	A - X =	719,541.7	E
B - Y =	438,010.2	N	B - X =	719,558.2	E
C - Y =	435,370.0	N	C - X =	719,574.7	E
D - Y =	432,724.7	N	D - X =	719,591.9	E
E - Y =	430,086.1	N	E - X =	719,607.8	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 =	440,591.7	N	A - X =	678,357.6	E
B - Y =	437,951.5	N	B - X =	678,374.0	E
C - Y =	435,311.3	N	C - X =	678,390.4	E
D - Y =	432,666.1	N	D - X =	678,407.6	E
E - Y =	430,027.6	N	E - X =	678,423.4	E

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

XTO Energy Inc.
POKER LAKE UNIT 15 TWR 306H
Projected TD: 19918.86' MD / 8924' TVD
SHL: 461' FNL & 1319' FEL , Section 22, T24S, R31E
BHL: 50' FSL & 530' 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	653'	Water
Top of Salt	994'	Water
Base of Salt	4255'	Water
Delaware	4496'	Water
Brushy Canyon	7028'	Water/Oil/Gas
Bone Spring	8330'	Water
Avalon	8424'	Water/Oil/Gas
Target/Land Curve	8924'	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 @ 753' (241' 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 8179.67' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19918.86 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 7879.67 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 753'	9.625	40	J-55	BTC	New	1.61	8.36	20.92
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	4.27	2.57	2.30
8.75	4000' – 8179.67'	7.625	29.7	HC L-80	Flush Joint	New	3.11	2.32	3.27
6.75	0' – 8079.67'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.26	2.94	2.44
6.75	8079.67' - 19918.86'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.26	2.66	2.44

· 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 +/- 753'

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 +/- 8179.67'
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: 100 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 7028
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 (7028') 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 +/- 19918.86'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 7879.67 feet
Tail: 820 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 8379.67 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' - 753'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
753' - 4496'	8.75	Saturated brine	10.0-10.5	30-32	NC	Fully saturated salt across salado / salt
4496' - 8179.67'	8.75	Brine or Direct Emulsion	10-10.5	30-32	NC	Depending on well conditions
8179.67' - 19918.86'	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 155 to 175 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-306H

Measured Depth:	19918.86 ft	**Site:**	Pad 2
TVD RKB:	8924.00 ft	**Slot:**	PLU 15 Twin Wells Ranch-306H
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	440122.90 ft		
Easting:	677041.70 ft		
RKB:	3564.00 ft		
Ground Level:	3532.00 ft		
North Reference:	Grid		
Convergence Angle:	0.31 Deg		

Plan Sections PLU 15 Twin Wells Ranch-306H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
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	
1873.69	15.47	35.87	1864.32	84.15	60.84	2.00	0.00	2.00	
6098.18	15.47	35.87	5935.68	997.53	721.20	0.00	0.00	0.00	
6871.87	0.00	0.00	6700.00	1081.68	782.04	-2.00	0.00	2.00	
8379.67	0.00	0.00	8207.80	1081.68	782.04	0.00	0.00	0.00	
9504.67	90.00	179.64	8924.00	365.50	786.50	8.00	0.00	8.00	FTP 14
19868.87	90.00	179.64	8924.00	-9998.50	851.10	0.00	0.00	0.00	LTP 14
19918.86	90.00	179.64	8924.00	-10048.48	851.41	0.00	0.00	0.00	BHL 14

Position Uncertainty PLU 15 Twin Wells Ranch-306H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool

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	35.866	1199.980	5.287	0.000	4.222	0.000	2.696	0.000	0.000	5.297	4.212	131.029	MWD+IFR1+MS
1300.000	4.000	35.866	1299.838	6.036	0.000	4.613	0.000	2.756	0.000	0.000	6.072	4.577	134.086	MWD+IFR1+MS
1400.000	6.000	35.866	1399.452	6.714	0.000	4.998	0.000	2.822	0.000	0.000	6.780	4.937	-44.480	MWD+IFR1+MS
1500.000	8.000	35.866	1498.702	7.339	0.000	5.379	0.000	2.895	0.000	0.000	7.435	5.295	-43.658	MWD+IFR1+MS
1600.000	10.000	35.866	1597.465	7.922	0.000	5.759	0.000	2.979	0.000	0.000	8.051	5.654	-43.129	MWD+IFR1+MS
1700.000	12.000	35.866	1695.623	8.471	0.000	6.137	0.000	3.073	0.000	0.000	8.634	6.014	-42.758	MWD+IFR1+MS
1800.000	14.000	35.866	1793.055	8.991	0.000	6.517	0.000	3.181	0.000	0.000	9.190	6.378	-42.480	MWD+IFR1+MS
1873.694	15.474	35.866	1864.323	9.264	0.000	6.789	0.000	3.251	0.000	0.000	9.493	6.648	-42.438	MWD+IFR1+MS
1900.000	15.474	35.866	1889.675	9.335	0.000	6.883	0.000	3.268	0.000	0.000	9.563	6.745	-42.473	MWD+IFR1+MS
2000.000	15.474	35.866	1986.051	9.608	0.000	7.253	0.000	3.356	0.000	0.000	9.824	7.122	-42.441	MWD+IFR1+MS
2100.000	15.474	35.866	2082.426	9.901	0.000	7.642	0.000	3.449	0.000	0.000	10.109	7.512	-42.166	MWD+IFR1+MS
2200.000	15.474	35.866	2178.801	10.202	0.000	8.032	0.000	3.547	0.000	0.000	10.400	7.903	-41.892	MWD+IFR1+MS
2300.000	15.474	35.866	2275.176	10.510	0.000	8.424	0.000	3.647	0.000	0.000	10.697	8.296	-41.619	MWD+IFR1+MS
2400.000	15.474	35.866	2371.552	10.824	0.000	8.817	0.000	3.751	0.000	0.000	11.001	8.690	-41.345	MWD+IFR1+MS
2500.000	15.474	35.866	2467.927	11.144	0.000	9.212	0.000	3.858	0.000	0.000	11.310	9.085	-41.071	MWD+IFR1+MS
2600.000	15.474	35.866	2564.302	11.470	0.000	9.607	0.000	3.968	0.000	0.000	11.624	9.481	-40.796	MWD+IFR1+MS
2700.000	15.474	35.866	2660.677	11.800	0.000	10.004	0.000	4.081	0.000	0.000	11.943	9.878	-40.520	MWD+IFR1+MS
2800.000	15.474	35.866	2757.052	12.136	0.000	10.401	0.000	4.196	0.000	0.000	12.266	10.276	-40.241	MWD+IFR1+MS
2900.000	15.474	35.866	2853.428	12.475	0.000	10.799	0.000	4.313	0.000	0.000	12.593	10.675	-39.961	MWD+IFR1+MS

3000.000	15.474	35.866	2949.803	12.818	0.000	11.198	0.000	4.432	0.000	0.000	12.923	11.074	-39.678	MWD+IFR1+MS
3100.000	15.474	35.866	3046.178	13.164	0.000	11.597	0.000	4.553	0.000	0.000	13.257	11.474	-39.391	MWD+IFR1+MS
3200.000	15.474	35.866	3142.553	13.514	0.000	11.997	0.000	4.677	0.000	0.000	13.594	11.874	-39.100	MWD+IFR1+MS
3300.000	15.474	35.866	3238.928	13.867	0.000	12.398	0.000	4.802	0.000	0.000	13.934	12.275	-38.805	MWD+IFR1+MS
3400.000	15.474	35.866	3335.304	14.223	0.000	12.799	0.000	4.929	0.000	0.000	14.276	12.676	-38.505	MWD+IFR1+MS
3500.000	15.474	35.866	3431.679	14.581	0.000	13.200	0.000	5.058	0.000	0.000	14.621	13.077	-38.199	MWD+IFR1+MS
3600.000	15.474	35.866	3528.054	14.942	0.000	13.601	0.000	5.189	0.000	0.000	14.969	13.479	-37.887	MWD+IFR1+MS
3700.000	15.474	35.866	3624.429	15.305	0.000	14.003	0.000	5.321	0.000	0.000	15.319	13.881	-37.568	MWD+IFR1+MS
3800.000	15.474	35.866	3720.805	15.670	0.000	14.405	0.000	5.455	0.000	0.000	15.670	14.283	-37.241	MWD+IFR1+MS
3900.000	15.474	35.866	3817.180	16.037	0.000	14.808	0.000	5.590	0.000	0.000	16.024	14.686	-36.906	MWD+IFR1+MS
4000.000	15.474	35.866	3913.555	16.406	0.000	15.211	0.000	5.727	0.000	0.000	16.379	15.088	-36.561	MWD+IFR1+MS
4100.000	15.474	35.866	4009.930	16.776	0.000	15.614	0.000	5.865	0.000	0.000	16.736	15.491	-36.206	MWD+IFR1+MS
4200.000	15.474	35.866	4106.305	17.148	0.000	16.017	0.000	6.005	0.000	0.000	17.095	15.895	-35.840	MWD+IFR1+MS
4300.000	15.474	35.866	4202.681	17.522	0.000	16.420	0.000	6.147	0.000	0.000	17.455	16.298	-35.462	MWD+IFR1+MS
4400.000	15.474	35.866	4299.056	17.897	0.000	16.824	0.000	6.290	0.000	0.000	17.817	16.701	-35.070	MWD+IFR1+MS
4500.000	15.474	35.866	4395.431	18.273	0.000	17.228	0.000	6.434	0.000	0.000	18.180	17.105	-34.663	MWD+IFR1+MS
4600.000	15.474	35.866	4491.806	18.650	0.000	17.631	0.000	6.580	0.000	0.000	18.544	17.508	-34.241	MWD+IFR1+MS
4700.000	15.474	35.866	4588.181	19.029	0.000	18.036	0.000	6.727	0.000	0.000	18.909	17.912	-33.801	MWD+IFR1+MS
4800.000	15.474	35.866	4684.557	19.409	0.000	18.440	0.000	6.876	0.000	0.000	19.276	18.316	-33.341	MWD+IFR1+MS
4900.000	15.474	35.866	4780.932	19.789	0.000	18.844	0.000	7.027	0.000	0.000	19.644	18.720	-32.862	MWD+IFR1+MS
5000.000	15.474	35.866	4877.307	20.171	0.000	19.249	0.000	7.178	0.000	0.000	20.012	19.124	-32.359	MWD+IFR1+MS
5100.000	15.474	35.866	4973.682	20.554	0.000	19.653	0.000	7.332	0.000	0.000	20.382	19.528	-31.832	MWD+IFR1+MS
5200.000	15.474	35.866	5070.058	20.937	0.000	20.058	0.000	7.487	0.000	0.000	20.753	19.932	-31.277	MWD+IFR1+MS
5300.000	15.474	35.866	5166.433	21.321	0.000	20.463	0.000	7.643	0.000	0.000	21.125	20.336	-30.694	MWD+IFR1+MS
5400.000	15.474	35.866	5262.808	21.706	0.000	20.868	0.000	7.801	0.000	0.000	21.497	20.740	-30.077	MWD+IFR1+MS
5500.000	15.474	35.866	5359.183	22.092	0.000	21.272	0.000	7.961	0.000	0.000	21.871	21.144	-29.426	MWD+IFR1+MS
5600.000	15.474	35.866	5455.558	22.478	0.000	21.678	0.000	8.122	0.000	0.000	22.245	21.548	-28.736	MWD+IFR1+MS
5700.000	15.474	35.866	5551.934	22.866	0.000	22.083	0.000	8.285	0.000	0.000	22.620	21.951	-28.003	MWD+IFR1+MS
5800.000	15.474	35.866	5648.309	23.253	0.000	22.488	0.000	8.449	0.000	0.000	22.996	22.355	-27.225	MWD+IFR1+MS
5900.000	15.474	35.866	5744.684	23.642	0.000	22.893	0.000	8.615	0.000	0.000	23.373	22.759	-26.395	MWD+IFR1+MS
6000.000	15.474	35.866	5841.059	24.030	0.000	23.299	0.000	8.782	0.000	0.000	23.750	23.162	-25.511	MWD+IFR1+MS
6098.176	15.474	35.866	5935.677	24.412	0.000	23.696	0.000	8.949	0.000	0.000	24.121	23.558	-24.600	MWD+IFR1+MS
6100.000	15.437	35.866	5937.435	24.420	0.000	23.704	0.000	8.952	0.000	0.000	24.128	23.566	-24.589	MWD+IFR1+MS

6200.000	13.437	35.866	6034.272	24.862	0.000	24.098	0.000	9.124	0.000	0.000	24.517	23.965	-24.831	MWD+IFR1+MS
6300.000	11.437	35.866	6131.920	25.346	0.000	24.488	0.000	9.301	0.000	0.000	24.979	24.358	-27.057	MWD+IFR1+MS
6400.000	9.437	35.866	6230.260	25.791	0.000	24.867	0.000	9.468	0.000	0.000	25.434	24.739	-28.931	MWD+IFR1+MS
6500.000	7.437	35.866	6329.173	26.195	0.000	25.234	0.000	9.625	0.000	0.000	25.882	25.108	-30.495	MWD+IFR1+MS
6600.000	5.437	35.866	6428.537	26.559	0.000	25.591	0.000	9.774	0.000	0.000	26.321	25.466	-31.793	MWD+IFR1+MS
6700.000	3.437	35.866	6528.233	26.882	0.000	25.937	0.000	9.916	0.000	0.000	26.751	25.811	-32.865	MWD+IFR1+MS
6800.000	1.437	35.866	6628.137	27.165	0.000	26.272	0.000	10.052	0.000	0.000	27.171	26.146	-33.746	MWD+IFR1+MS
6871.870	0.000	0.000	6700.000	26.722	0.000	27.093	0.000	10.147	0.000	0.000	27.422	26.384	-34.541	MWD+IFR1+MS
6900.000	0.000	0.000	6728.130	26.812	0.000	27.178	0.000	10.184	0.000	0.000	27.507	26.475	-34.620	MWD+IFR1+MS
7000.000	0.000	0.000	6828.130	27.133	0.000	27.487	0.000	10.317	0.000	0.000	27.814	26.798	-34.825	MWD+IFR1+MS
7100.000	0.000	0.000	6928.130	27.459	0.000	27.800	0.000	10.452	0.000	0.000	28.129	27.122	-35.107	MWD+IFR1+MS
7200.000	0.000	0.000	7028.130	27.786	0.000	28.114	0.000	10.591	0.000	0.000	28.445	27.447	-35.388	MWD+IFR1+MS
7300.000	0.000	0.000	7128.130	28.113	0.000	28.430	0.000	10.732	0.000	0.000	28.762	27.773	-35.667	MWD+IFR1+MS
7400.000	0.000	0.000	7228.130	28.441	0.000	28.746	0.000	10.876	0.000	0.000	29.080	28.099	-35.944	MWD+IFR1+MS
7500.000	0.000	0.000	7328.130	28.770	0.000	29.063	0.000	11.023	0.000	0.000	29.399	28.427	-36.220	MWD+IFR1+MS
7600.000	0.000	0.000	7428.130	29.099	0.000	29.382	0.000	11.174	0.000	0.000	29.719	28.755	-36.495	MWD+IFR1+MS
7700.000	0.000	0.000	7528.130	29.430	0.000	29.701	0.000	11.327	0.000	0.000	30.040	29.083	-36.767	MWD+IFR1+MS
7800.000	0.000	0.000	7628.130	29.761	0.000	30.021	0.000	11.483	0.000	0.000	30.362	29.413	-37.038	MWD+IFR1+MS
7900.000	0.000	0.000	7728.130	30.092	0.000	30.342	0.000	11.642	0.000	0.000	30.685	29.743	-37.308	MWD+IFR1+MS
8000.000	0.000	0.000	7828.130	30.424	0.000	30.664	0.000	11.804	0.000	0.000	31.008	30.073	-37.575	MWD+IFR1+MS
8100.000	0.000	0.000	7928.130	30.757	0.000	30.986	0.000	11.970	0.000	0.000	31.332	30.404	-37.841	MWD+IFR1+MS
8200.000	0.000	0.000	8028.130	31.090	0.000	31.310	0.000	12.138	0.000	0.000	31.657	30.736	-38.105	MWD+IFR1+MS
8300.000	0.000	0.000	8128.130	31.424	0.000	31.634	0.000	12.310	0.000	0.000	31.983	31.068	-38.368	MWD+IFR1+MS
8379.673	0.000	0.000	8207.803	31.689	0.000	31.891	0.000	12.448	0.000	0.000	32.240	31.333	-38.553	MWD+IFR1+MS
8400.000	1.626	179.643	8228.127	31.625	0.000	31.959	-0.000	12.484	0.000	0.000	32.301	31.398	-38.545	MWD+IFR1+MS
8500.000	9.626	179.643	8327.564	31.485	0.000	32.245	-0.000	12.676	0.000	0.000	32.841	31.892	127.036	MWD+IFR1+MS
8600.000	17.626	179.643	8424.671	31.702	0.000	32.511	-0.000	13.016	0.000	0.000	34.116	32.340	107.512	MWD+IFR1+MS
8700.000	25.626	179.643	8517.556	31.447	0.000	32.752	-0.000	13.598	0.000	0.000	35.339	32.620	102.109	MWD+IFR1+MS
8800.000	33.626	179.643	8604.412	30.796	0.000	32.965	-0.000	14.484	0.000	0.000	36.379	32.846	99.951	MWD+IFR1+MS
8900.000	41.626	179.643	8683.549	29.850	0.000	33.153	-0.000	15.684	0.000	0.000	37.214	33.037	98.949	MWD+IFR1+MS
9000.000	49.626	179.643	8753.426	28.736	0.000	33.314	-0.000	17.165	0.000	0.000	37.845	33.196	98.517	MWD+IFR1+MS
9100.000	57.626	179.643	8812.683	27.612	0.000	33.452	-0.000	18.867	0.000	0.000	38.287	33.328	98.435	MWD+IFR1+MS
9200.000	65.626	179.643	8860.167	26.658	0.000	33.568	-0.000	20.719	0.000	0.000	38.564	33.434	98.601	MWD+IFR1+MS

9300.000	73.626	179.643	8894.953	26.061	0.000	33.663	-0.000	22.648	0.000	0.000	38.711	33.517	98.951	MWD+IFR1+MS
9400.000	81.626	179.643	8916.365	25.984	0.000	33.737	-0.000	24.588	0.000	0.000	38.769	33.576	99.423	MWD+IFR1+MS
9504.673	90.000	179.643	8924.000	26.725	0.000	33.794	-0.000	26.725	0.000	0.000	38.788	33.615	99.963	MWD+IFR1+MS
9600.000	90.000	179.643	8924.000	27.379	0.000	33.844	-0.000	27.379	0.000	0.000	38.802	33.649	100.449	MWD+IFR1+MS
9700.000	90.000	179.643	8924.000	27.620	0.000	33.919	-0.000	27.620	0.000	0.000	38.819	33.706	101.010	MWD+IFR1+MS
9800.000	90.000	179.643	8924.000	27.881	0.000	34.018	-0.000	27.881	0.000	0.000	38.838	33.784	101.626	MWD+IFR1+MS
9900.000	90.000	179.643	8924.000	28.161	0.000	34.138	-0.000	28.161	0.000	0.000	38.860	33.882	102.305	MWD+IFR1+MS
10000.000	90.000	179.643	8924.000	28.460	0.000	34.281	-0.000	28.460	0.000	0.000	38.884	34.001	103.058	MWD+IFR1+MS
10100.000	90.000	179.643	8924.000	28.778	0.000	34.446	-0.000	28.778	0.000	0.000	38.912	34.138	103.896	MWD+IFR1+MS
10200.000	90.000	179.643	8924.000	29.113	0.000	34.633	-0.000	29.113	0.000	0.000	38.944	34.293	104.832	MWD+IFR1+MS
10300.000	90.000	179.643	8924.000	29.465	0.000	34.840	-0.000	29.465	0.000	0.000	38.980	34.466	105.883	MWD+IFR1+MS
10400.000	90.000	179.643	8924.000	29.834	0.000	35.069	-0.000	29.834	0.000	0.000	39.021	34.655	107.069	MWD+IFR1+MS
10500.000	90.000	179.643	8924.000	30.218	0.000	35.318	-0.000	30.218	0.000	0.000	39.068	34.859	108.412	MWD+IFR1+MS
10600.000	90.000	179.643	8924.000	30.618	0.000	35.587	-0.000	30.618	0.000	0.000	39.123	35.076	109.938	MWD+IFR1+MS
10700.000	90.000	179.643	8924.000	31.033	0.000	35.876	-0.000	31.033	0.000	0.000	39.187	35.304	111.678	MWD+IFR1+MS
10800.000	90.000	179.643	8924.000	31.462	0.000	36.184	-0.000	31.462	0.000	0.000	39.261	35.541	113.664	MWD+IFR1+MS
10900.000	90.000	179.643	8924.000	31.904	0.000	36.510	-0.000	31.904	0.000	0.000	39.349	35.784	115.929	MWD+IFR1+MS
11000.000	90.000	179.643	8924.000	32.359	0.000	36.855	-0.000	32.359	0.000	0.000	39.453	36.029	118.502	MWD+IFR1+MS
11100.000	90.000	179.643	8924.000	32.827	0.000	37.218	-0.000	32.827	0.000	0.000	39.577	36.273	121.400	MWD+IFR1+MS
11200.000	90.000	179.643	8924.000	33.306	0.000	37.597	-0.000	33.306	0.000	0.000	39.724	36.511	124.618	MWD+IFR1+MS
11300.000	90.000	179.643	8924.000	33.797	0.000	37.993	-0.000	33.797	0.000	0.000	39.899	36.739	128.118	MWD+IFR1+MS
11400.000	90.000	179.643	8924.000	34.299	0.000	38.405	-0.000	34.299	0.000	0.000	40.104	36.952	131.824	MWD+IFR1+MS
11500.000	90.000	179.643	8924.000	34.812	0.000	38.833	-0.000	34.812	0.000	0.000	40.343	37.148	-44.377	MWD+IFR1+MS
11600.000	90.000	179.643	8924.000	35.334	0.000	39.276	-0.000	35.334	0.000	0.000	40.618	37.324	-40.614	MWD+IFR1+MS
11700.000	90.000	179.643	8924.000	35.866	0.000	39.734	-0.000	35.866	0.000	0.000	40.929	37.480	-37.012	MWD+IFR1+MS
11800.000	90.000	179.643	8924.000	36.407	0.000	40.205	-0.000	36.407	0.000	0.000	41.273	37.616	-33.663	MWD+IFR1+MS
11900.000	90.000	179.643	8924.000	36.957	0.000	40.691	-0.000	36.957	0.000	0.000	41.649	37.734	-30.622	MWD+IFR1+MS
12000.000	90.000	179.643	8924.000	37.516	0.000	41.189	-0.000	37.516	0.000	0.000	42.055	37.837	-27.907	MWD+IFR1+MS
12100.000	90.000	179.643	8924.000	38.082	0.000	41.700	-0.000	38.082	0.000	0.000	42.487	37.926	-25.510	MWD+IFR1+MS
12200.000	90.000	179.643	8924.000	38.656	0.000	42.223	-0.000	38.656	0.000	0.000	42.942	38.005	-23.406	MWD+IFR1+MS
12300.000	90.000	179.643	8924.000	39.237	0.000	42.758	-0.000	39.237	0.000	0.000	43.419	38.075	-21.563	MWD+IFR1+MS
12400.000	90.000	179.643	8924.000	39.825	0.000	43.304	-0.000	39.825	0.000	0.000	43.915	38.137	-19.948	MWD+IFR1+MS
12500.000	90.000	179.643	8924.000	40.420	0.000	43.861	-0.000	40.420	0.000	0.000	44.429	38.193	-18.530	MWD+IFR1+MS

12600.000	90.000	179.643	8924.000	41.021	0.000	44.429	-0.000	41.021	0.000	0.000	44.958	38.245	-17.280	MWD+IFR1+MS
12700.000	90.000	179.643	8924.000	41.629	0.000	45.006	-0.000	41.629	0.000	0.000	45.502	38.292	-16.174	MWD+IFR1+MS
12800.000	90.000	179.643	8924.000	42.242	0.000	45.594	-0.000	42.242	0.000	0.000	46.060	38.336	-15.192	MWD+IFR1+MS
12900.000	90.000	179.643	8924.000	42.860	0.000	46.190	-0.000	42.860	0.000	0.000	46.630	38.377	-14.316	MWD+IFR1+MS
13000.000	90.000	179.643	8924.000	43.485	0.000	46.796	-0.000	43.485	0.000	0.000	47.212	38.416	-13.530	MWD+IFR1+MS
13100.000	90.000	179.643	8924.000	44.114	0.000	47.410	-0.000	44.114	0.000	0.000	47.805	38.453	-12.823	MWD+IFR1+MS
13200.000	90.000	179.643	8924.000	44.748	0.000	48.033	-0.000	44.748	0.000	0.000	48.408	38.489	-12.184	MWD+IFR1+MS
13300.000	90.000	179.643	8924.000	45.387	0.000	48.663	-0.000	45.387	0.000	0.000	49.021	38.524	-11.605	MWD+IFR1+MS
13400.000	90.000	179.643	8924.000	46.030	0.000	49.301	-0.000	46.030	0.000	0.000	49.643	38.557	-11.077	MWD+IFR1+MS
13500.000	90.000	179.643	8924.000	46.678	0.000	49.947	-0.000	46.678	0.000	0.000	50.274	38.590	-10.594	MWD+IFR1+MS
13600.000	90.000	179.643	8924.000	47.330	0.000	50.600	-0.000	47.330	0.000	0.000	50.913	38.622	-10.152	MWD+IFR1+MS
13700.000	90.000	179.643	8924.000	47.986	0.000	51.259	-0.000	47.986	0.000	0.000	51.560	38.653	-9.745	MWD+IFR1+MS
13800.000	90.000	179.643	8924.000	48.646	0.000	51.925	-0.000	48.646	0.000	0.000	52.215	38.684	-9.369	MWD+IFR1+MS
13900.000	90.000	179.643	8924.000	49.309	0.000	52.597	-0.000	49.309	0.000	0.000	52.876	38.715	-9.021	MWD+IFR1+MS
14000.000	90.000	179.643	8924.000	49.976	0.000	53.276	-0.000	49.976	0.000	0.000	53.545	38.746	-8.699	MWD+IFR1+MS
14100.000	90.000	179.643	8924.000	50.646	0.000	53.960	-0.000	50.646	0.000	0.000	54.220	38.776	-8.399	MWD+IFR1+MS
14200.000	90.000	179.643	8924.000	51.320	0.000	54.650	-0.000	51.320	0.000	0.000	54.901	38.806	-8.120	MWD+IFR1+MS
14300.000	90.000	179.643	8924.000	51.996	0.000	55.345	-0.000	51.996	0.000	0.000	55.588	38.837	-7.859	MWD+IFR1+MS
14400.000	90.000	179.643	8924.000	52.676	0.000	56.046	-0.000	52.676	0.000	0.000	56.281	38.867	-7.614	MWD+IFR1+MS
14500.000	90.000	179.643	8924.000	53.358	0.000	56.751	-0.000	53.358	0.000	0.000	56.979	38.897	-7.385	MWD+IFR1+MS
14600.000	90.000	179.643	8924.000	54.044	0.000	57.462	-0.000	54.044	0.000	0.000	57.683	38.927	-7.170	MWD+IFR1+MS
14700.000	90.000	179.643	8924.000	54.732	0.000	58.177	-0.000	54.732	0.000	0.000	58.392	38.958	-6.967	MWD+IFR1+MS
14800.000	90.000	179.643	8924.000	55.422	0.000	58.896	-0.000	55.422	0.000	0.000	59.105	38.989	-6.775	MWD+IFR1+MS
14900.000	90.000	179.643	8924.000	56.115	0.000	59.620	-0.000	56.115	0.000	0.000	59.823	39.020	-6.595	MWD+IFR1+MS
15000.000	90.000	179.643	8924.000	56.810	0.000	60.348	-0.000	56.810	0.000	0.000	60.546	39.051	-6.424	MWD+IFR1+MS
15100.000	90.000	179.643	8924.000	57.508	0.000	61.080	-0.000	57.508	0.000	0.000	61.273	39.082	-6.262	MWD+IFR1+MS
15200.000	90.000	179.643	8924.000	58.208	0.000	61.816	-0.000	58.208	0.000	0.000	62.004	39.113	-6.108	MWD+IFR1+MS
15300.000	90.000	179.643	8924.000	58.910	0.000	62.555	-0.000	58.910	0.000	0.000	62.739	39.145	-5.963	MWD+IFR1+MS
15400.000	90.000	179.643	8924.000	59.614	0.000	63.299	-0.000	59.614	0.000	0.000	63.477	39.177	-5.824	MWD+IFR1+MS
15500.000	90.000	179.643	8924.000	60.320	0.000	64.045	-0.000	60.320	0.000	0.000	64.220	39.210	-5.692	MWD+IFR1+MS
15600.000	90.000	179.643	8924.000	61.028	0.000	64.796	-0.000	61.028	0.000	0.000	64.966	39.242	-5.566	MWD+IFR1+MS
15700.000	90.000	179.643	8924.000	61.738	0.000	65.549	-0.000	61.738	0.000	0.000	65.715	39.275	-5.446	MWD+IFR1+MS
15800.000	90.000	179.643	8924.000	62.450	0.000	66.305	-0.000	62.450	0.000	0.000	66.468	39.308	-5.331	MWD+IFR1+MS

15900.000	90.000	179.643	8924.000	63.163	0.000	67.065	-0.000	63.163	0.000	0.000	67.224	39.342	-5.221	MWD+IFR1+MS
16000.000	90.000	179.643	8924.000	63.878	0.000	67.827	-0.000	63.878	0.000	0.000	67.983	39.376	-5.116	MWD+IFR1+MS
16100.000	90.000	179.643	8924.000	64.595	0.000	68.593	-0.000	64.595	0.000	0.000	68.745	39.410	-5.015	MWD+IFR1+MS
16200.000	90.000	179.643	8924.000	65.313	0.000	69.361	-0.000	65.313	0.000	0.000	69.510	39.445	-4.919	MWD+IFR1+MS
16300.000	90.000	179.643	8924.000	66.033	0.000	70.131	-0.000	66.033	0.000	0.000	70.277	39.480	-4.826	MWD+IFR1+MS
16400.000	90.000	179.643	8924.000	66.754	0.000	70.905	-0.000	66.754	0.000	0.000	71.048	39.515	-4.737	MWD+IFR1+MS
16500.000	90.000	179.643	8924.000	67.477	0.000	71.680	-0.000	67.477	0.000	0.000	71.821	39.551	-4.652	MWD+IFR1+MS
16600.000	90.000	179.643	8924.000	68.201	0.000	72.458	-0.000	68.201	0.000	0.000	72.596	39.587	-4.570	MWD+IFR1+MS
16700.000	90.000	179.643	8924.000	68.927	0.000	73.239	-0.000	68.927	0.000	0.000	73.374	39.623	-4.491	MWD+IFR1+MS
16800.000	90.000	179.643	8924.000	69.653	0.000	74.021	-0.000	69.653	0.000	0.000	74.154	39.660	-4.414	MWD+IFR1+MS
16900.000	90.000	179.643	8924.000	70.381	0.000	74.806	-0.000	70.381	0.000	0.000	74.936	39.697	-4.341	MWD+IFR1+MS
17000.000	90.000	179.643	8924.000	71.110	0.000	75.593	-0.000	71.110	0.000	0.000	75.721	39.735	-4.270	MWD+IFR1+MS
17100.000	90.000	179.643	8924.000	71.840	0.000	76.382	-0.000	71.840	0.000	0.000	76.508	39.772	-4.201	MWD+IFR1+MS
17200.000	90.000	179.643	8924.000	72.572	0.000	77.173	-0.000	72.572	0.000	0.000	77.297	39.811	-4.135	MWD+IFR1+MS
17300.000	90.000	179.643	8924.000	73.304	0.000	77.966	-0.000	73.304	0.000	0.000	78.087	39.849	-4.071	MWD+IFR1+MS
17400.000	90.000	179.643	8924.000	74.038	0.000	78.761	-0.000	74.038	0.000	0.000	78.880	39.888	-4.010	MWD+IFR1+MS
17500.000	90.000	179.643	8924.000	74.773	0.000	79.558	-0.000	74.773	0.000	0.000	79.675	39.928	-3.950	MWD+IFR1+MS
17600.000	90.000	179.643	8924.000	75.508	0.000	80.356	-0.000	75.508	0.000	0.000	80.471	39.968	-3.892	MWD+IFR1+MS
17700.000	90.000	179.643	8924.000	76.245	0.000	81.156	-0.000	76.245	0.000	0.000	81.269	40.008	-3.836	MWD+IFR1+MS
17800.000	90.000	179.643	8924.000	76.983	0.000	81.958	-0.000	76.983	0.000	0.000	82.069	40.049	-3.782	MWD+IFR1+MS
17900.000	90.000	179.643	8924.000	77.721	0.000	82.761	-0.000	77.721	0.000	0.000	82.871	40.090	-3.729	MWD+IFR1+MS
18000.000	90.000	179.643	8924.000	78.460	0.000	83.566	-0.000	78.460	0.000	0.000	83.674	40.131	-3.678	MWD+IFR1+MS
18100.000	90.000	179.643	8924.000	79.201	0.000	84.372	-0.000	79.201	0.000	0.000	84.479	40.173	-3.629	MWD+IFR1+MS
18200.000	90.000	179.643	8924.000	79.942	0.000	85.180	-0.000	79.942	0.000	0.000	85.285	40.215	-3.581	MWD+IFR1+MS
18300.000	90.000	179.643	8924.000	80.684	0.000	85.989	-0.000	80.684	0.000	0.000	86.093	40.258	-3.534	MWD+IFR1+MS
18400.000	90.000	179.643	8924.000	81.427	0.000	86.800	-0.000	81.427	0.000	0.000	86.902	40.301	-3.489	MWD+IFR1+MS
18500.000	90.000	179.643	8924.000	82.170	0.000	87.612	-0.000	82.170	0.000	0.000	87.712	40.344	-3.445	MWD+IFR1+MS
18600.000	90.000	179.643	8924.000	82.914	0.000	88.425	-0.000	82.914	0.000	0.000	88.524	40.388	-3.402	MWD+IFR1+MS
18700.000	90.000	179.643	8924.000	83.659	0.000	89.240	-0.000	83.659	0.000	0.000	89.338	40.432	-3.360	MWD+IFR1+MS
18800.000	90.000	179.643	8924.000	84.405	0.000	90.056	-0.000	84.405	0.000	0.000	90.152	40.477	-3.320	MWD+IFR1+MS
18900.000	90.000	179.643	8924.000	85.152	0.000	90.873	-0.000	85.152	0.000	0.000	90.968	40.522	-3.280	MWD+IFR1+MS
19000.000	90.000	179.643	8924.000	85.899	0.000	91.691	-0.000	85.899	0.000	0.000	91.785	40.567	-3.242	MWD+IFR1+MS
19100.000	90.000	179.643	8924.000	86.647	0.000	92.511	-0.000	86.647	0.000	0.000	92.603	40.613	-3.204	MWD+IFR1+MS

19200.000	90.000	179.643	8924.000	87.395	0.000	93.331	-0.000	87.395	0.000	0.000	93.422	40.659	-3.168	MWD+IFR1+MS
19300.000	90.000	179.643	8924.000	88.144	0.000	94.153	-0.000	88.144	0.000	0.000	94.243	40.706	-3.132	MWD+IFR1+MS
19400.000	90.000	179.643	8924.000	88.894	0.000	94.975	-0.000	88.894	0.000	0.000	95.064	40.753	-3.098	MWD+IFR1+MS
19500.000	90.000	179.643	8924.000	89.644	0.000	95.799	-0.000	89.644	0.000	0.000	95.887	40.800	-3.064	MWD+IFR1+MS
19600.000	90.000	179.643	8924.000	90.395	0.000	96.624	-0.000	90.395	0.000	0.000	96.710	40.848	-3.031	MWD+IFR1+MS
19700.000	90.000	179.643	8924.000	91.146	0.000	97.449	-0.000	91.146	0.000	0.000	97.535	40.896	-2.999	MWD+IFR1+MS
19800.000	90.000	179.643	8924.000	91.898	0.000	98.276	-0.000	91.898	0.000	0.000	98.360	40.945	-2.967	MWD+IFR1+MS
19868.875	90.000	179.643	8924.000	92.416	0.000	98.845	-0.000	92.416	0.000	0.000	98.928	40.978	-2.946	MWD+IFR1+MS
19900.000	90.000	179.643	8924.000	92.650	0.000	99.101	-0.000	92.650	0.000	0.000	99.185	40.993	-2.937	MWD+IFR1+MS
19918.857	90.000	179.643	8924.000	92.791	0.000	99.257	-0.000	92.791	0.000	0.000	99.340	41.003	-2.931	MWD+IFR1+MS

Plan Targets PLU 15 Twin Wells Ranch-306H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 14	9504.58	440488.40	677828.20	5360.00	CIRCLE
LTP 14	19868.87	430124.40	677892.80	5360.00	CIRCLE
BHL 14	19918.88	430074.40	677893.10	5360.00	CIRCLE

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

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

Background

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

Supporting Documentation

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

Figure 1: Winch System attached to BOP Stack

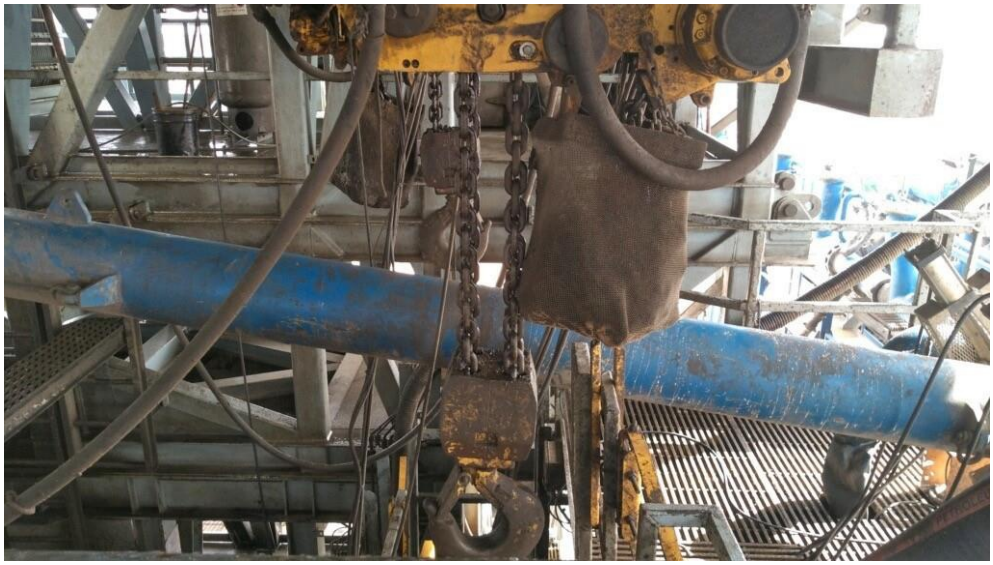


Figure 2: BOP Winch System

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

62 API STANDARD 53

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

Component to be Pressure Tested	Pressure Test—Low Pressure[ac] psig (MPa)	Pressure Test—High Pressure[ac]	
		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[bd]	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.

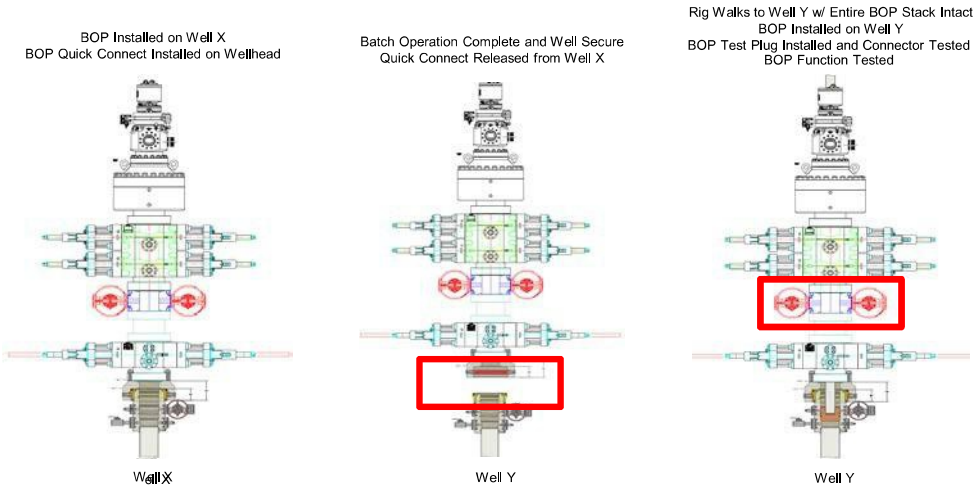
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often 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.

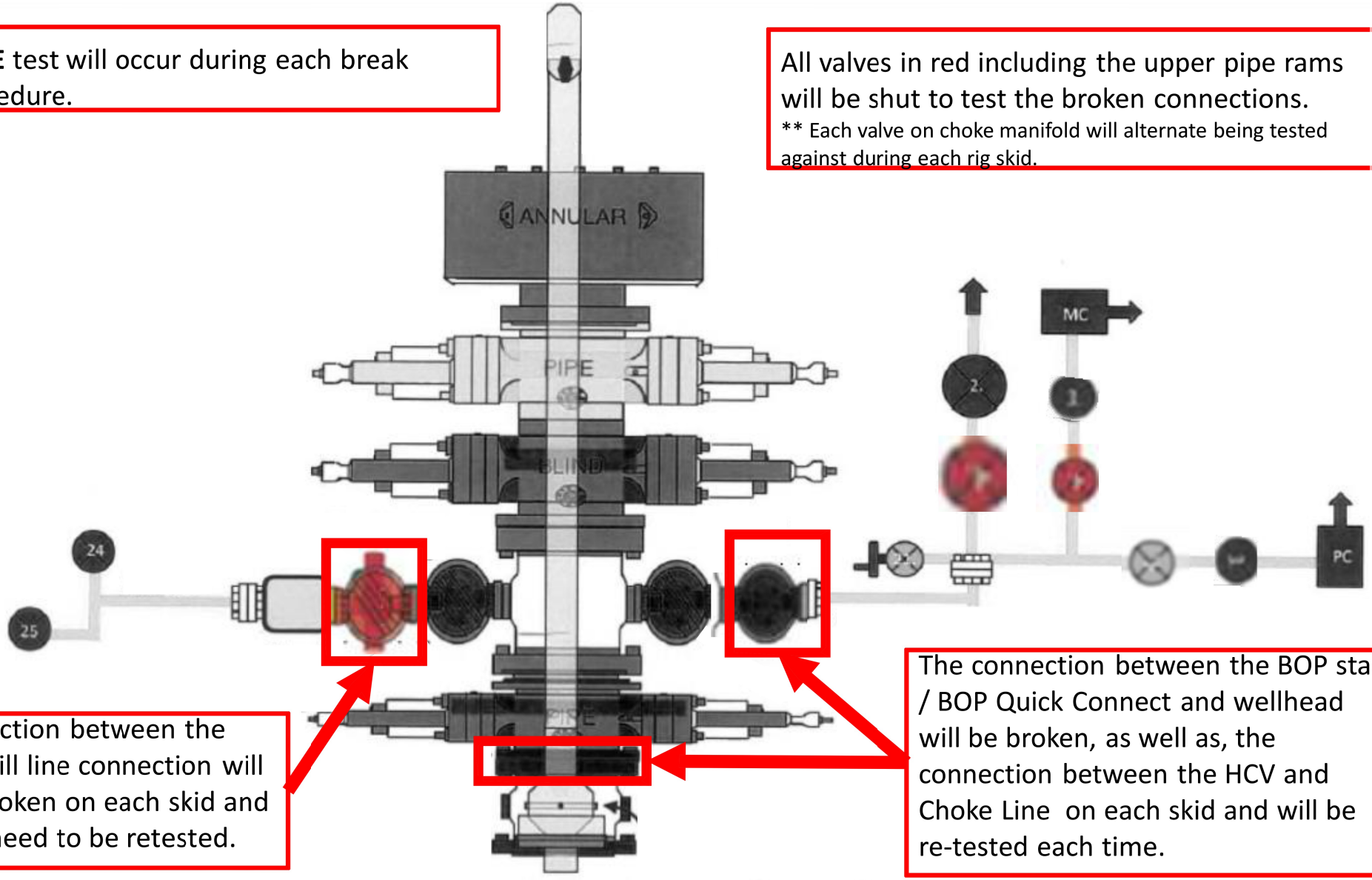
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

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.

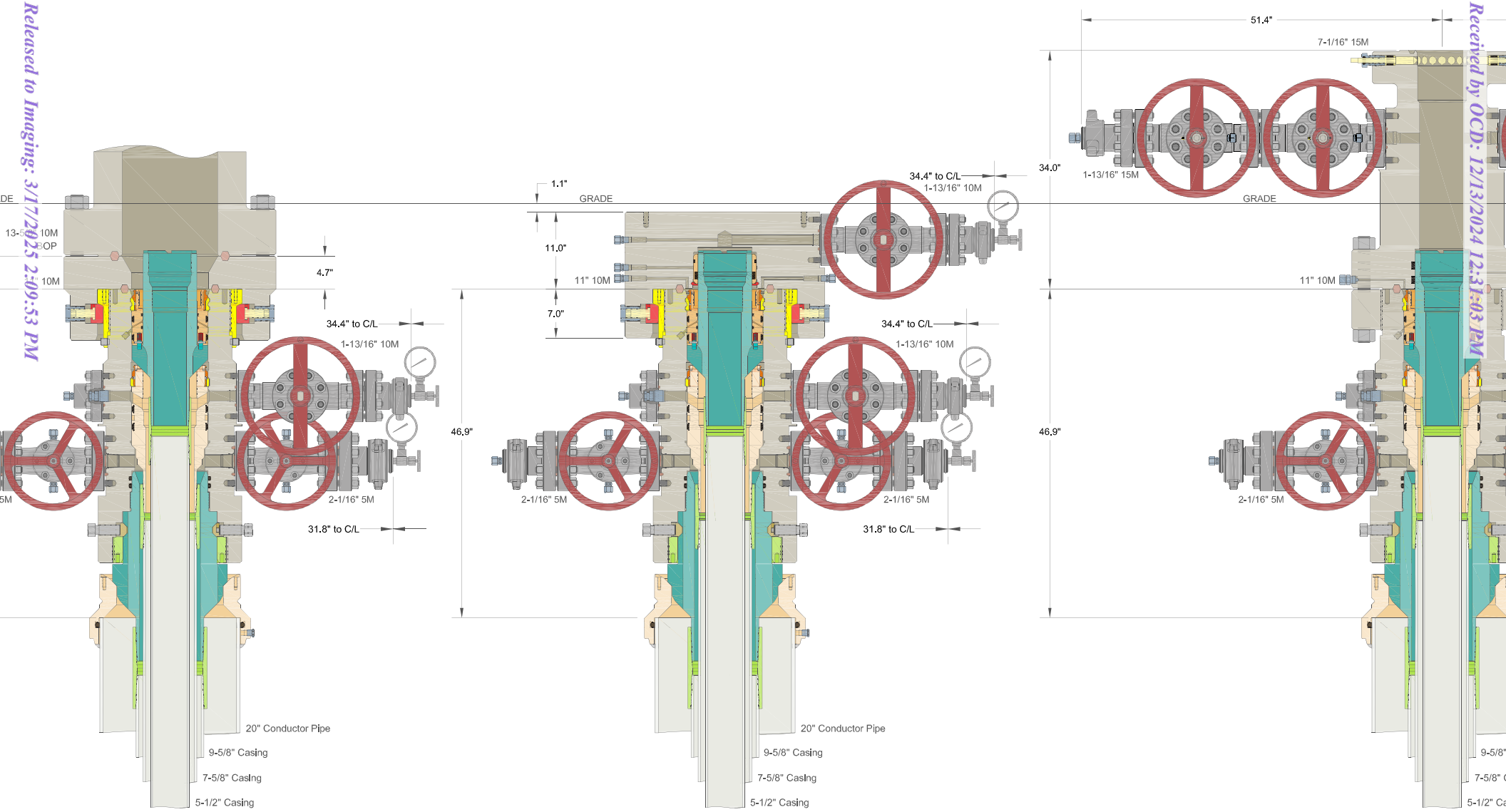
Only **ONE** test will occur during each break test procedure.

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.

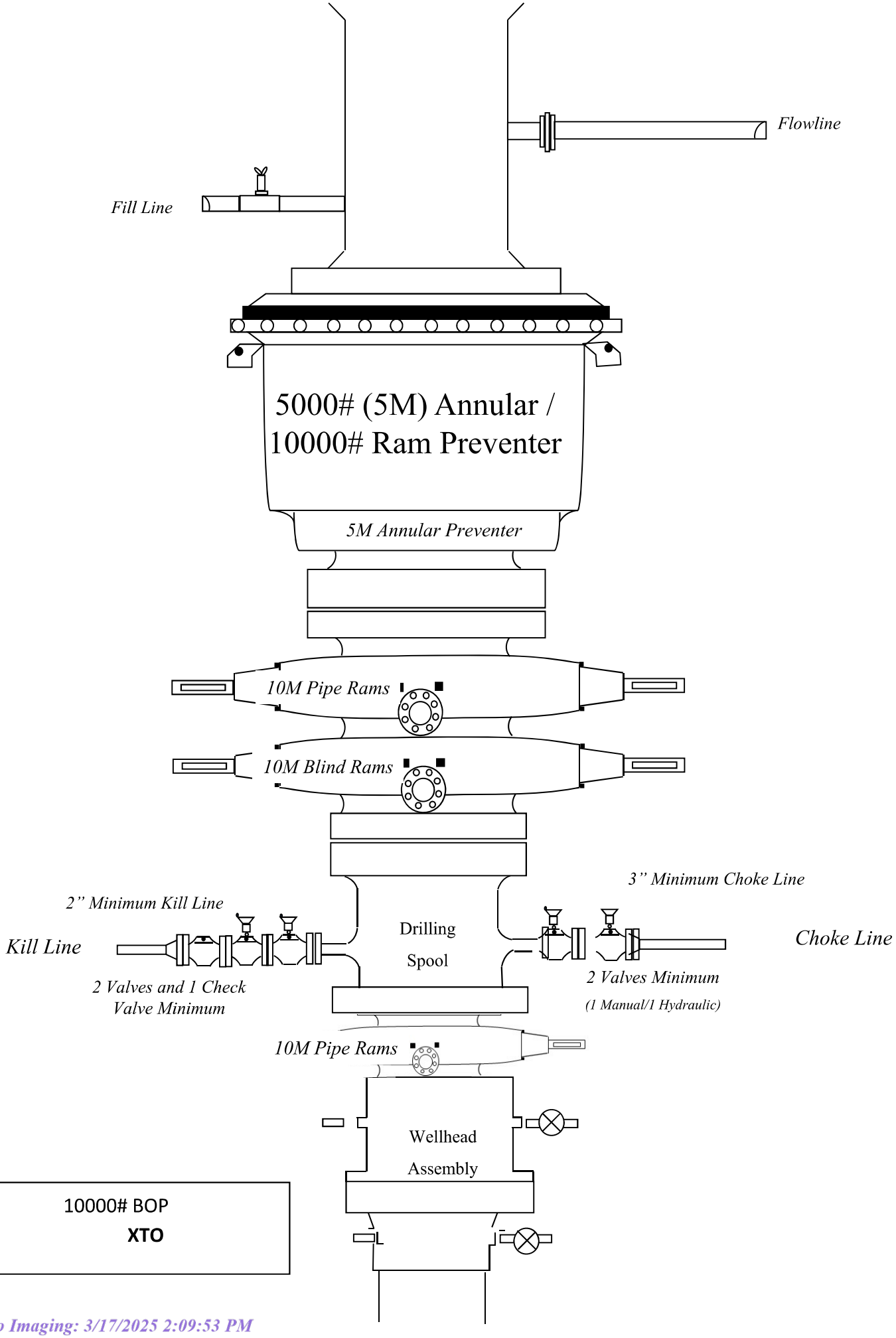


The connection between the HCV and kill line connection will **NOT** be broken on each skid and does not need to be retested.

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.



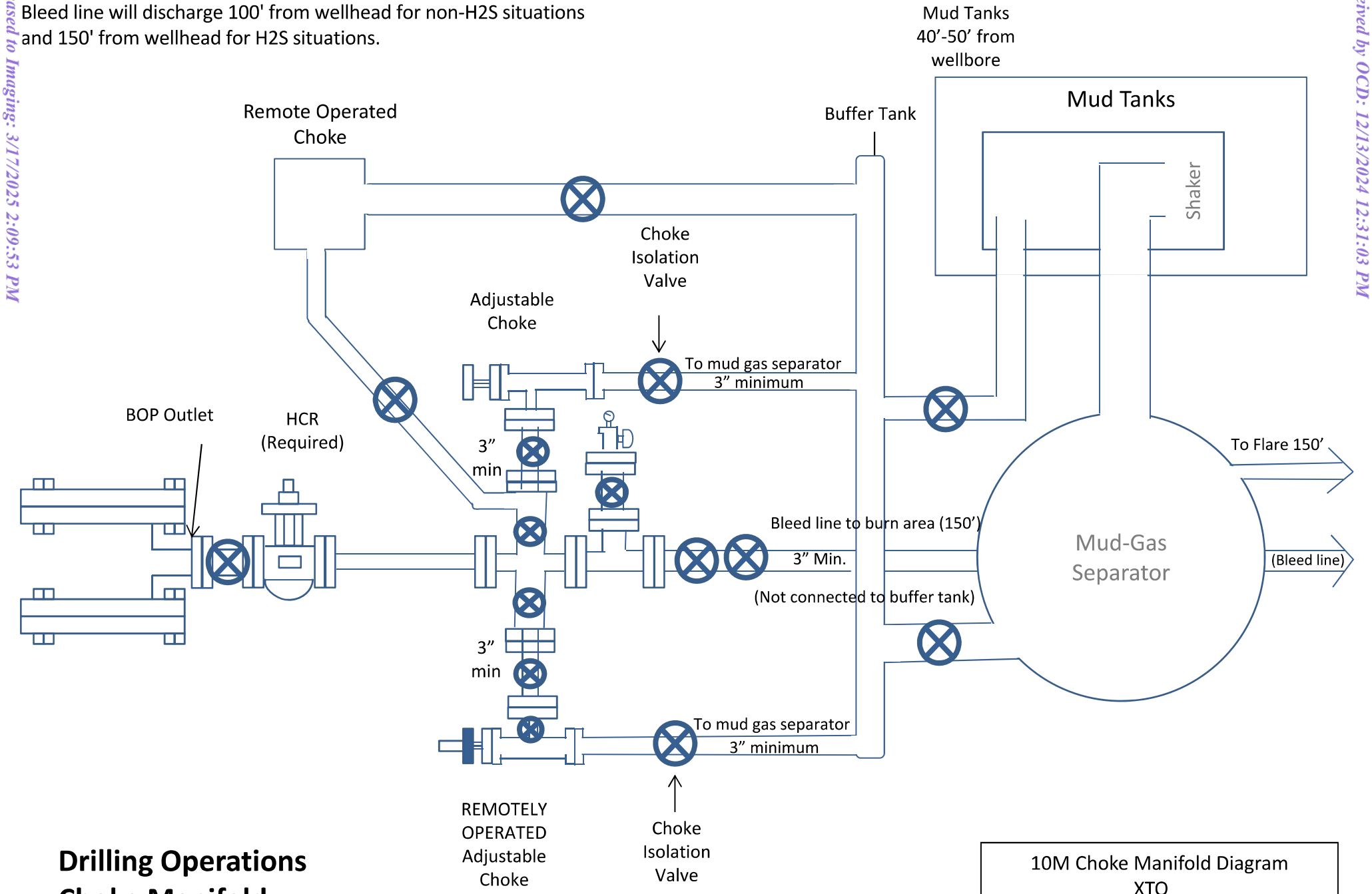
CACTUS WELLHEAD LLC



10000# BOP

XTO

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®

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	–

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.

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

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

XTO Permian Operating, LLC Offline Cementing Variance Request

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

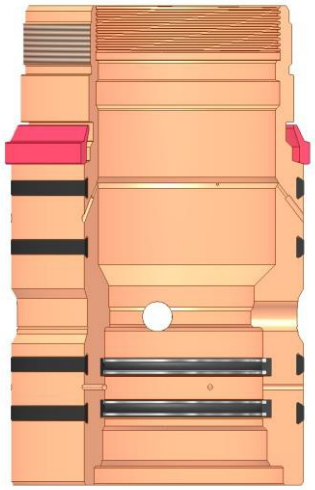
1. Cement Program

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

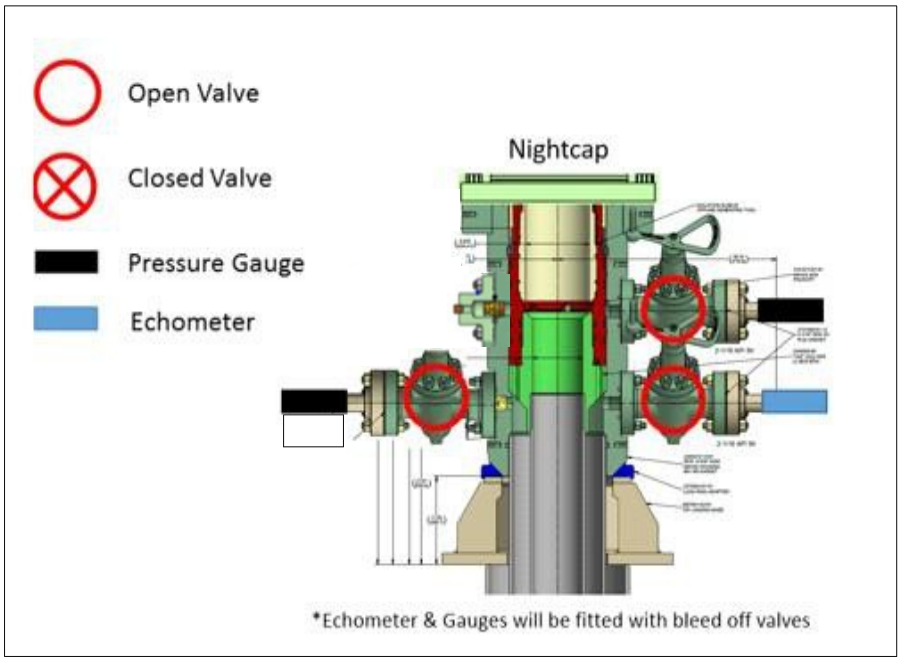
2. Offline Cementing Procedure

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

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



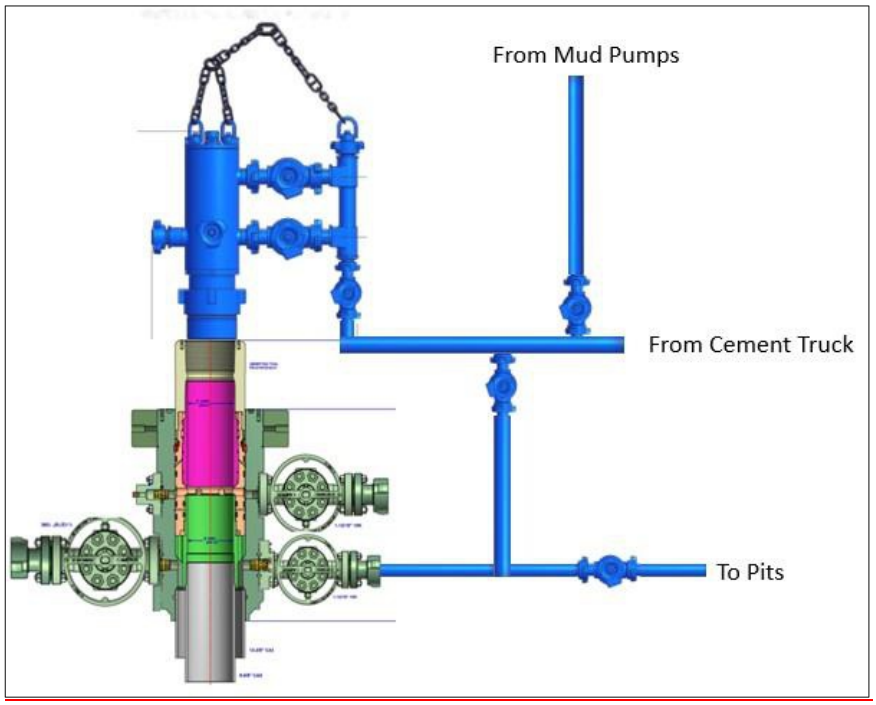
Annular packoff with both external and internal seals



Wellhead diagram during skidding operations

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
    a. Well Control Plan
        i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
        ii. Rig pumps or a 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 nippled up and tested on the wellhead before drilling operations resume on each well.
    a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
    b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.

U. S. Steel Tubular Products

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

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000	–	psi	–
Maximum Yield Strength	125,000	–	psi	–
Minimum Tensile Strength	125,000	–	psi	–
DIMENSIONS	**Pipe**	**USS-TALON HTQ™ RD**		**–**
Outside Diameter	5.500	5.900	in.	–
Wall Thickness	0.361	--	in.	–
Inside Diameter	4.778	4.778	in.	–
Standard Drift	4.653	4.653	in.	–
Alternate Drift	–	--	in.	–
Nominal Linear Weight, T&C	20.00	--	lb/ft	–
Plain End Weight	19.83	--	lb/ft	–
SECTION AREA	**Pipe**	**USS-TALON HTQ™ RD**		**–**
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	**Pipe**	**USS-TALON HTQ™ RD**		**–**
Minimum Collapse Pressure	11,100	11,100	psi	--
Minimum Internal Yield Pressure	12,640	12,640	psi	--
Minimum Pipe Body Yield Strength	641,000	--	lb	--
Joint Strength	--	641,000	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]

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.

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

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

BLACK GOLD®

GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX. 77086

PHONE: +1 (281) 602-4100
FAX: +1 (281) 602-4147
EMAIL: gesna.quality@gates.com
WEB: www.gates.com/oilandgas

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. OSUNOS

TITLE: QUALITY ASSURANCE

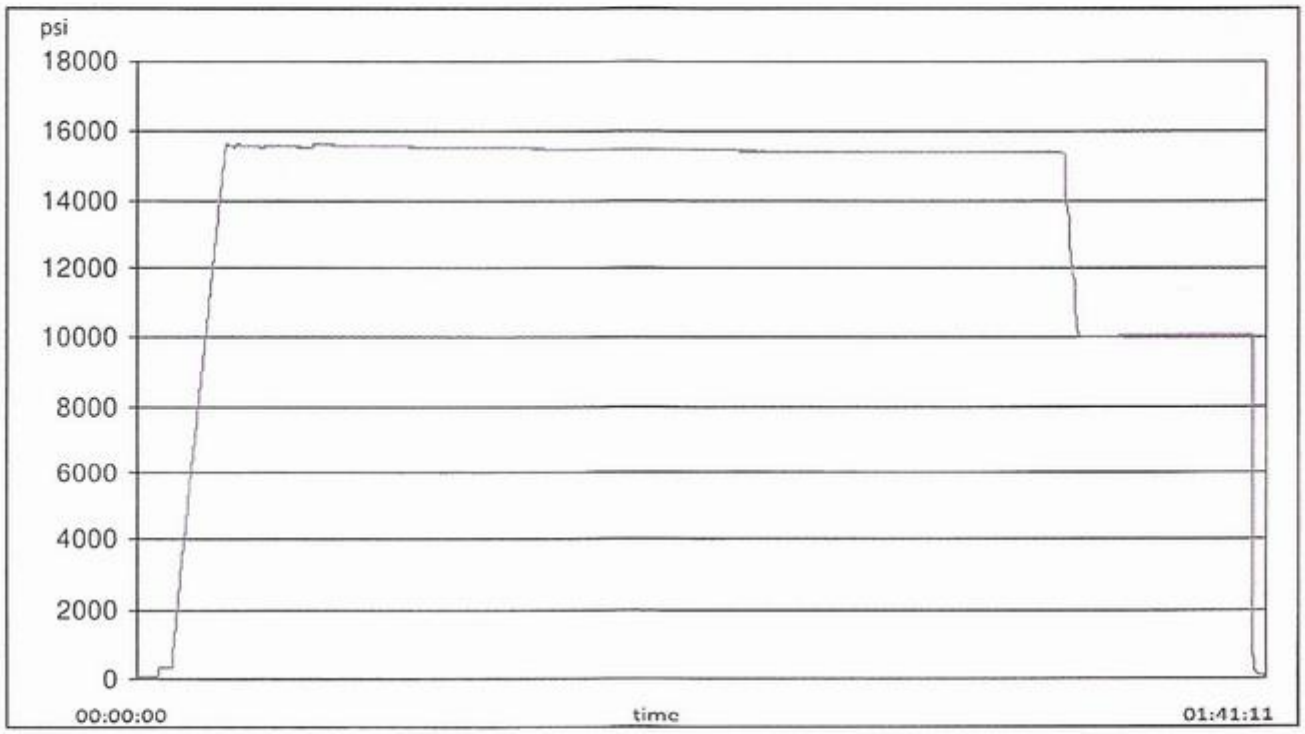
DATE: 1/25/2024

H3-15716

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER			TEST OBJECT		
Company:	Nabors Industries Inc.		Serial number:	H3-012524-1	
			Lot number:		
Production description:	74621/66-1531		Description:	74621/66-1531	
Sales order #:	529480				
Customer reference:	FG1213		Hose ID:	3" 16C CK	
			Part number:		
TEST INFORMATION					
Test procedure:	GTS-04-053		Fitting 1:	3.0 x 4-1/16 10K	
Test pressure:	15000.00	psi	Part number:		
Test pressure hold:	3600.00	sec	Description:		
Work pressure:	10000.00	psi			
Work pressure hold:	900.00	sec	Fitting 2:	3.0 x 4-1/16 10K	
Length difference:	0.00	%	Part number:		
Length difference:	0.00	inch	Description:		
Visual check:			Length:	45	feet
Pressure test result:	PASS				
Length measurement result:					
Test operator:	Travis				



H3-15/16

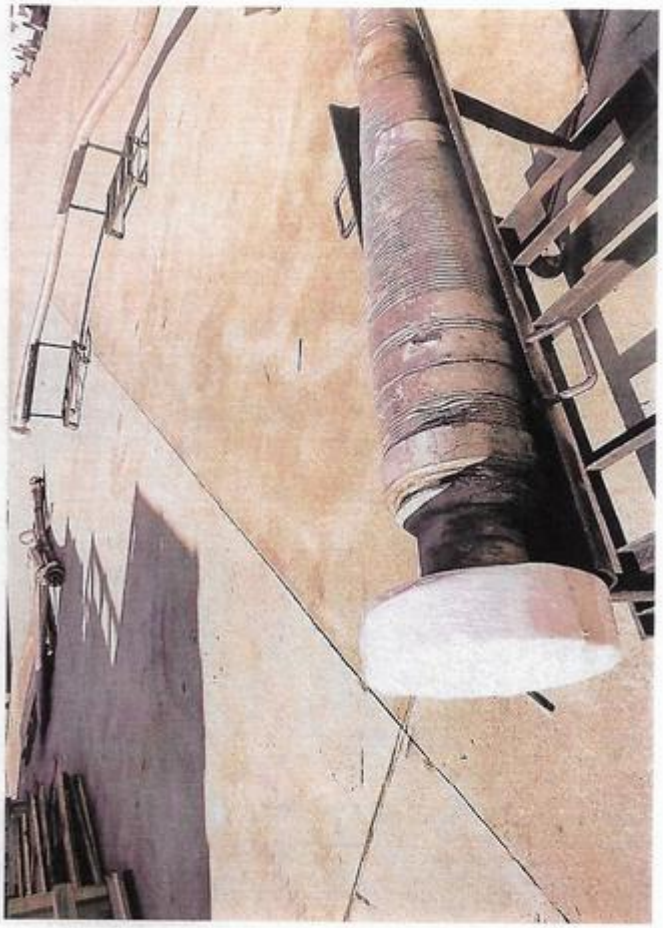
1/25/2024 11:48:06 AM

TEST REPORT

GAUGE TRACEABILITY

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

Comment



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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 411822

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 411822
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	3/17/2025