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

Sundry Print Report
12/16/2024

Well Name: POKER LAKE UNIT 15 TWR

Well Location: T24S / R31E / SEC 22 / NWNW / 32.208749 / -103.772453

County or Parish/State: EDDY / NM

Well Number: 116H

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: 3001554170

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2823642

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 11/20/2024

Time Sundry Submitted: 01:45

Date proposed operation will begin: 12/18/2024

Procedure Description: Poker Lake Unit 15 TWR 116H SUNDRY LANGUAGE 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 Code. There is no new surface disturbance. There is a dedicated acreage change. This is an INFILL well and the dedicated acres are associated with the Defining Well API 30-015-54173. FROM: TO: SHL: 490' FNL & 550' FWL OF SECTION 22-T24S-R31E 510' FNL & 550' FWL OF SECTION 22-T24S-R31E KOP: 490’ FNL & 550’ FWL OF SECTION 22-T24S-R31E 616’ FSL & 2305’ FWL OF SECTION 15-T24S-R31E FTP: 330' FNL & 1430' FWL OF SECTION 22-T24S-R31E 100' FNL & 2305' FWL OF SECTION 22-T24S-R31E LTP: 2460' FNL & 1430' FWL OF SECTION 27-T24S-R31E 100' FSL & 2300' FWL OF SECTION 27-T24S-R31E BHL: 2590' FNL & 1430' FWL OF SECTION 27-T24S-R31E 50' FSL & 2300' FWL OF SECTION 27-T24S-R31E The proposed total depth is changing from 18296’ MD; 10360’ TVD (2nd Bone Spring SS) to 20161’ MD; 8903’ TVD (Avalon). There is a Pool Code change from 96403/Wildcat; Bone Spring to 96546/Cotton Draw; Bone Spring, South. A saturated salt brine will be utilized while drilling through the salt formations.

NOI Attachments

Procedure Description

PLU_15_TWR___116H__Sundry_Attachments_20241213145934.pdf

Well Name: POKER LAKE UNIT 15 TWR	**Well Location:** T24S / R31E / SEC 22 / NWNW / 32.208749 / -103.772453	**County or Parish/State:** EDDY / NM
Well Number: 116H	**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: 3001554170	**Operator:** XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

PLU_15_TWR_116H_COA_20241215143452.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: SAMANTHA WEIS

Signed on: DEC 13, 2024 03:04 PM

Name: XTO PERMIAN OPERATING LLC

Title: Permitting Advisor

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING **State:** TX

Phone: (832) 625-7361

Email address: SAMANTHA.R.BARTNIK@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 12/16/2024

Signature: Chris Walls

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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/116H

2. Name of Operator XTO PERMIAN OPERATING LLC

9. API Well No. 3001554170

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
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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.)

Poker Lake Unit 15 TWR 116H

SUNDRY LANGUAGE

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 Code. There is no new surface disturbance. There is a dedicated acreage change.

This is an INFILL well and the dedicated acres are associated with the Defining Well API 30-015-54173.

FROM: TO:
SHL: 490' FNL & 550' FWL OF SECTION 22-T24S-R31E 510' FNL & 550' FWL OF SECTION 22-T24S-R31E
KOP: 490 FNL & 550 FWL OF SECTION 22-T24S-R31E 616 FSL & 2305 FWL OF SECTION 15-T24S-R31E

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* SAMANTHA WEIS / Ph: (832) 625-7361

Title Permitting Advisor

Signature (Electronic Submission)

Date 12/13/2024

THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title Petroleum Engineer

Date 12/16/2024

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

Office CARLSBAD

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect 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

FTP: 330' FNL & 1430' FWL OF SECTION 22-T24S-R31E 100' FNL & 2305' FWL OF SECTION 22-T24S-R31E

LTP: 2460' FNL & 1430' FWL OF SECTION 27-T24S-R31E 100' FSL & 2300' FWL OF SECTION 27-T24S-R31E

BHL: 2590' FNL & 1430' FWL OF SECTION 27-T24S-R31E 50' FSL & 2300' FWL OF SECTION 27-T24S-R31E

The proposed total depth is changing from 18296 MD; 10360 TVD (2nd Bone Spring SS) to 20161 MD; 8903 TVD (Avalon).

There is a Pool Code change from 96403/Wildcat; Bone Spring to 96546/Cotton Draw; Bone Spring, South.

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

Location of Well

0. SHL: NWNW / 490 FNL / 550 FWL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.208749 / LONG: -103.772453 (TVD: 0 feet, MD: 0 feet)

PPP: NENW / 330 FNL / 1430 FWL / TWSP: 24S / RANGE: 31E / SECTION: 22 / LAT: 32.209193 / LONG: -103.769609 (TVD: 10347 feet, MD: 10800 feet)

BHL: SENW / 2590 FNL / 1430 FWL / TWSP: 24S / RANGE: 31E / SECTION: 27 / LAT: 32.188464 / LONG: -103.769576 (TVD: 10360 feet, MD: 18296 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 116H
SURFACE HOLE FOOTAGE:	510'/N & 550'/W
BOTTOM HOLE FOOTAGE:	50'/S & 2300'/W

*Changes approved through engineering via **Sundry 2823642,** on 12-15-2024_. 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 7008' .**

b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.**

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

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

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

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. **(This is not necessary for secondary recovery unit wells)**

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.

- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

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

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

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

GENERAL REQUIREMENTS

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

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

Contact Eddy County Petroleum Engineering Inspection Staff:
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;
BLM_NM_CFO_DrillingNotifications@BLM.GOV; (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 12/15/2024
575-234-5998 / zstevens@blm.gov

C-102 Sumbit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024 Submital Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015- 54170	96546	COTTON DRAW; BONE SPRING, SOUTH

Property Code	Property Name	Well Number
	POKER LAKE UNIT 15 TWR	116H

OGRID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,522'

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
D	22	24S	31E		510 FNL	550 FWL	32.208694	-103.772453	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	27	24S	31E		50 FSL	2,300 FWL	32.181204	-103.766747	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
800.00	INFILL	30-015-54173	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
N	15	24S	31E		616 FSL	2,305 FWL	32.211798	-103.766781	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	22	24S	31E		100 FNL	2,305 FWL	32.209830	-103.766779	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	27	24S	31E		100 FSL	2,300 FWL	32.181342	-103.766747	EDDY

Unitized Area of Area of Interest	Spacing Unit Type : ☒Horizontal ☐Vertical	Ground Elevation
NMNM105422429		3,522'

OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of heretofore entered by the division.

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Samantha Weis 11/15/2024

Signature Date

Samantha Weis

Printed Name

samantha.r.bartnik@exxonmobil.com

Email Address

SURVEYOR CERTIFICATIONS

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief

Signature and Seal of Professional Surveyor

MARK DILLON HARP 23786 | 10/31/2024

Certificate Number | Date of Survey

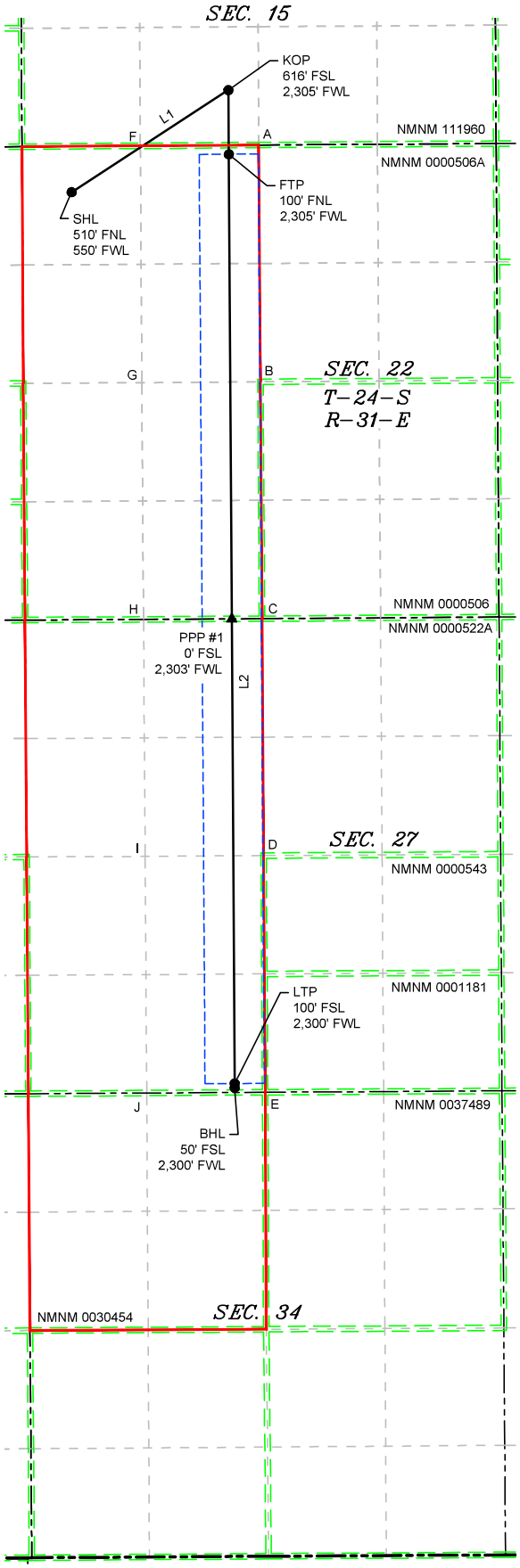
DN 618.013003.14-19

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

ACREAGE DEDICATION PLATS

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

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



LEGEND

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	056°55'17"	2,086.30'
L2	179°38'33"	11,129.94'

COORDINATE TABLE					
SHL (NAD 83 NME)			SHL (NAD 27 NME)		
Y =	440,109.4	N	Y =	440,050.6	N
X =	714,810.0	E	X =	673,626.0	E
LAT. =	32.208694	°N	LAT. =	32.208570	°N
LONG. =	103.772453	°W	LONG. =	103.771969	°W
KOP (NAD 83 NME)			KOP (NAD 27 NME)		
Y =	441,248.1	N	Y =	441,189.2	N
X =	716,558.1	E	X =	675,374.1	E
LAT. =	32.211798	°N	LAT. =	32.211675	°N
LONG. =	103.766781	°W	LONG. =	103.766298	°W
FTP (NAD 83 NME)			FTP (NAD 27 NME)		
Y =	440,532.0	N	Y =	440,473.1	N
X =	716,562.6	E	X =	675,378.6	E
LAT. =	32.209830	°N	LAT. =	32.209706	°N
LONG. =	103.766779	°W	LONG. =	103.766296	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	435,350.2	N	Y =	435,291.5	N
X =	716,594.7	E	X =	675,410.4	E
LAT. =	32.195586	°N	LAT. =	32.195462	°N
LONG. =	103.766764	°W	LONG. =	103.766281	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	430,168.4	N	Y =	430,109.8	N
X =	716,627.2	E	X =	675,442.8	E
LAT. =	32.181342	°N	LAT. =	32.181218	°N
LONG. =	103.766747	°W	LONG. =	103.766265	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	430,118.4	N	Y =	430,059.8	N
X =	716,627.6	E	X =	675,443.1	E
LAT. =	32.181204	°N	LAT. =	32.181080	°N
LONG. =	103.766747	°W	LONG. =	103.766265	°W
CORNER COORDINATES (NAD 83 NME)					
A - Y =	440,634.3	N	A - X =	716,896.1	E
B - Y =	437,992.9	N	B - X =	716,914.3	E
C - Y =	435,352.3	N	C - X =	716,932.4	E
D - Y =	432,709.7	N	D - X =	716,950.0	E
E - Y =	430,070.5	N	E - X =	716,967.5	E
F - Y =	440,625.0	N	F - X =	715,576.6	E
G - Y =	437,984.1	N	G - X =	715,592.5	E
H - Y =	435,344.2	N	H - X =	715,612.0	E
I - Y =	432,702.2	N	I - X =	715,629.4	E
J - Y =	430,062.2	N	J - X =	715,647.5	E
CORNER COORDINATES (NAD 27 NME)					
A - Y =	440,575.5	N	A - X =	675,712.1	E
B - Y =	437,934.1	N	B - X =	675,730.1	E
C - Y =	435,293.6	N	C - X =	675,748.2	E
D - Y =	432,651.0	N	D - X =	675,765.7	E
E - Y =	430,011.9	N	E - X =	675,783.0	E
F - Y =	440,566.2	N	F - X =	674,392.6	E
G - Y =	437,925.4	N	G - X =	674,408.4	E
H - Y =	435,285.5	N	H - X =	674,427.7	E
I - Y =	432,643.5	N	I - X =	674,445.1	E
J - Y =	430,003.6	N	J - X =	674,463.1	E

DN 618.013003.14-19

618.013 XTO Energy - NM\003 Poker Lake Unit\.14 - PLU 15 TWR - EDDY\Wells\-19 - 116H\DWG\116H C-102.dwg

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

XTO Energy Inc.
POKER LAKE UNIT 15 TWR 116H
Projected TD: 20161.43' MD / 8903' TVD
SHL: 510' FNL & 550' FWL , Section 22, T24S, R31E
BHL: 50' FSL & 2300' FWL , 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	648'	Water
Top of Salt	976'	Water
Base of Salt	4221'	Water
Delaware	4436'	Water
Brushy Canyon	7008'	Water/Oil/Gas
Bone Spring	8284'	Water
Avalon	8403'	Water/Oil/Gas
Target/Land Curve	8903'	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 @ 748' (228' 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 8422.94' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 20161.43 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8122.94 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 748'	9.625	40	J-55	BTC	New	1.56	8.42	21.06
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	4.28	2.57	2.23
8.75	4000' – 8422.94'	7.625	29.7	HC L-80	Flush Joint	New	3.12	2.26	3.09
6.75	0' – 8322.94'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.26	2.85	2.39
6.75	8322.94' - 20161.43'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.26	2.66	2.39

· 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 Multi-Bowl System - See Attached

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 748'

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 +/- 8422.94'
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: 130 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 7008
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 (7008') 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 +/- 20161.43'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8122.94 feet
Tail: 820 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 8622.94 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

5. Pressure Control Equipment

Once the permanent WH is installed on the casing, the blow out preventer equipment (BOP) will consist of a 5M Hydril Annular and a 10M Triple Ram BOP.

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

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. .

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' - 748'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
748' - 4436'	8.75	Saturated brine	10.0-10.5	30-32	NC	Fully saturated salt across salado / salt
4436' - 8422.94'	8.75	Brine or Direct Emulsion	10-10.5	30-32	NC	Depending on well conditions
8422.94' - 20161.43'	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-116H

Measured Depth:	20161.43 ft	**Site:**	Pad 1
TVD RKB:	8903.00 ft	**Slot:**	PLU 15 Twin Wells Ranch-116H
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	440050.60 ft		
Easting:	673626.00 ft		
RKB:	3554.00 ft		
Ground Level:	3522.00 ft		
North Reference:	Grid		
Convergence Angle:	0.30 Deg		

Plan Sections PLU 15 Twin Wells Ranch-116H

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	
2400.12	26.00	56.92	2355.95	158.27	242.99	2.00	0.00	2.00	
5836.02	26.00	56.92	5444.05	980.41	1505.18	0.00	0.00	0.00	
7136.14	0.00	0.00	6700.00	1138.68	1748.16	-2.00	0.00	2.00	
8622.94	0.00	0.00	8186.80	1138.68	1748.16	0.00	0.00	0.00	
9747.94	90.00	179.65	8903.00	422.50	1752.60	8.00	0.00	8.00	FTP 10
20111.44	90.00	179.65	8903.00	-9940.80	1816.80	0.00	0.00	0.00	LTP 10
20161.43	90.00	179.65	8903.00	-9990.79	1817.11	0.00	0.00	0.00	BHL 10

Position Uncertainty PLU 15 Twin Wells Ranch-116H

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	2.534	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	2.638	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	56.921	1199.980	5.210	0.000	4.300	0.000	2.695	0.000	0.000	5.255	4.248	134.466	MWD+IFR1+MS
1300.000	4.000	56.921	1299.838	5.962	0.000	4.686	0.000	2.756	0.000	0.000	5.974	4.683	-35.935	MWD+IFR1+MS
1400.000	6.000	56.921	1399.452	6.642	0.000	5.069	0.000	2.822	0.000	0.000	6.664	5.067	-31.142	MWD+IFR1+MS
1500.000	8.000	56.921	1498.702	7.268	0.000	5.450	0.000	2.895	0.000	0.000	7.314	5.436	-28.428	MWD+IFR1+MS
1600.000	10.000	56.921	1597.465	7.852	0.000	5.830	0.000	2.978	0.000	0.000	7.927	5.799	-26.715	MWD+IFR1+MS
1700.000	12.000	56.921	1695.623	8.401	0.000	6.211	0.000	3.073	0.000	0.000	8.511	6.163	-25.543	MWD+IFR1+MS
1800.000	14.000	56.921	1793.055	8.922	0.000	6.594	0.000	3.181	0.000	0.000	9.068	6.529	-24.689	MWD+IFR1+MS
1900.000	16.000	56.921	1889.643	9.419	0.000	6.980	0.000	3.304	0.000	0.000	9.602	6.901	-24.035	MWD+IFR1+MS
2000.000	18.000	56.921	1985.268	9.894	0.000	7.372	0.000	3.444	0.000	0.000	10.118	7.279	-23.510	MWD+IFR1+MS
2100.000	20.000	56.921	2079.816	10.351	0.000	7.771	0.000	3.602	0.000	0.000	10.616	7.665	-23.068	MWD+IFR1+MS
2200.000	22.000	56.921	2173.169	10.791	0.000	8.179	0.000	3.779	0.000	0.000	11.099	8.062	-22.678	MWD+IFR1+MS
2300.000	24.000	56.921	2265.215	11.217	0.000	8.598	0.000	3.975	0.000	0.000	11.570	8.471	-22.315	MWD+IFR1+MS
2400.124	26.002	56.921	2355.952	11.631	0.000	9.032	0.000	4.193	0.000	0.000	12.029	8.896	-21.958	MWD+IFR1+MS
2500.000	26.002	56.921	2445.718	12.007	0.000	9.476	0.000	4.357	0.000	0.000	12.368	9.335	-21.521	MWD+IFR1+MS
2600.000	26.002	56.921	2535.596	12.319	0.000	9.929	0.000	4.496	0.000	0.000	12.648	9.790	-21.171	MWD+IFR1+MS
2700.000	26.002	56.921	2625.473	12.640	0.000	10.389	0.000	4.643	0.000	0.000	12.937	10.252	-20.779	MWD+IFR1+MS
2800.000	26.002	56.921	2715.351	12.971	0.000	10.856	0.000	4.796	0.000	0.000	13.233	10.720	-20.338	MWD+IFR1+MS
2900.000	26.002	56.921	2805.228	13.310	0.000	11.328	0.000	4.955	0.000	0.000	13.538	11.193	-19.839	MWD+IFR1+MS
3000.000	26.002	56.921	2895.106	13.657	0.000	11.806	0.000	5.119	0.000	0.000	13.849	11.671	-19.271	MWD+IFR1+MS

3100.000	26.002	56.921	2984.983	14.012	0.000	12.287	0.000	5.289	0.000	0.000	14.167	12.152	-18.618	MWD+IFR1+MS
3200.000	26.002	56.921	3074.861	14.374	0.000	12.772	0.000	5.463	0.000	0.000	14.491	12.636	-17.860	MWD+IFR1+MS
3300.000	26.002	56.921	3164.738	14.742	0.000	13.261	0.000	5.641	0.000	0.000	14.822	13.123	-16.973	MWD+IFR1+MS
3400.000	26.002	56.921	3254.616	15.116	0.000	13.753	0.000	5.823	0.000	0.000	15.158	13.612	-15.922	MWD+IFR1+MS
3500.000	26.002	56.921	3344.493	15.496	0.000	14.248	0.000	6.008	0.000	0.000	15.501	14.102	-14.662	MWD+IFR1+MS
3600.000	26.002	56.921	3434.371	15.880	0.000	14.745	0.000	6.197	0.000	0.000	15.849	14.593	-13.130	MWD+IFR1+MS
3700.000	26.002	56.921	3524.248	16.270	0.000	15.244	0.000	6.389	0.000	0.000	16.204	15.084	-11.241	MWD+IFR1+MS
3800.000	26.002	56.921	3614.126	16.663	0.000	15.745	0.000	6.584	0.000	0.000	16.566	15.574	-8.877	MWD+IFR1+MS
3900.000	26.002	56.921	3704.003	17.061	0.000	16.248	0.000	6.781	0.000	0.000	16.936	16.062	-5.882	MWD+IFR1+MS
4000.000	26.002	56.921	3793.881	17.463	0.000	16.753	0.000	6.980	0.000	0.000	17.315	16.545	-2.064	MWD+IFR1+MS
4100.000	26.002	56.921	3883.758	17.868	0.000	17.260	0.000	7.182	0.000	0.000	17.706	17.022	2.765	MWD+IFR1+MS
4200.000	26.002	56.921	3973.636	18.277	0.000	17.767	0.000	7.386	0.000	0.000	18.112	17.488	8.671	MWD+IFR1+MS
4300.000	26.002	56.921	4063.513	18.688	0.000	18.276	0.000	7.593	0.000	0.000	18.535	17.941	15.406	MWD+IFR1+MS
4400.000	26.002	56.921	4153.391	19.103	0.000	18.786	0.000	7.801	0.000	0.000	18.977	18.378	22.330	MWD+IFR1+MS
4500.000	26.002	56.921	4243.268	19.520	0.000	19.297	0.000	8.011	0.000	0.000	19.438	18.800	28.695	MWD+IFR1+MS
4600.000	26.002	56.921	4333.146	19.940	0.000	19.810	0.000	8.222	0.000	0.000	19.914	19.211	34.054	MWD+IFR1+MS
4700.000	26.002	56.921	4423.023	20.362	0.000	20.323	0.000	8.436	0.000	0.000	20.401	19.614	38.343	MWD+IFR1+MS
4800.000	26.002	56.921	4512.901	20.787	0.000	20.837	0.000	8.651	0.000	0.000	20.896	20.012	41.713	MWD+IFR1+MS
4900.000	26.002	56.921	4602.778	21.213	0.000	21.351	0.000	8.867	0.000	0.000	21.397	20.407	44.361	MWD+IFR1+MS
5000.000	26.002	56.921	4692.656	21.642	0.000	21.867	0.000	9.085	0.000	0.000	21.902	20.800	46.465	MWD+IFR1+MS
5100.000	26.002	56.921	4782.533	22.072	0.000	22.383	0.000	9.305	0.000	0.000	22.410	21.193	48.159	MWD+IFR1+MS
5200.000	26.002	56.921	4872.411	22.504	0.000	22.900	0.000	9.526	0.000	0.000	22.921	21.585	49.543	MWD+IFR1+MS
5300.000	26.002	56.921	4962.288	22.938	0.000	23.417	0.000	9.748	0.000	0.000	23.434	21.978	50.691	MWD+IFR1+MS
5400.000	26.002	56.921	5052.166	23.373	0.000	23.935	0.000	9.972	0.000	0.000	23.948	22.372	51.655	MWD+IFR1+MS
5500.000	26.002	56.921	5142.043	23.810	0.000	24.453	0.000	10.197	0.000	0.000	24.463	22.766	52.474	MWD+IFR1+MS
5600.000	26.002	56.921	5231.921	24.249	0.000	24.972	0.000	10.423	0.000	0.000	24.980	23.161	53.178	MWD+IFR1+MS
5700.000	26.002	56.921	5321.798	24.688	0.000	25.492	0.000	10.650	0.000	0.000	25.497	23.557	53.788	MWD+IFR1+MS
5800.000	26.002	56.921	5411.676	25.129	0.000	26.011	0.000	10.879	0.000	0.000	26.015	23.954	54.322	MWD+IFR1+MS
5836.018	26.002	56.921	5444.048	25.286	0.000	26.196	0.000	10.961	0.000	0.000	26.200	24.096	54.550	MWD+IFR1+MS
5900.000	24.723	56.921	5501.862	25.621	0.000	26.521	0.000	11.108	0.000	0.000	26.523	24.351	54.889	MWD+IFR1+MS
6000.000	22.723	56.921	5593.408	26.174	0.000	27.015	0.000	11.350	0.000	0.000	27.017	24.799	54.957	MWD+IFR1+MS
6100.000	20.723	56.921	5686.301	26.718	0.000	27.490	0.000	11.586	0.000	0.000	27.493	25.273	54.756	MWD+IFR1+MS
6200.000	18.723	56.921	5780.430	27.218	0.000	27.944	0.000	11.803	0.000	0.000	27.948	25.742	54.522	MWD+IFR1+MS

6300.000	16.723	56.921	5875.679	27.673	0.000	28.377	0.000	12.002	0.000	0.000	28.381	26.205	54.249	MWD+IFR1+MS
6400.000	14.723	56.921	5971.933	28.082	0.000	28.789	0.000	12.184	0.000	0.000	28.794	26.660	53.932	MWD+IFR1+MS
6500.000	12.723	56.921	6069.073	28.446	0.000	29.181	0.000	12.350	0.000	0.000	29.188	27.106	53.566	MWD+IFR1+MS
6600.000	10.723	56.921	6166.983	28.764	0.000	29.553	0.000	12.503	0.000	0.000	29.561	27.542	53.144	MWD+IFR1+MS
6700.000	8.723	56.921	6265.541	29.036	0.000	29.906	0.000	12.643	0.000	0.000	29.916	27.966	52.657	MWD+IFR1+MS
6800.000	6.723	56.921	6364.629	29.262	0.000	30.241	0.000	12.773	0.000	0.000	30.254	28.377	52.099	MWD+IFR1+MS
6900.000	4.723	56.921	6464.126	29.442	0.000	30.559	0.000	12.893	0.000	0.000	30.574	28.776	51.461	MWD+IFR1+MS
7000.000	2.723	56.921	6563.910	29.576	0.000	30.860	0.000	13.005	0.000	0.000	30.879	29.160	50.732	MWD+IFR1+MS
7100.000	0.723	56.921	6663.859	29.665	0.000	31.146	0.000	13.111	0.000	0.000	31.169	29.530	49.907	MWD+IFR1+MS
7136.142	0.000	0.000	6700.000	30.602	0.000	30.319	0.000	13.148	0.000	0.000	31.268	29.633	49.986	MWD+IFR1+MS
7200.000	0.000	0.000	6763.858	30.783	0.000	30.487	0.000	13.214	0.000	0.000	31.442	29.807	50.214	MWD+IFR1+MS
7300.000	0.000	0.000	6863.858	31.068	0.000	30.755	0.000	13.318	0.000	0.000	31.717	30.086	50.528	MWD+IFR1+MS
7400.000	0.000	0.000	6963.858	31.356	0.000	31.027	0.000	13.426	0.000	0.000	31.993	30.370	50.852	MWD+IFR1+MS
7500.000	0.000	0.000	7063.858	31.645	0.000	31.300	0.000	13.536	0.000	0.000	32.271	30.655	51.174	MWD+IFR1+MS
7600.000	0.000	0.000	7163.858	31.936	0.000	31.575	0.000	13.650	0.000	0.000	32.550	30.942	51.492	MWD+IFR1+MS
7700.000	0.000	0.000	7263.858	32.228	0.000	31.852	0.000	13.766	0.000	0.000	32.831	31.230	51.807	MWD+IFR1+MS
7800.000	0.000	0.000	7363.858	32.522	0.000	32.130	0.000	13.885	0.000	0.000	33.114	31.519	52.120	MWD+IFR1+MS
7900.000	0.000	0.000	7463.858	32.817	0.000	32.410	0.000	14.007	0.000	0.000	33.398	31.810	52.429	MWD+IFR1+MS
8000.000	0.000	0.000	7563.858	33.113	0.000	32.691	0.000	14.133	0.000	0.000	33.684	32.102	52.736	MWD+IFR1+MS
8100.000	0.000	0.000	7663.858	33.410	0.000	32.974	0.000	14.261	0.000	0.000	33.971	32.395	53.040	MWD+IFR1+MS
8200.000	0.000	0.000	7763.858	33.709	0.000	33.258	0.000	14.393	0.000	0.000	34.260	32.690	53.340	MWD+IFR1+MS
8300.000	0.000	0.000	7863.858	34.008	0.000	33.544	0.000	14.528	0.000	0.000	34.550	32.986	53.638	MWD+IFR1+MS
8400.000	0.000	0.000	7963.858	34.309	0.000	33.831	0.000	14.666	0.000	0.000	34.841	33.282	53.933	MWD+IFR1+MS
8500.000	0.000	0.000	8063.858	34.611	0.000	34.119	0.000	14.807	0.000	0.000	35.134	33.580	54.224	MWD+IFR1+MS
8600.000	0.000	0.000	8163.858	34.914	0.000	34.409	0.000	14.952	0.000	0.000	35.428	33.879	54.512	MWD+IFR1+MS
8622.944	0.000	0.000	8186.803	34.982	0.000	34.475	0.000	14.985	0.000	0.000	35.496	33.946	54.565	MWD+IFR1+MS
8700.000	6.164	179.645	8263.710	34.654	0.000	34.673	-0.000	15.099	0.000	0.000	35.771	34.190	56.373	MWD+IFR1+MS
8800.000	14.164	179.645	8362.060	34.549	0.000	34.919	-0.000	15.318	0.000	0.000	36.680	34.664	69.062	MWD+IFR1+MS
8900.000	22.164	179.645	8457.000	34.213	0.000	35.142	-0.000	15.734	0.000	0.000	37.801	35.005	77.076	MWD+IFR1+MS
9000.000	30.164	179.645	8546.680	33.454	0.000	35.340	-0.000	16.413	0.000	0.000	38.806	35.254	80.901	MWD+IFR1+MS
9100.000	38.164	179.645	8629.356	32.373	0.000	35.513	-0.000	17.394	0.000	0.000	39.641	35.454	83.018	MWD+IFR1+MS
9200.000	46.164	179.645	8703.418	31.103	0.000	35.662	-0.000	18.671	0.000	0.000	40.291	35.619	84.347	MWD+IFR1+MS
9300.000	54.164	179.645	8767.424	29.804	0.000	35.787	-0.000	20.204	0.000	0.000	40.761	35.757	85.291	MWD+IFR1+MS

9400.000	62.164	179.645	8820.130	28.664	0.000	35.892	-0.000	21.931	0.000	0.000	41.067	35.870	86.056	MWD+IFR1+MS
9500.000	70.164	179.645	8860.508	27.881	0.000	35.977	-0.000	23.782	0.000	0.000	41.236	35.963	86.768	MWD+IFR1+MS
9600.000	78.164	179.645	8887.774	27.633	0.000	36.043	-0.000	25.686	0.000	0.000	41.303	36.035	87.513	MWD+IFR1+MS
9700.000	86.164	179.645	8901.396	28.032	0.000	36.091	-0.000	27.577	0.000	0.000	41.312	36.088	88.348	MWD+IFR1+MS
9747.944	90.000	179.645	8903.000	27.919	0.000	36.104	-0.000	27.919	0.000	0.000	41.311	36.103	88.780	MWD+IFR1+MS
9800.000	90.000	179.645	8903.000	28.110	0.000	36.119	-0.000	28.110	0.000	0.000	41.310	36.119	89.273	MWD+IFR1+MS
9900.000	90.000	179.645	8903.000	28.439	0.000	36.168	-0.000	28.439	0.000	0.000	41.310	36.168	90.230	MWD+IFR1+MS
10000.000	90.000	179.645	8903.000	28.789	0.000	36.242	-0.000	28.789	0.000	0.000	41.313	36.238	91.209	MWD+IFR1+MS
10100.000	90.000	179.645	8903.000	29.156	0.000	36.336	-0.000	29.156	0.000	0.000	41.320	36.325	92.222	MWD+IFR1+MS
10200.000	90.000	179.645	8903.000	29.540	0.000	36.451	-0.000	29.540	0.000	0.000	41.331	36.430	93.278	MWD+IFR1+MS
10300.000	90.000	179.645	8903.000	29.938	0.000	36.588	-0.000	29.938	0.000	0.000	41.345	36.553	94.390	MWD+IFR1+MS
10400.000	90.000	179.645	8903.000	30.352	0.000	36.744	-0.000	30.352	0.000	0.000	41.363	36.691	95.571	MWD+IFR1+MS
10500.000	90.000	179.645	8903.000	30.781	0.000	36.922	-0.000	30.781	0.000	0.000	41.386	36.846	96.838	MWD+IFR1+MS
10600.000	90.000	179.645	8903.000	31.223	0.000	37.119	-0.000	31.223	0.000	0.000	41.415	37.016	98.209	MWD+IFR1+MS
10700.000	90.000	179.645	8903.000	31.678	0.000	37.336	-0.000	31.678	0.000	0.000	41.449	37.199	99.703	MWD+IFR1+MS
10800.000	90.000	179.645	8903.000	32.147	0.000	37.572	-0.000	32.147	0.000	0.000	41.490	37.395	101.345	MWD+IFR1+MS
10900.000	90.000	179.645	8903.000	32.627	0.000	37.828	-0.000	32.627	0.000	0.000	41.540	37.602	103.162	MWD+IFR1+MS
11000.000	90.000	179.645	8903.000	33.119	0.000	38.102	-0.000	33.119	0.000	0.000	41.599	37.818	105.183	MWD+IFR1+MS
11100.000	90.000	179.645	8903.000	33.622	0.000	38.394	-0.000	33.622	0.000	0.000	41.670	38.040	107.437	MWD+IFR1+MS
11200.000	90.000	179.645	8903.000	34.136	0.000	38.704	-0.000	34.136	0.000	0.000	41.756	38.267	109.953	MWD+IFR1+MS
11300.000	90.000	179.645	8903.000	34.660	0.000	39.032	-0.000	34.660	0.000	0.000	41.857	38.495	112.753	MWD+IFR1+MS
11400.000	90.000	179.645	8903.000	35.193	0.000	39.376	-0.000	35.193	0.000	0.000	41.979	38.720	115.844	MWD+IFR1+MS
11500.000	90.000	179.645	8903.000	35.736	0.000	39.737	-0.000	35.736	0.000	0.000	42.125	38.938	119.211	MWD+IFR1+MS
11600.000	90.000	179.645	8903.000	36.288	0.000	40.114	-0.000	36.288	0.000	0.000	42.297	39.145	122.807	MWD+IFR1+MS
11700.000	90.000	179.645	8903.000	36.848	0.000	40.507	-0.000	36.848	0.000	0.000	42.500	39.338	126.553	MWD+IFR1+MS
11800.000	90.000	179.645	8903.000	37.417	0.000	40.915	-0.000	37.417	0.000	0.000	42.735	39.515	130.342	MWD+IFR1+MS
11900.000	90.000	179.645	8903.000	37.992	0.000	41.338	-0.000	37.992	0.000	0.000	43.003	39.674	134.060	MWD+IFR1+MS
12000.000	90.000	179.645	8903.000	38.576	0.000	41.775	-0.000	38.576	0.000	0.000	43.304	39.814	-42.397	MWD+IFR1+MS
12100.000	90.000	179.645	8903.000	39.166	0.000	42.226	-0.000	39.166	0.000	0.000	43.637	39.936	-39.104	MWD+IFR1+MS
12200.000	90.000	179.645	8903.000	39.763	0.000	42.690	-0.000	39.763	0.000	0.000	43.999	40.043	-36.105	MWD+IFR1+MS
12300.000	90.000	179.645	8903.000	40.367	0.000	43.167	-0.000	40.367	0.000	0.000	44.388	40.136	-33.411	MWD+IFR1+MS
12400.000	90.000	179.645	8903.000	40.976	0.000	43.657	-0.000	40.976	0.000	0.000	44.802	40.218	-31.012	MWD+IFR1+MS
12500.000	90.000	179.645	8903.000	41.592	0.000	44.159	-0.000	41.592	0.000	0.000	45.239	40.289	-28.886	MWD+IFR1+MS

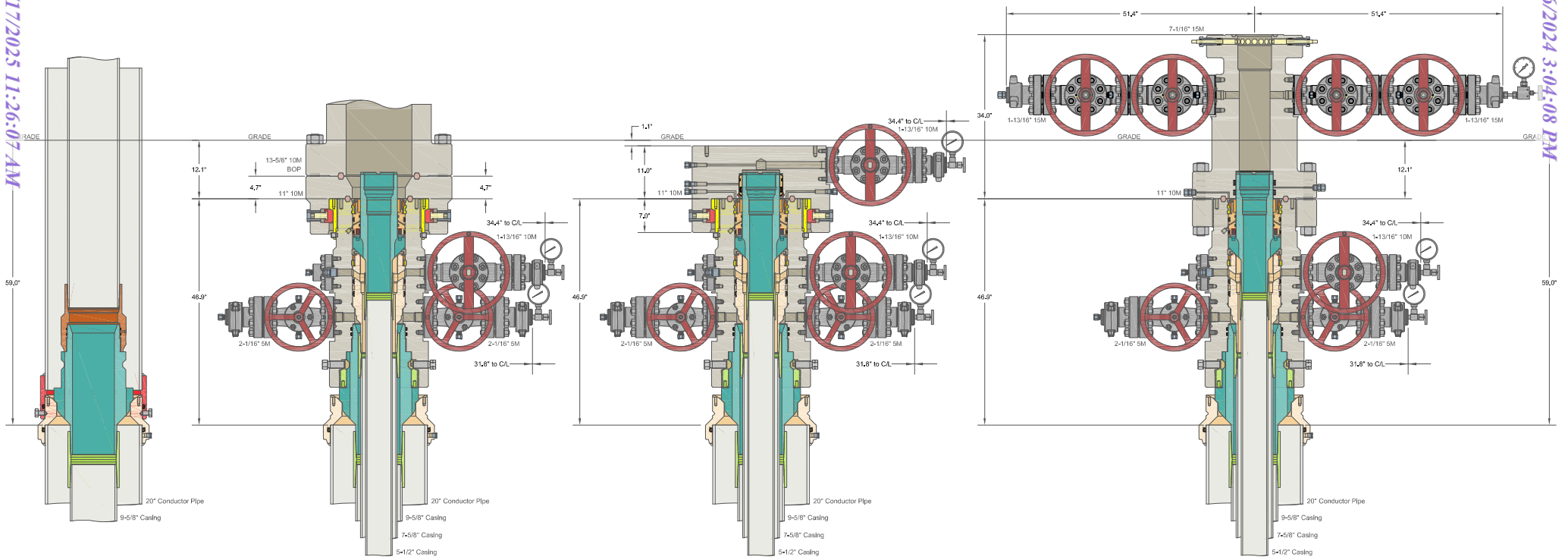
12600.000	90.000	179.645	8903.000	42.213	0.000	44.672	-0.000	42.213	0.000	0.000	45.696	40.353	-27.005	MWD+IFR1+MS
12700.000	90.000	179.645	8903.000	42.840	0.000	45.197	-0.000	42.840	0.000	0.000	46.171	40.409	-25.340	MWD+IFR1+MS
12800.000	90.000	179.645	8903.000	43.471	0.000	45.733	-0.000	43.471	0.000	0.000	46.664	40.460	-23.861	MWD+IFR1+MS
12900.000	90.000	179.645	8903.000	44.108	0.000	46.280	-0.000	44.108	0.000	0.000	47.172	40.507	-22.545	MWD+IFR1+MS
13000.000	90.000	179.645	8903.000	44.749	0.000	46.836	-0.000	44.749	0.000	0.000	47.694	40.550	-21.369	MWD+IFR1+MS
13100.000	90.000	179.645	8903.000	45.395	0.000	47.403	-0.000	45.395	0.000	0.000	48.229	40.590	-20.313	MWD+IFR1+MS
13200.000	90.000	179.645	8903.000	46.045	0.000	47.979	-0.000	46.045	0.000	0.000	48.778	40.627	-19.362	MWD+IFR1+MS
13300.000	90.000	179.645	8903.000	46.699	0.000	48.564	-0.000	46.699	0.000	0.000	49.337	40.662	-18.500	MWD+IFR1+MS
13400.000	90.000	179.645	8903.000	47.358	0.000	49.158	-0.000	47.358	0.000	0.000	49.908	40.696	-17.718	MWD+IFR1+MS
13500.000	90.000	179.645	8903.000	48.020	0.000	49.760	-0.000	48.020	0.000	0.000	50.489	40.728	-17.004	MWD+IFR1+MS
13600.000	90.000	179.645	8903.000	48.685	0.000	50.371	-0.000	48.685	0.000	0.000	51.080	40.759	-16.350	MWD+IFR1+MS
13700.000	90.000	179.645	8903.000	49.354	0.000	50.989	-0.000	49.354	0.000	0.000	51.680	40.789	-15.750	MWD+IFR1+MS
13800.000	90.000	179.645	8903.000	50.027	0.000	51.615	-0.000	50.027	0.000	0.000	52.290	40.818	-15.196	MWD+IFR1+MS
13900.000	90.000	179.645	8903.000	50.703	0.000	52.249	-0.000	50.703	0.000	0.000	52.907	40.847	-14.683	MWD+IFR1+MS
14000.000	90.000	179.645	8903.000	51.382	0.000	52.889	-0.000	51.382	0.000	0.000	53.533	40.875	-14.208	MWD+IFR1+MS
14100.000	90.000	179.645	8903.000	52.063	0.000	53.536	-0.000	52.063	0.000	0.000	54.166	40.903	-13.766	MWD+IFR1+MS
14200.000	90.000	179.645	8903.000	52.748	0.000	54.190	-0.000	52.748	0.000	0.000	54.807	40.931	-13.353	MWD+IFR1+MS
14300.000	90.000	179.645	8903.000	53.436	0.000	54.851	-0.000	53.436	0.000	0.000	55.455	40.958	-12.968	MWD+IFR1+MS
14400.000	90.000	179.645	8903.000	54.126	0.000	55.517	-0.000	54.126	0.000	0.000	56.109	40.986	-12.606	MWD+IFR1+MS
14500.000	90.000	179.645	8903.000	54.818	0.000	56.189	-0.000	54.818	0.000	0.000	56.770	41.013	-12.266	MWD+IFR1+MS
14600.000	90.000	179.645	8903.000	55.513	0.000	56.867	-0.000	55.513	0.000	0.000	57.438	41.040	-11.947	MWD+IFR1+MS
14700.000	90.000	179.645	8903.000	56.211	0.000	57.551	-0.000	56.211	0.000	0.000	58.111	41.068	-11.645	MWD+IFR1+MS
14800.000	90.000	179.645	8903.000	56.911	0.000	58.240	-0.000	56.911	0.000	0.000	58.790	41.095	-11.360	MWD+IFR1+MS
14900.000	90.000	179.645	8903.000	57.613	0.000	58.933	-0.000	57.613	0.000	0.000	59.474	41.123	-11.091	MWD+IFR1+MS
15000.000	90.000	179.645	8903.000	58.317	0.000	59.632	-0.000	58.317	0.000	0.000	60.164	41.150	-10.835	MWD+IFR1+MS
15100.000	90.000	179.645	8903.000	59.023	0.000	60.336	-0.000	59.023	0.000	0.000	60.859	41.178	-10.593	MWD+IFR1+MS
15200.000	90.000	179.645	8903.000	59.731	0.000	61.044	-0.000	59.731	0.000	0.000	61.559	41.206	-10.362	MWD+IFR1+MS
15300.000	90.000	179.645	8903.000	60.441	0.000	61.757	-0.000	60.441	0.000	0.000	62.264	41.235	-10.142	MWD+IFR1+MS
15400.000	90.000	179.645	8903.000	61.152	0.000	62.473	-0.000	61.152	0.000	0.000	62.973	41.263	-9.932	MWD+IFR1+MS
15500.000	90.000	179.645	8903.000	61.866	0.000	63.194	-0.000	61.866	0.000	0.000	63.686	41.292	-9.732	MWD+IFR1+MS
15600.000	90.000	179.645	8903.000	62.581	0.000	63.919	-0.000	62.581	0.000	0.000	64.404	41.321	-9.541	MWD+IFR1+MS
15700.000	90.000	179.645	8903.000	63.298	0.000	64.648	-0.000	63.298	0.000	0.000	65.126	41.350	-9.358	MWD+IFR1+MS
15800.000	90.000	179.645	8903.000	64.017	0.000	65.381	-0.000	64.017	0.000	0.000	65.852	41.380	-9.183	MWD+IFR1+MS

15900.000	90.000	179.645	8903.000	64.737	0.000	66.117	-0.000	64.737	0.000	0.000	66.582	41.410	-9.015	MWD+IFR1+MS
16000.000	90.000	179.645	8903.000	65.458	0.000	66.857	-0.000	65.458	0.000	0.000	67.315	41.440	-8.854	MWD+IFR1+MS
16100.000	90.000	179.645	8903.000	66.181	0.000	67.600	-0.000	66.181	0.000	0.000	68.052	41.470	-8.699	MWD+IFR1+MS
16200.000	90.000	179.645	8903.000	66.905	0.000	68.346	-0.000	66.905	0.000	0.000	68.792	41.501	-8.550	MWD+IFR1+MS
16300.000	90.000	179.645	8903.000	67.631	0.000	69.096	-0.000	67.631	0.000	0.000	69.536	41.532	-8.406	MWD+IFR1+MS
16400.000	90.000	179.645	8903.000	68.358	0.000	69.849	-0.000	68.358	0.000	0.000	70.283	41.564	-8.268	MWD+IFR1+MS
16500.000	90.000	179.645	8903.000	69.086	0.000	70.604	-0.000	69.086	0.000	0.000	71.033	41.596	-8.135	MWD+IFR1+MS
16600.000	90.000	179.645	8903.000	69.816	0.000	71.363	-0.000	69.816	0.000	0.000	71.786	41.628	-8.007	MWD+IFR1+MS
16700.000	90.000	179.645	8903.000	70.546	0.000	72.124	-0.000	70.546	0.000	0.000	72.542	41.661	-7.883	MWD+IFR1+MS
16800.000	90.000	179.645	8903.000	71.278	0.000	72.888	-0.000	71.278	0.000	0.000	73.301	41.694	-7.763	MWD+IFR1+MS
16900.000	90.000	179.645	8903.000	72.011	0.000	73.654	-0.000	72.011	0.000	0.000	74.063	41.727	-7.647	MWD+IFR1+MS
17000.000	90.000	179.645	8903.000	72.745	0.000	74.423	-0.000	72.745	0.000	0.000	74.827	41.761	-7.535	MWD+IFR1+MS
17100.000	90.000	179.645	8903.000	73.480	0.000	75.195	-0.000	73.480	0.000	0.000	75.594	41.795	-7.427	MWD+IFR1+MS
17200.000	90.000	179.645	8903.000	74.216	0.000	75.969	-0.000	74.216	0.000	0.000	76.363	41.829	-7.322	MWD+IFR1+MS
17300.000	90.000	179.645	8903.000	74.953	0.000	76.745	-0.000	74.953	0.000	0.000	77.135	41.864	-7.220	MWD+IFR1+MS
17400.000	90.000	179.645	8903.000	75.691	0.000	77.523	-0.000	75.691	0.000	0.000	77.909	41.899	-7.122	MWD+IFR1+MS
17500.000	90.000	179.645	8903.000	76.430	0.000	78.304	-0.000	76.430	0.000	0.000	78.685	41.935	-7.026	MWD+IFR1+MS
17600.000	90.000	179.645	8903.000	77.170	0.000	79.086	-0.000	77.170	0.000	0.000	79.463	41.971	-6.933	MWD+IFR1+MS
17700.000	90.000	179.645	8903.000	77.911	0.000	79.871	-0.000	77.911	0.000	0.000	80.244	42.007	-6.843	MWD+IFR1+MS
17800.000	90.000	179.645	8903.000	78.653	0.000	80.658	-0.000	78.653	0.000	0.000	81.027	42.044	-6.756	MWD+IFR1+MS
17900.000	90.000	179.645	8903.000	79.395	0.000	81.446	-0.000	79.395	0.000	0.000	81.811	42.081	-6.670	MWD+IFR1+MS
18000.000	90.000	179.645	8903.000	80.138	0.000	82.237	-0.000	80.138	0.000	0.000	82.598	42.119	-6.588	MWD+IFR1+MS
18100.000	90.000	179.645	8903.000	80.882	0.000	83.029	-0.000	80.882	0.000	0.000	83.386	42.157	-6.507	MWD+IFR1+MS
18200.000	90.000	179.645	8903.000	81.627	0.000	83.823	-0.000	81.627	0.000	0.000	84.177	42.195	-6.429	MWD+IFR1+MS
18300.000	90.000	179.645	8903.000	82.373	0.000	84.619	-0.000	82.373	0.000	0.000	84.969	42.234	-6.352	MWD+IFR1+MS
18400.000	90.000	179.645	8903.000	83.119	0.000	85.416	-0.000	83.119	0.000	0.000	85.763	42.273	-6.278	MWD+IFR1+MS
18500.000	90.000	179.645	8903.000	83.866	0.000	86.216	-0.000	83.866	0.000	0.000	86.558	42.312	-6.206	MWD+IFR1+MS
18600.000	90.000	179.645	8903.000	84.614	0.000	87.016	-0.000	84.614	0.000	0.000	87.356	42.352	-6.135	MWD+IFR1+MS
18700.000	90.000	179.645	8903.000	85.362	0.000	87.818	-0.000	85.362	0.000	0.000	88.155	42.393	-6.066	MWD+IFR1+MS
18800.000	90.000	179.645	8903.000	86.111	0.000	88.622	-0.000	86.111	0.000	0.000	88.955	42.433	-5.999	MWD+IFR1+MS
18900.000	90.000	179.645	8903.000	86.860	0.000	89.427	-0.000	86.860	0.000	0.000	89.757	42.474	-5.934	MWD+IFR1+MS
19000.000	90.000	179.645	8903.000	87.611	0.000	90.234	-0.000	87.611	0.000	0.000	90.560	42.516	-5.870	MWD+IFR1+MS
19100.000	90.000	179.645	8903.000	88.361	0.000	91.042	-0.000	88.361	0.000	0.000	91.365	42.558	-5.807	MWD+IFR1+MS

19200.000	90.000	179.645	8903.000	89.113	0.000	91.851	-0.000	89.113	0.000	0.000	92.171	42.600	-5.747	MWD+IFR1+MS
19300.000	90.000	179.645	8903.000	89.865	0.000	92.661	-0.000	89.865	0.000	0.000	92.979	42.642	-5.687	MWD+IFR1+MS
19400.000	90.000	179.645	8903.000	90.617	0.000	93.473	-0.000	90.617	0.000	0.000	93.788	42.685	-5.629	MWD+IFR1+MS
19500.000	90.000	179.645	8903.000	91.370	0.000	94.286	-0.000	91.370	0.000	0.000	94.598	42.729	-5.572	MWD+IFR1+MS
19600.000	90.000	179.645	8903.000	92.124	0.000	95.100	-0.000	92.124	0.000	0.000	95.409	42.773	-5.516	MWD+IFR1+MS
19700.000	90.000	179.645	8903.000	92.878	0.000	95.916	-0.000	92.878	0.000	0.000	96.222	42.817	-5.462	MWD+IFR1+MS
19800.000	90.000	179.645	8903.000	93.633	0.000	96.732	-0.000	93.633	0.000	0.000	97.036	42.861	-5.409	MWD+IFR1+MS
19900.000	90.000	179.645	8903.000	94.388	0.000	97.550	-0.000	94.388	0.000	0.000	97.851	42.906	-5.357	MWD+IFR1+MS
20000.000	90.000	179.645	8903.000	95.143	0.000	98.369	-0.000	95.143	0.000	0.000	98.667	42.952	-5.306	MWD+IFR1+MS
20100.000	90.000	179.645	8903.000	95.899	0.000	99.189	-0.000	95.899	0.000	0.000	99.484	42.998	-5.256	MWD+IFR1+MS
20111.443	90.000	179.645	8903.000	95.986	0.000	99.282	-0.000	95.986	0.000	0.000	99.577	43.003	-5.250	MWD+IFR1+MS
20161.432	90.000	179.645	8903.000	96.363	0.000	99.691	-0.000	96.363	0.000	0.000	99.985	43.026	-5.226	MWD+IFR1+MS

Plan Targets PLU 15 Twin Wells Ranch-116H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 10	9747.94	440473.10	675378.60	5349.00	CIRCLE
LTP 10	20111.44	430109.80	675442.80	5349.00	CIRCLE
BHL 10	20161.45	430059.80	675443.10	5349.00	CIRCLE



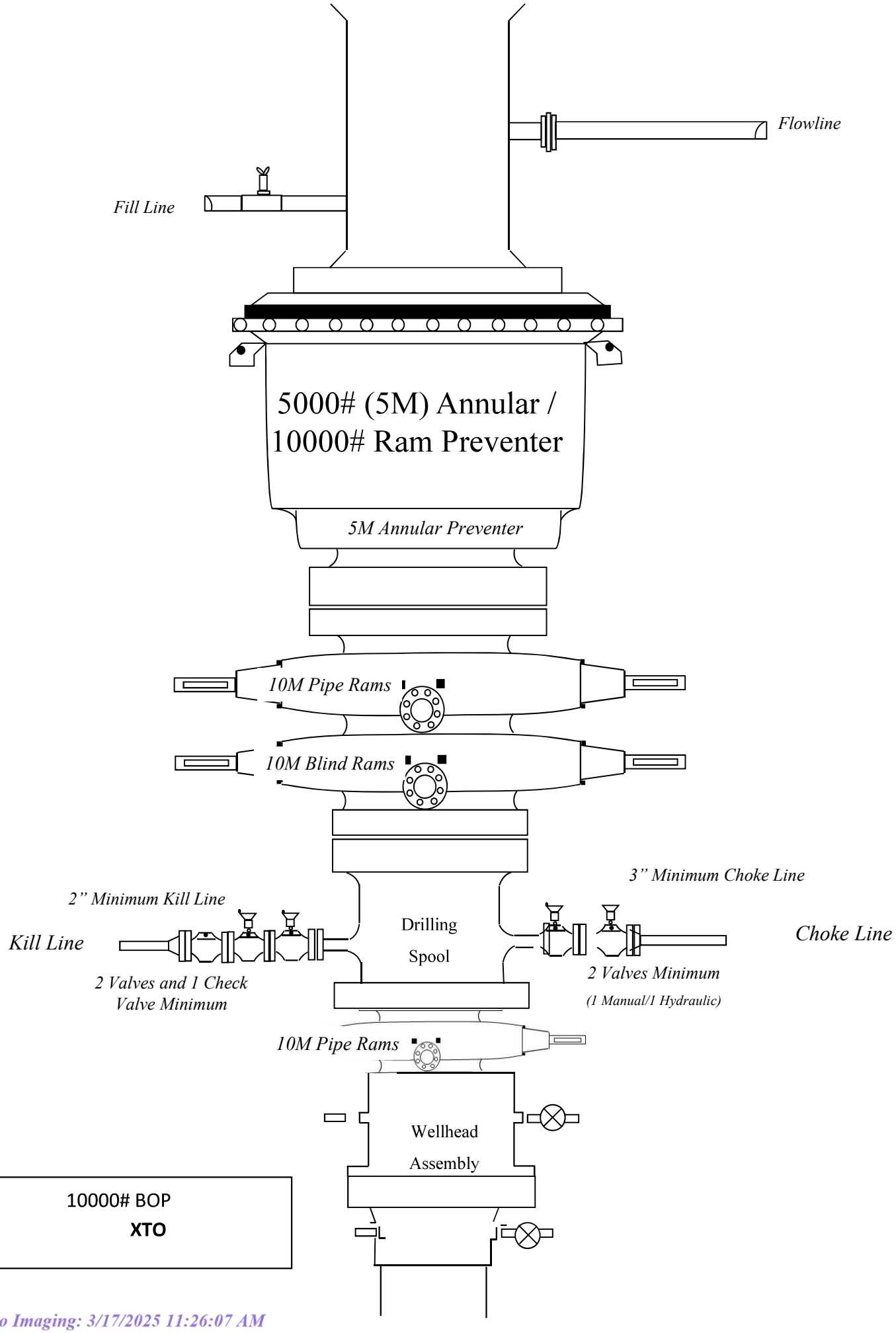
ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

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

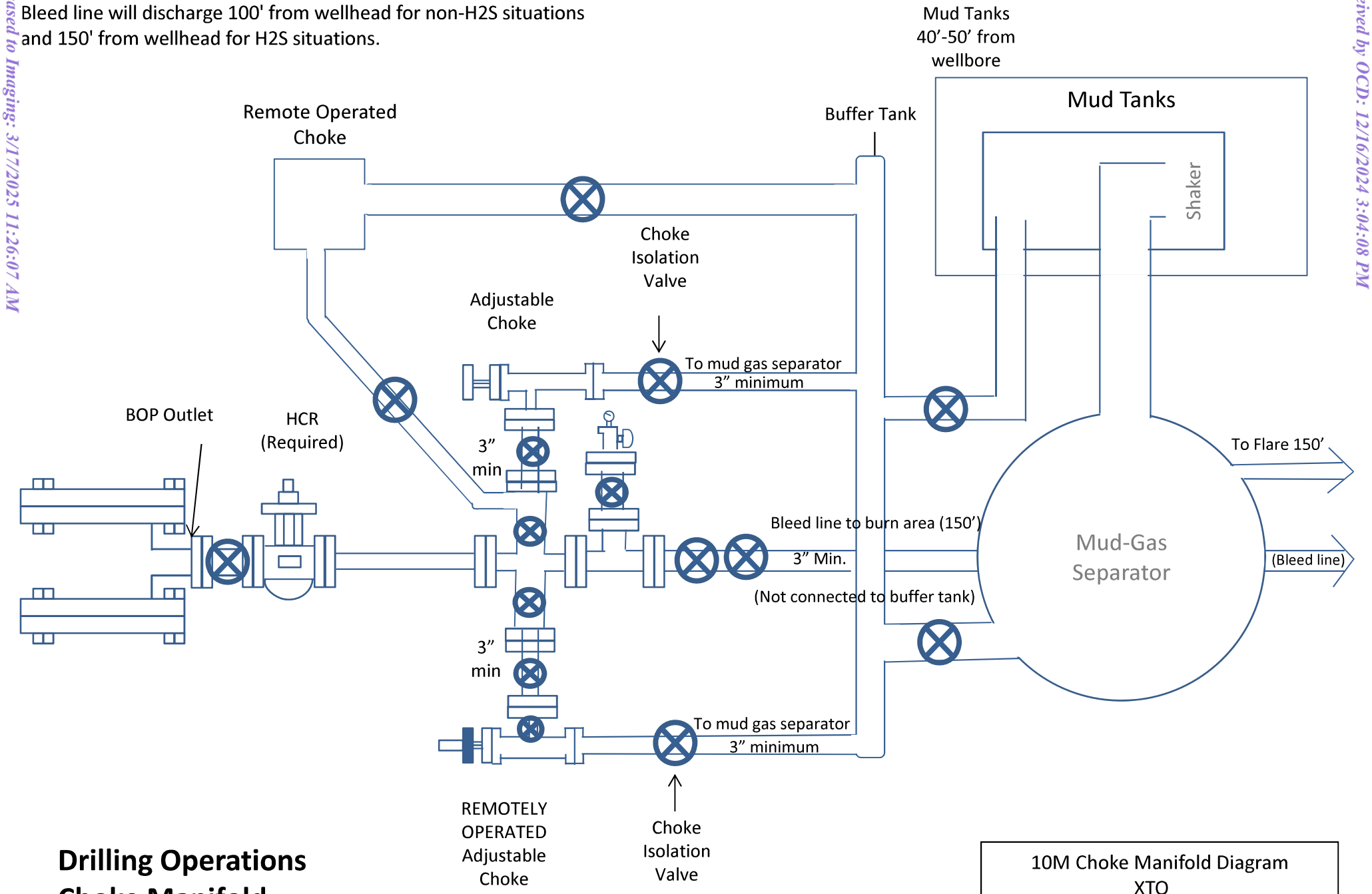
DRAWN	VJK	31MAR22
APPRV		
DRAWING NO.	HBE0000479	



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

11/8/2023 1:08:50 PM

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.

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U. S. Steel Tubular Products

11/29/2021 4:16:04 PM

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.

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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

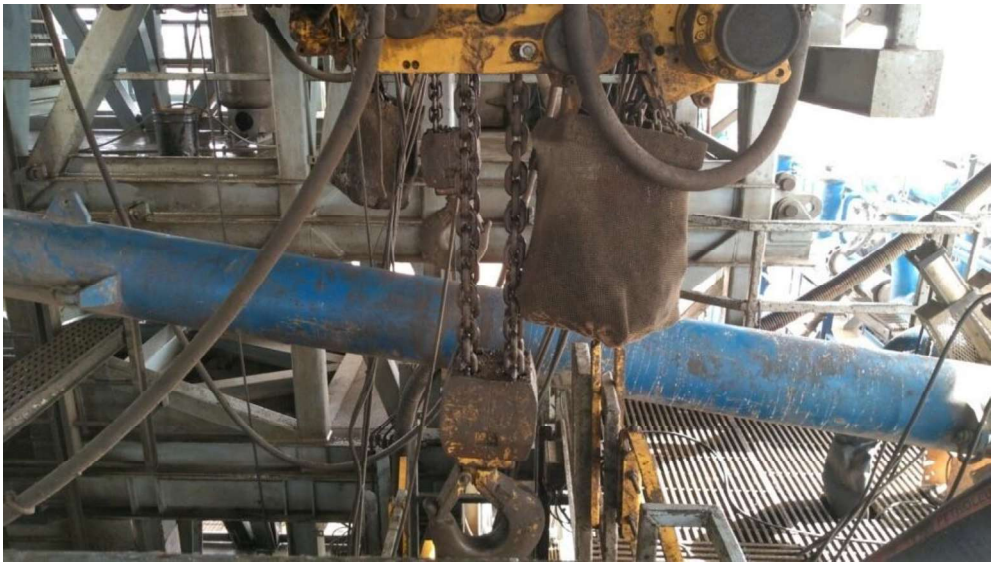


Figure 2: BOP Winch System

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.

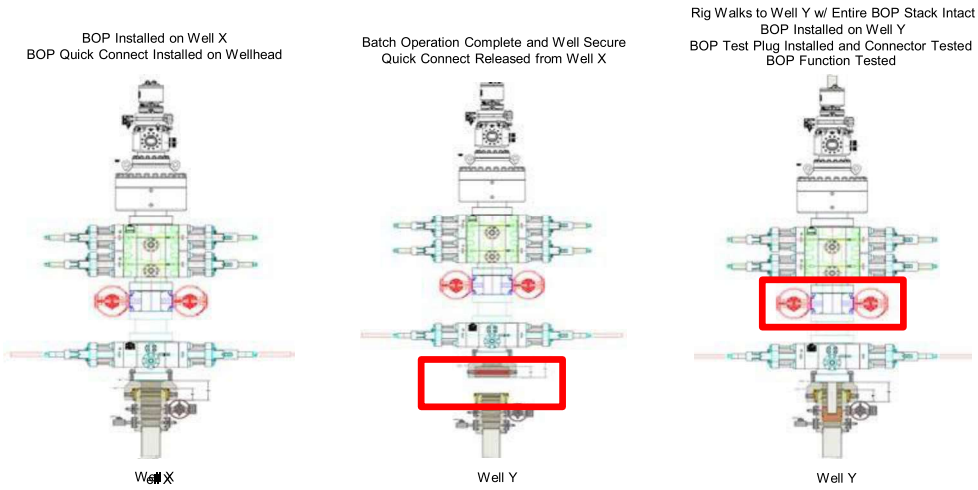
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often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

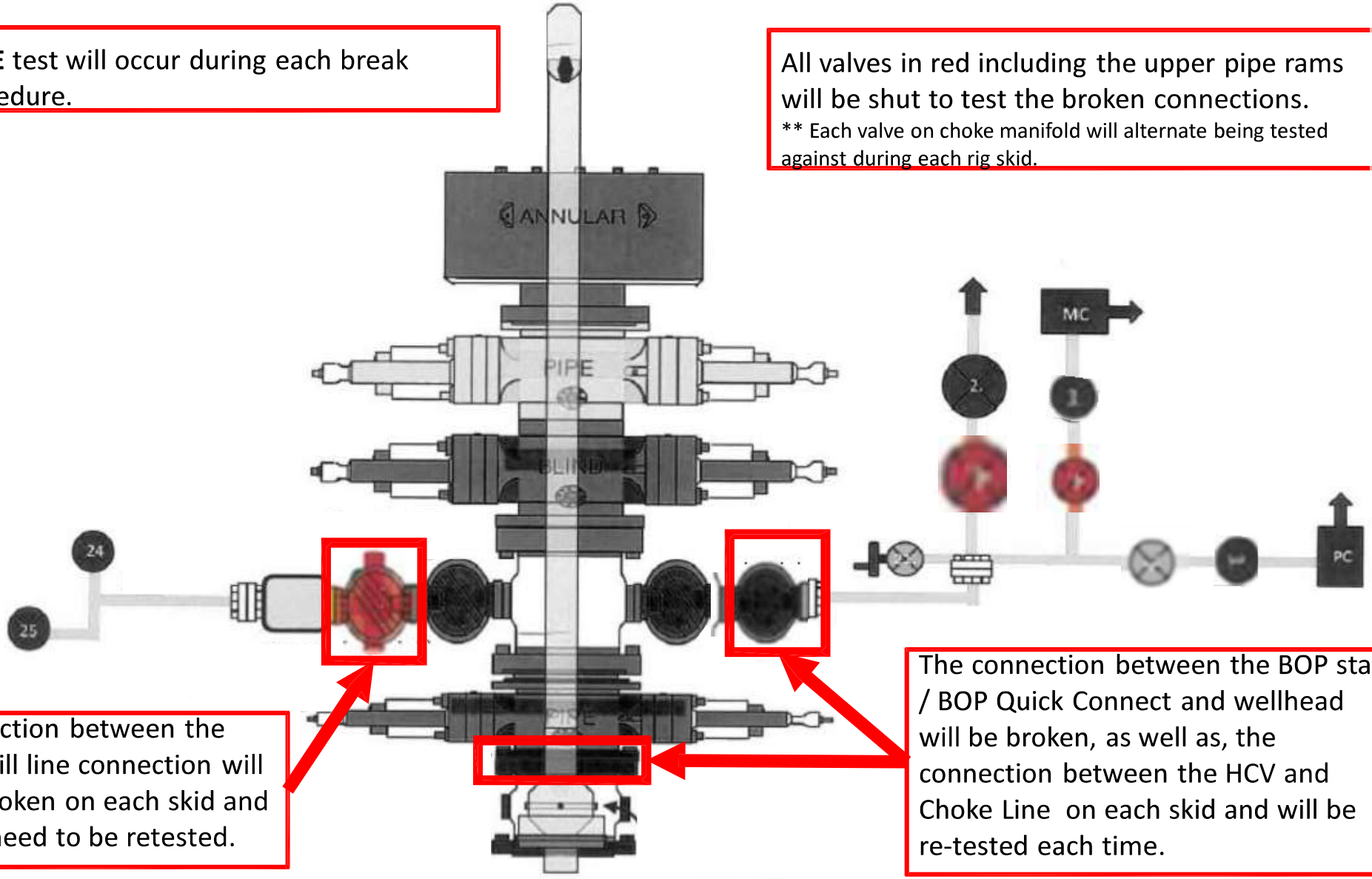
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

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.

XTO Permian Operating, LLC Offline Cementing Variance Request

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

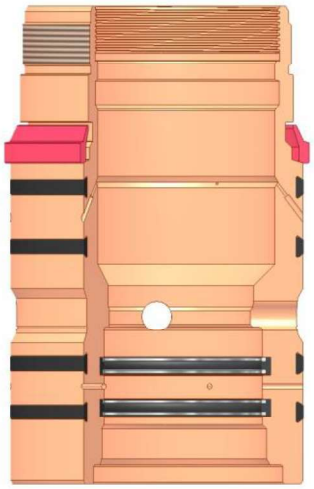
1. Cement Program

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

2. Offline Cementing Procedure

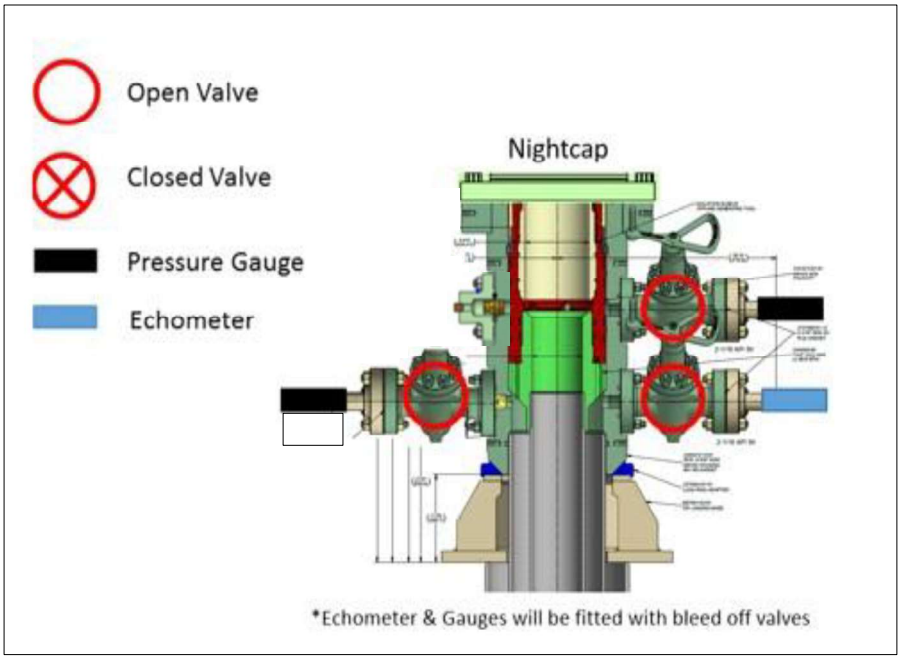
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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



Annular packoff with both external and internal seals

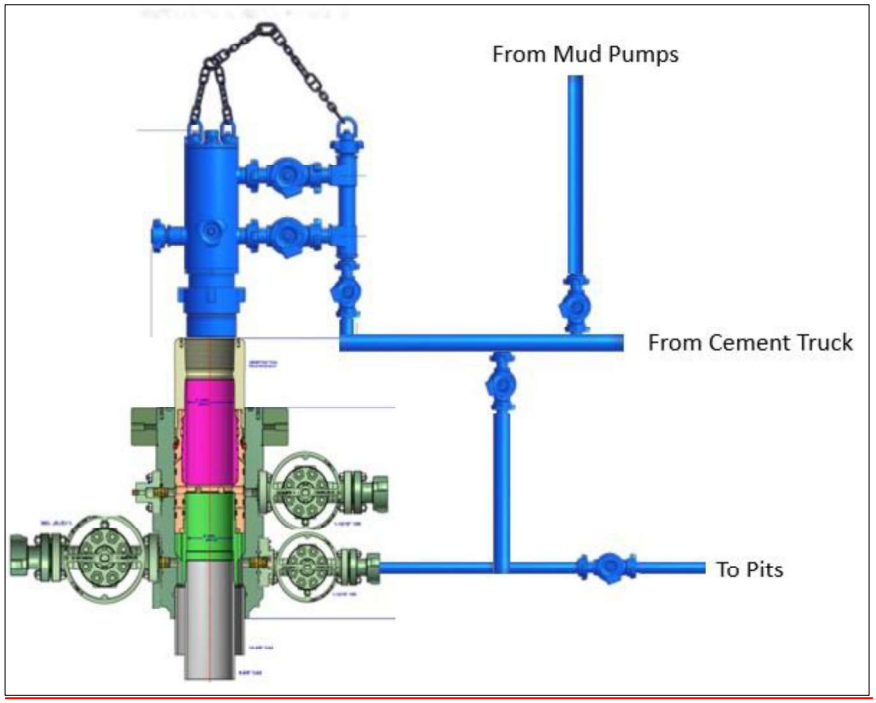
XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
    a. Well Control Plan
        i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
        ii. Rig pumps or a 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.

BLACK GOLD®

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NEW CHOKE HOSE
INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

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

CUSTOMER:	NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#:	15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N:	IMR RETEST SN 74621 ASSET #66-1531
PART DESCRIPTION:	RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES
SALES ORDER #:	529480
QUANTITY:	1
SERIAL #:	74621 H3-012524-1

SIGNATURE: F. OSMOS

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

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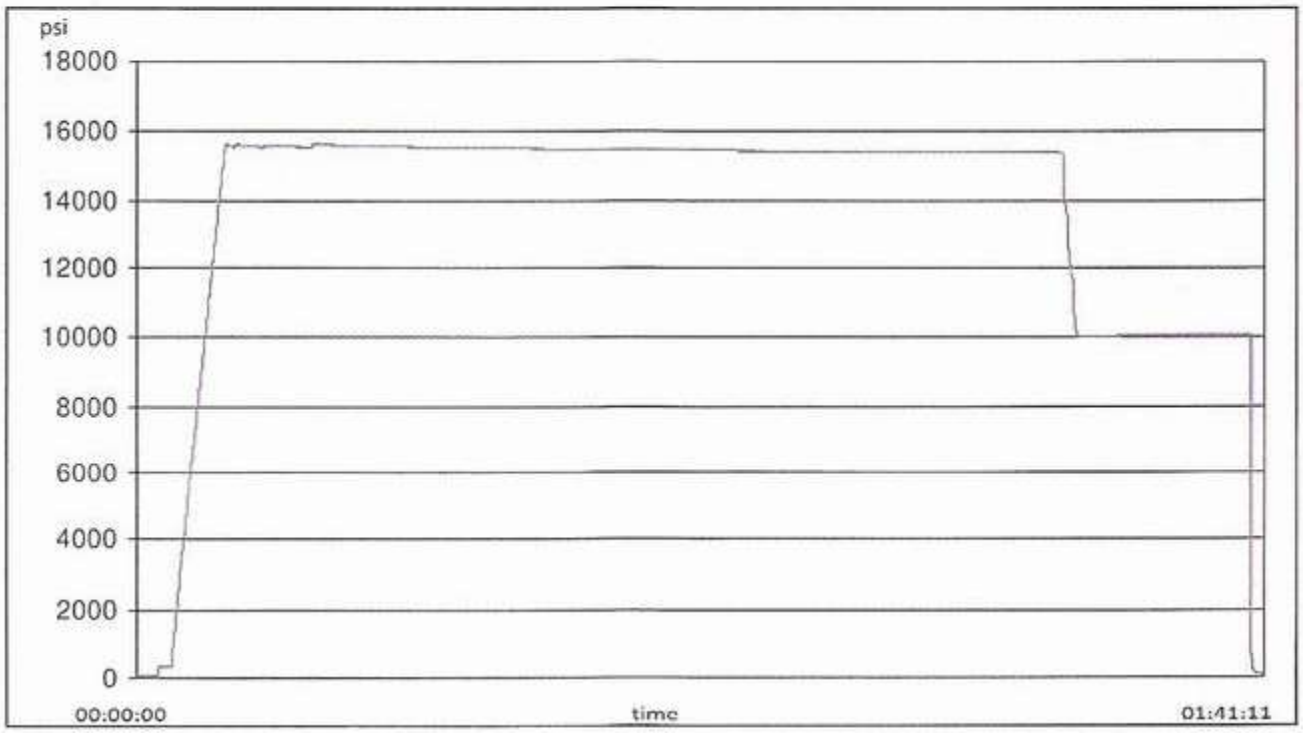
TEST REPORT

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				



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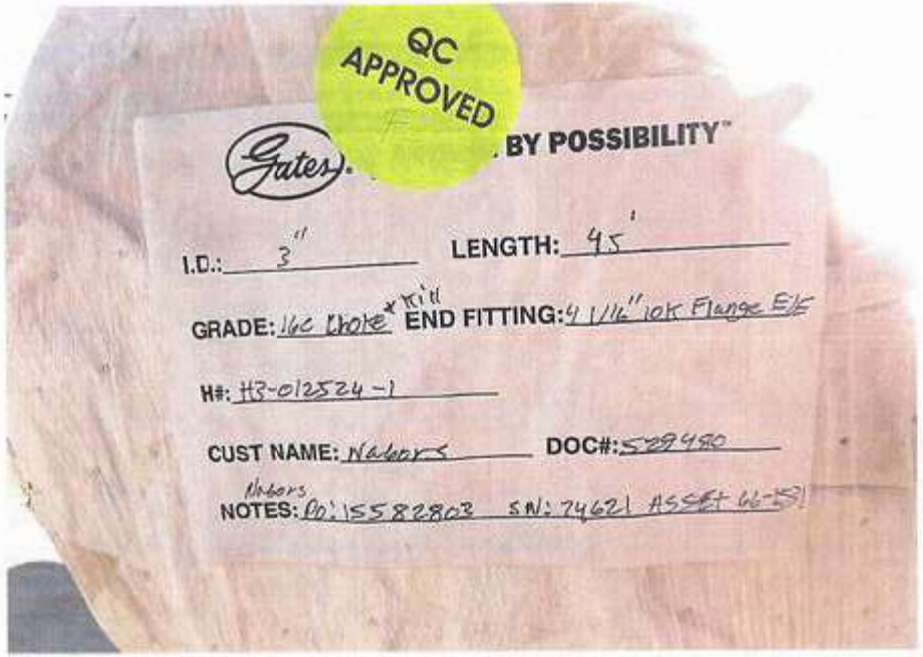
TEST REPORT

GAUGE TRACEABILITY

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

Comment



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

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 412542

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 412542
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	3/17/2025
ward.rikala	Cement is required to circulate on both surface and production strings of casing.	3/17/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	3/17/2025