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

Sundry Print Report

12/16/2024

Well Name: POKER LAKE UNIT 28 BS

Well Location: T25S / R31E / SEC 28 / SENW / 32.101871 / -103.78524

County or Parish/State: EDDY / NM

Well Number: 209H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMLC062140A

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number: NMNM71016X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2820196

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/31/2024

Time Sundry Submitted: 01:07

Date proposed operation will begin: 11/14/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include KOP, FTP, LTP, BHL, & Proposed total Depth. There will be no additional surface disturbance. FROM: TO: KOP: 2435’ FNL & 2010’ FWL OF SECTION 28-T25S-R31E 2036’ FNL & 1748’ FWL OF SECTION 28-T25S-R31E FTP: 2435' FNL & 2090' FWL OF SECTION 28-T25S-R31E 2553' FSL & 1750' FWL OF SECTION 28-T25S-R31E LTP: 100' FSL & 2090' FWL OF SECTION 4-T26S-R31E 100' FSL & 1750' FWL OF SECTION 4-T26S-R31E BHL: 50' FSL & 2090' FWL OF SECTION 4-T26S-R31E 50' FSL & 1750' FWL OF SECTION 4-T26S-R31E The proposed total depth is changing from 24795’ MD; 9921’ TVD (Bone Spring) to 23749’ MD; 10185’ TVD (Bone Spring). A saturated salt brine will be utilized while drilling through the salt formations.

NOI Attachments

Procedure Description

PLU_28_BS____209H_Sundry_Attachments_20241209103337.pdf

Well Name: POKER LAKE UNIT 28 BS

Well Location: T25S / R31E / SEC 28 / SENW / 32.101871 / -103.78524

County or Parish/State: EDDY / NM

Well Number: 209H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMLC062140A

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number: NMNM71016X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

Poker_Lake_Unit_28_BS_309H_310H_209H_210H_COA_20241216073901.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: TERRA SEBASTIAN

Signed on: DEC 09, 2024 10:35 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Advisor

Street Address: 6401 HOLIDAY HILL ROAD SUITE 200

City: MIDLAND **State:** TX

Phone: (432) 999-3107

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

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 12/16/2024

Signature: Chris Walls

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	**NMLC062140A**
LOCATION:	Sec. 28, T.25 S, R 31 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Poker Lake Unit 28 BS 309H
SURFACE HOLE FOOTAGE:	2435'/N & 1951'/E
BOTTOM HOLE FOOTAGE:	50'/S & 2332'/E

WELL NAME & NO.:	Poker Lake Unit 28 BS 310H
SURFACE HOLE FOOTAGE:	2435'/N & 1921'/E
BOTTOM HOLE FOOTAGE:	50'/S & 1712'/E

WELL NAME & NO.:	Poker Lake Unit 28 BS 209H
SURFACE HOLE FOOTAGE:	2435'/N & 2010'/W
BOTTOM HOLE FOOTAGE:	50'/S & 1750'/W

WELL NAME & NO.:	Poker Lake Unit 28 BS 210H
SURFACE HOLE FOOTAGE:	2435'/N & 2040'/W
BOTTOM HOLE FOOTAGE:	50'/S & 2010'/W

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	☑ EchoMeter	☐ 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 ☐ Four-String	☐ Casing Clearance ☑ Offline Cementing	☐ Pilot Hole ☐ Fluid-Filled	☑ Break Testing

*Changes approved through engineering via **Sundry 2820285,2820283,2820196,2820229_** on _12-15-2024_. Any previous COAs not addressed within the updated COAs still apply.*

A. HYDROGEN SULFIDE

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

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **995** 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 6873-6900'.**

    b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

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

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

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

second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

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

C. PRESSURE CONTROL

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

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

   a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
   b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
   c. Manufacturer representative shall install the test plug for the initial BOP test.
   d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
   e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

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

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

GENERAL REQUIREMENTS

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

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

Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM_NM_CFO_DrillingNotifications@BLM.GOV**; (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

GENERAL REQUIREMENTS

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

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

Contact Eddy County Petroleum Engineering Inspection Staff:
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM_NM_CFO_DrillingNotifications@BLM.GOV**; (575) 361-2822

4. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
    b. When the operator proposes to set surface casing with Spudder Rig
        i. Notify the BLM when moving in and removing the Spudder Rig.
        ii. Notify the BLM when moving in the 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.
5. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
6. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

E. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

F. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
    ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

open. (only applies to single stage cement jobs, prior to the cement setting up.)

iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

v. The results of the test shall be reported to the appropriate BLM office.

vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

G. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

H. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be

disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Approved by Zota Stevens on 12/15/2024
575-234-5998 / zstevens@blm.gov

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

APD ID: 10400094968

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015	97860	Jennings, Bone Springs, west

Property Code	Property Name	Well Number
	POKER LAKE UNIT 28 BS	209H

ORGID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,335'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
F	28	25 S	31 E		2,435' FNL	2,010' FWL	32.101871	-103.785240	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	4	26 S	31 E		50' FSL	1,750' FWL	32.064890	-103.786143	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
400	Defining		No	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
F	28	25 S	31 E		2,036' FNL	1,748' FWL	32.102967	-103.786082	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
K	28	25 S	31 E		2,553' FSL	1,750' FWL	32.100999	-103.786085	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	4	26 S	31 E		100' FSL	1,750' FWL	32.065028	-103.786143	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
NMNM-071016X	☒ Horizontal ☐ Vertical	3,335'

OPERATOR CERTIFICATIONS

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

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

Terra Sebastian 10/30/2024

Signature Date

Terra Sebastian

Printed Name

terra.b.sebastian@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.

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

30 Sept 2024

TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209

TIM C. PAPPAS NEW MEXICO 21209 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
TIM C. PAPPAS 21209	9/28/2024

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

FSC INC SURVEYORS+ENGINEERS
2821 West 7th Street., Ste 200 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	9-28-2024	PROJECT NO:	2023040162
DRAWN BY:	LM	SCALE:	
CHECKED BY:	CH	SHEET:	1 OF 2
FIELD CREW:	IR	REVISION:	NO

ACREAGE DEDICATION PLATS

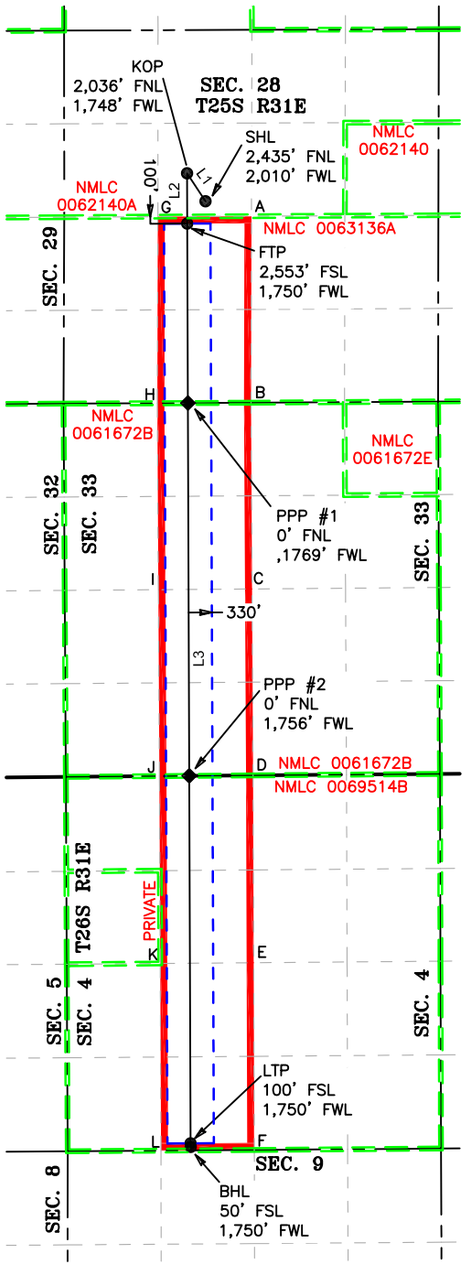
This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the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

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

LEGEND

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	326° 32'59"	476.64'
L2	179° 47'15"	716.21'
L3	179° 47'13"	13,135.64'



COORDINATE TABLE					
SHL (NAD 83 NME)			FTP (NAD 83 NME)		
Y =	401,228.5	N	Y =	400,910.0	N
X =	711,052.9	E	X =	710,792.8	E
LAT. =	32.101871	°N	LAT. =	32.100999	°N
LONG. =	103.785240	°W	LONG. =	103.786085	°W
KOP (NAD 83 NME)					
Y =	401,626.2	N			
X =	710,790.1	E			
LAT. =	32.102967	°N			
LONG. =	103.786082	°W			
LTP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	387,824.4	N	Y =	387,774.4	N
X =	710,841.4	E	X =	710,841.7	E
LAT. =	32.065028	°N	LAT. =	32.064890	°N
LONG. =	103.786143	°W	LONG. =	103.786143	°W
SHL (NAD 27 NME)			FTP (NAD 27 NME)		
Y =	401,170.6	N	Y =	400,852.1	N
X =	669,867.2	E	X =	669,607.1	E
LAT. =	32.101746	°N	LAT. =	32.100874	°N
LONG. =	103.784762	°W	LONG. =	103.785608	°W
KOP (NAD 27 NME)					
Y =	401,568.3	N			
X =	669,604.4	E			
LAT. =	32.102843	°N			
LONG. =	103.785604	°W			
LTP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	387,766.9	N	Y =	387,716.9	N
X =	669,655.2	E	X =	669,655.5	E
LAT. =	32.064903	°N	LAT. =	32.064766	°N
LONG. =	103.785667	°W	LONG. =	103.785666	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	398,357.4	N	Y =	398,299.6	N
X =	710,802.3	E	X =	669,616.5	E
LAT. =	32.093982	°N	LAT. =	32.093857	°N
LONG. =	103.786096	°W	LONG. =	103.785619	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 27 NME)		
Y =	393,052.6	N	Y =	392,994.9	N
X =	710,822.0	E	X =	669,636.0	E
LAT. =	32.079400	°N	LAT. =	32.079275	°N
LONG. =	103.786120	°W	LONG. =	103.785643	°W

CORNER COORDINATES (NAD83 NME)					
A - Y =	401,014.4	N	A - X =	711,707.2	E
B - Y =	398,362.0	N	B - X =	711,700.3	E
C - Y =	395,711.7	N	C - X =	711,714.8	E
D - Y =	393,060.0	N	D - X =	711,729.2	E
E - Y =	390,394.6	N	E - X =	711,738.3	E
F - Y =	387,731.0	N	F - X =	711,747.4	E
G - Y =	401,008.0	N	G - X =	710,375.2	E
H - Y =	398,355.2	N	H - X =	710,366.6	E
I - Y =	395,701.2	N	E - X =	710,382.1	E
J - Y =	393,049.2	N	F - X =	710,397.7	E
K - Y =	390,383.8	N	G - X =	710,408.3	E
L - Y =	387,721.3	N	H - X =	710,419.7	E
CORNER COORDINATES (NAD27 NME)					
A - Y =	400,956.5	N	A - X =	670,521.5	E
B - Y =	398,304.2	N	B - X =	670,514.5	E
C - Y =	395,654.0	N	C - X =	670,528.9	E
D - Y =	393,002.3	N	D - X =	670,543.2	E
E - Y =	390,337.0	N	E - X =	670,552.2	E
F - Y =	387,673.5	N	F - X =	670,561.2	E
G - Y =	400,950.1	N	G - X =	669,189.5	E
H - Y =	398,297.4	N	H - X =	669,180.8	E
I - Y =	395,643.5	N	E - X =	669,196.2	E
J - Y =	392,991.5	N	F - X =	669,211.7	E
K - Y =	390,326.2	N	G - X =	669,222.2	E
L - Y =	387,663.8	N	H - X =	669,233.5	E

FSC INC SURVEYORS+ENGINEERS
2821 West 7th Street, Suite 200
Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	9-27-2024	PROJECT NO:	2023040162
DRAWN BY:	LM	SCALE:	1" = 2,500'
CHECKED BY:	CH	SHEET:	2 OF 2
FIELD CREW:	IR	REVISION:	NO

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

XTO Energy Inc.
POKER LAKE UNIT 28 BS 209H
Projected TD: 23749.96' MD / 10185' TVD
SHL: 2435' FNL & 2010' FWL , Section 28, T25S, R31E
BHL: 50' FSL & 1750' FWL , Section 4, T26S, R31E
EDDY County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	922'	Water
Top of Salt	1221'	Water
Base of Salt	3990'	Water
Delaware	4218'	Water
Brushy Canyon	6875'	Water/Oil/Gas
Bone Spring	8153'	Water
Avalon	8269'	Water/Oil/Gas
1st Bone Spring	8895'	Water/Oil/Gas
2nd Bone Spring	9414'	Water/Oil/Gas
Target/Land Curve	10185'	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 @ 1022' (199' 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 9289.68' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23749.96 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8989.68 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1022'	9.625	40	J-55	BTC	New	1.71	6.16	15.41
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.67	2.86	2.02
8.75	4000' – 9289.68'	7.625	29.7	HC L-80	Flush Joint	New	2.67	2.47	2.58
6.75	0' – 9189.68'	5.5	20	RY P-110	Freedom/Semi-Permium	New	1.05	2.55	2.11
6.75	9189.68' - 23749.96'	5.5	20	RY P-110	Talon/Semi-Flush	New	1.05	2.30	2.11

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

Wellhead:

Operator will utilize Multibowl System - see attached

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 1022'

Lead: 240 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 +/- 9289.68'
1st Stage
Optional Lead: 370 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 220 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6875
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: 770 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 (6875') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing: 5.5, 20 New Talon/Semi-Flush, RY P-110 casing to be set at +/- 23749.96'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8989.68 feet
Tail: 1020 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9489.68 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

5. Pressure Control Equipment

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

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

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Additional Comments
0' - 1022'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
1022' - 9289.68'	8.75	Saturated brine for salt interval / Direct Emulsion	9-9.5	30-32	NC	Fully saturated salt across salado / salt
9289.68' - 23749.96'	6.75	OBM	9.1-9.6	50-60	NC - 20	N/A

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

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

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid.

10. Anticipated Starting Date and Duration of Operations

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

Well Plan Report - Poker Lake Unit 28 BS 209H

Measured Depth:	23749.96 ft
TVD RKB:	10185.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	401170.60 ft
Easting:	669867.20 ft
RKB:	3367.00 ft
Ground Level:	3367.00 ft
North Reference:	Grid
Convergence Angle:	0.29 Deg

Plan Sections Poker Lake Unit 28 BS 209H

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	
1354.79	5.10	326.55	1354.46	9.45	-6.24	2.00	0.00	2.00	
6466.08	5.10	326.55	6445.54	388.24	-256.49	0.00	0.00	0.00	
6720.87	0.00	0.00	6700.00	397.69	-262.73	-2.00	0.00	2.00	
9489.68	0.00	0.00	9468.80	397.69	-262.73	0.00	0.00	0.00	
10614.68	90.00	179.79	10185.00	-318.50	-260.10	8.00	0.00	8.00	FTP 11
23699.97	90.00	179.79	10185.00	-13403.70	-212.00	0.00	0.00	0.00	LTP 11
23749.96	90.00	179.79	10185.00	-13453.70	-211.82	0.00	0.00	0.00	BHL 5

Position Uncertainty Poker Lake Unit 28 BS 209H

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	XOMR2_OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.000	0.358	0.179	90.000	XOMR2_OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.310	0.000	0.000	0.717	0.538	90.000	XOMR2_OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.325	0.000	0.000	1.075	0.896	90.000	XOMR2_OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.347	0.000	0.000	1.434	1.255	90.000	XOMR2_OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.374	0.000	0.000	1.792	1.613	90.000	XOMR2_OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.406	0.000	0.000	2.151	1.972	90.000	XOMR2_OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.443	0.000	0.000	2.509	2.330	90.000	XOMR2_OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.485	0.000	0.000	2.868	2.689	90.000	XOMR2_OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.531	0.000	0.000	3.226	3.047	90.000	XOMR2_OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.580	0.000	0.000	3.585	3.405	90.000	XOMR2_OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.634	0.000	0.000	3.943	3.764	90.000	XOMR2_OWSG MWD+IFR1+MS
1200.000	2.000	326.550	1199.980	4.245	0.000	4.176	0.000	2.690	0.000	0.000	4.300	4.121	89.935	XOMR2_OWSG MWD+IFR1+MS
1300.000	4.000	326.550	1299.838	4.594	0.000	4.531	0.000	2.747	0.000	0.000	4.658	4.476	89.669	XOMR2_OWSG MWD+IFR1+MS
1354.793	5.096	326.550	1354.457	4.784	0.000	4.725	0.000	2.778	0.000	0.000	4.854	4.670	89.406	XOMR2_OWSG MWD+IFR1+MS
1400.000	5.096	326.550	1399.486	4.945	0.000	4.886	0.000	2.805	0.000	0.000	5.016	4.831	89.358	XOMR2_OWSG MWD+IFR1+MS
1500.000	5.096	326.550	1499.090	5.302	0.000	5.241	0.000	2.871	0.000	0.000	5.372	5.185	89.533	XOMR2_OWSG MWD+IFR1+MS
1600.000	5.096	326.550	1598.695	5.660	0.000	5.598	0.000	2.939	0.000	0.000	5.730	5.541	89.668	XOMR2_OWSG MWD+IFR1+MS
1700.000	5.096	326.550	1698.300	6.018	0.000	5.955	0.000	3.010	0.000	0.000	6.088	5.897	89.770	XOMR2_OWSG MWD+IFR1+MS

1800.000	5.096	326.550	1797.905	6.378	0.000	6.312	0.000	3.083	0.000	0.000	6.446	6.253	89.846	XOMR2_OWSG MWD+IFR1+MS
1900.000	5.096	326.550	1897.509	6.737	0.000	6.670	0.000	3.159	0.000	0.000	6.805	6.610	89.900	XOMR2_OWSG MWD+IFR1+MS
2000.000	5.096	326.550	1997.114	7.098	0.000	7.028	0.000	3.236	0.000	0.000	7.165	6.968	89.935	XOMR2_OWSG MWD+IFR1+MS
2100.000	5.096	326.550	2096.719	7.458	0.000	7.387	0.000	3.315	0.000	0.000	7.525	7.326	89.955	XOMR2_OWSG MWD+IFR1+MS
2200.000	5.096	326.550	2196.324	7.819	0.000	7.745	0.000	3.397	0.000	0.000	7.885	7.684	89.962	XOMR2_OWSG MWD+IFR1+MS
2300.000	5.096	326.550	2295.928	8.180	0.000	8.104	0.000	3.479	0.000	0.000	8.245	8.042	89.958	XOMR2_OWSG MWD+IFR1+MS
2400.000	5.096	326.550	2395.533	8.541	0.000	8.463	0.000	3.564	0.000	0.000	8.606	8.400	89.945	XOMR2_OWSG MWD+IFR1+MS
2500.000	5.096	326.550	2495.138	8.903	0.000	8.822	0.000	3.650	0.000	0.000	8.967	8.759	89.925	XOMR2_OWSG MWD+IFR1+MS
2600.000	5.096	326.550	2594.743	9.265	0.000	9.182	0.000	3.737	0.000	0.000	9.328	9.118	89.897	XOMR2_OWSG MWD+IFR1+MS
2700.000	5.096	326.550	2694.347	9.627	0.000	9.541	0.000	3.827	0.000	0.000	9.689	9.477	89.864	XOMR2_OWSG MWD+IFR1+MS
2800.000	5.096	326.550	2793.952	9.989	0.000	9.901	0.000	3.917	0.000	0.000	10.050	9.836	89.827	XOMR2_OWSG MWD+IFR1+MS
2900.000	5.096	326.550	2893.557	10.351	0.000	10.261	0.000	4.009	0.000	0.000	10.411	10.195	89.785	XOMR2_OWSG MWD+IFR1+MS
3000.000	5.096	326.550	2993.162	10.714	0.000	10.620	0.000	4.102	0.000	0.000	10.773	10.554	89.739	XOMR2_OWSG MWD+IFR1+MS
3100.000	5.096	326.550	3092.766	11.076	0.000	10.980	0.000	4.197	0.000	0.000	11.134	10.914	89.690	XOMR2_OWSG MWD+IFR1+MS
3200.000	5.096	326.550	3192.371	11.439	0.000	11.340	0.000	4.293	0.000	0.000	11.496	11.273	89.639	XOMR2_OWSG MWD+IFR1+MS
3300.000	5.096	326.550	3291.976	11.801	0.000	11.700	0.000	4.391	0.000	0.000	11.858	11.633	89.585	XOMR2_OWSG MWD+IFR1+MS
3400.000	5.096	326.550	3391.581	12.164	0.000	12.060	0.000	4.489	0.000	0.000	12.220	11.993	89.530	XOMR2_OWSG MWD+IFR1+MS
3500.000	5.096	326.550	3491.185	12.527	0.000	12.420	0.000	4.590	0.000	0.000	12.581	12.352	89.473	XOMR2_OWSG MWD+IFR1+MS
3600.000	5.096	326.550	3590.790	12.890	0.000	12.781	0.000	4.691	0.000	0.000	12.943	12.712	89.414	XOMR2_OWSG MWD+IFR1+MS
3700.000	5.096	326.550	3690.395	13.252	0.000	13.141	0.000	4.794	0.000	0.000	13.305	13.072	89.355	XOMR2_OWSG MWD+IFR1+MS

3800.000	5.096	326.550	3790.000	13.615	0.000	13.501	0.000	4.899	0.000	0.000	13.668	13.432	89.294	XOMR2_OWSG MWD+IFR1+MS
3900.000	5.096	326.550	3889.604	13.978	0.000	13.861	0.000	5.005	0.000	0.000	14.030	13.792	89.233	XOMR2_OWSG MWD+IFR1+MS
4000.000	5.096	326.550	3989.209	14.342	0.000	14.222	0.000	5.113	0.000	0.000	14.392	14.152	89.170	XOMR2_OWSG MWD+IFR1+MS
4100.000	5.096	326.550	4088.814	14.705	0.000	14.582	0.000	5.222	0.000	0.000	14.754	14.512	89.108	XOMR2_OWSG MWD+IFR1+MS
4200.000	5.096	326.550	4188.419	15.068	0.000	14.943	0.000	5.332	0.000	0.000	15.116	14.872	89.044	XOMR2_OWSG MWD+IFR1+MS
4300.000	5.096	326.550	4288.023	15.431	0.000	15.303	0.000	5.445	0.000	0.000	15.479	15.232	88.981	XOMR2_OWSG MWD+IFR1+MS
4400.000	5.096	326.550	4387.628	15.794	0.000	15.664	0.000	5.558	0.000	0.000	15.841	15.592	88.917	XOMR2_OWSG MWD+IFR1+MS
4500.000	5.096	326.550	4487.233	16.158	0.000	16.024	0.000	5.674	0.000	0.000	16.203	15.952	88.853	XOMR2_OWSG MWD+IFR1+MS
4600.000	5.096	326.550	4586.838	16.521	0.000	16.385	0.000	5.791	0.000	0.000	16.566	16.312	88.789	XOMR2_OWSG MWD+IFR1+MS
4700.000	5.096	326.550	4686.442	16.884	0.000	16.745	0.000	5.910	0.000	0.000	16.928	16.672	88.724	XOMR2_OWSG MWD+IFR1+MS
4800.000	5.096	326.550	4786.047	17.248	0.000	17.106	0.000	6.030	0.000	0.000	17.291	17.032	88.660	XOMR2_OWSG MWD+IFR1+MS
4900.000	5.096	326.550	4885.652	17.611	0.000	17.466	0.000	6.153	0.000	0.000	17.653	17.392	88.595	XOMR2_OWSG MWD+IFR1+MS
5000.000	5.096	326.550	4985.257	17.974	0.000	17.827	0.000	6.277	0.000	0.000	18.016	17.753	88.531	XOMR2_OWSG MWD+IFR1+MS
5100.000	5.096	326.550	5084.861	18.338	0.000	18.187	0.000	6.403	0.000	0.000	18.378	18.113	88.467	XOMR2_OWSG MWD+IFR1+MS
5200.000	5.096	326.550	5184.466	18.701	0.000	18.548	0.000	6.531	0.000	0.000	18.741	18.473	88.403	XOMR2_OWSG MWD+IFR1+MS
5300.000	5.096	326.550	5284.071	19.065	0.000	18.909	0.000	6.661	0.000	0.000	19.103	18.833	88.338	XOMR2_OWSG MWD+IFR1+MS
5400.000	5.096	326.550	5383.676	19.428	0.000	19.269	0.000	6.792	0.000	0.000	19.466	19.194	88.274	XOMR2_OWSG MWD+IFR1+MS
5500.000	5.096	326.550	5483.280	19.792	0.000	19.630	0.000	6.926	0.000	0.000	19.829	19.554	88.210	XOMR2_OWSG MWD+IFR1+MS
5600.000	5.096	326.550	5582.885	20.155	0.000	19.991	0.000	7.062	0.000	0.000	20.191	19.914	88.147	XOMR2_OWSG MWD+IFR1+MS
5700.000	5.096	326.550	5682.490	20.519	0.000	20.352	0.000	7.200	0.000	0.000	20.554	20.275	88.083	XOMR2_OWSG MWD+IFR1+MS

5800.000	5.096	326.550	5782.095	20.882	0.000	20.712	0.000	7.340	0.000	0.000	20.917	20.635	88.020	XOMR2_OWSG MWD+IFR1+MS
5900.000	5.096	326.550	5881.699	21.246	0.000	21.073	0.000	7.482	0.000	0.000	21.279	20.995	87.956	XOMR2_OWSG MWD+IFR1+MS
6000.000	5.096	326.550	5981.304	21.610	0.000	21.434	0.000	7.626	0.000	0.000	21.642	21.356	87.893	XOMR2_OWSG MWD+IFR1+MS
6100.000	5.096	326.550	6080.909	21.973	0.000	21.794	0.000	7.772	0.000	0.000	22.005	21.716	87.830	XOMR2_OWSG MWD+IFR1+MS
6200.000	5.096	326.550	6180.514	22.337	0.000	22.155	0.000	7.921	0.000	0.000	22.368	22.077	87.768	XOMR2_OWSG MWD+IFR1+MS
6300.000	5.096	326.550	6280.118	22.700	0.000	22.516	0.000	8.071	0.000	0.000	22.731	22.437	87.705	XOMR2_OWSG MWD+IFR1+MS
6400.000	5.096	326.550	6379.723	23.064	0.000	22.877	0.000	8.224	0.000	0.000	23.093	22.798	87.643	XOMR2_OWSG MWD+IFR1+MS
6466.081	5.096	326.550	6445.543	23.304	0.000	23.115	0.000	8.327	0.000	0.000	23.333	23.036	87.601	XOMR2_OWSG MWD+IFR1+MS
6500.000	4.417	326.550	6479.345	23.430	0.000	23.237	0.000	8.380	0.000	0.000	23.456	23.158	87.588	XOMR2_OWSG MWD+IFR1+MS
6600.000	2.417	326.550	6579.162	23.782	0.000	23.596	0.000	8.537	0.000	0.000	23.816	23.516	87.556	XOMR2_OWSG MWD+IFR1+MS
6700.000	0.417	326.550	6679.126	24.104	0.000	23.952	0.000	8.694	0.000	0.000	24.173	23.872	87.552	XOMR2_OWSG MWD+IFR1+MS
6720.874	0.000	0.000	6700.000	24.246	0.000	23.947	0.000	8.726	0.000	0.000	24.246	23.946	87.570	XOMR2_OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6779.126	24.525	0.000	24.226	0.000	8.851	0.000	0.000	24.525	24.225	87.689	XOMR2_OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6879.126	24.878	0.000	24.578	0.000	9.010	0.000	0.000	24.878	24.578	87.836	XOMR2_OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6979.126	25.231	0.000	24.931	0.000	9.172	0.000	0.000	25.231	24.931	87.979	XOMR2_OWSG MWD+IFR1+MS
7100.000	0.000	0.000	7079.126	25.584	0.000	25.284	0.000	9.336	0.000	0.000	25.584	25.284	88.118	XOMR2_OWSG MWD+IFR1+MS
7200.000	0.000	0.000	7179.126	25.937	0.000	25.638	0.000	9.503	0.000	0.000	25.937	25.637	88.253	XOMR2_OWSG MWD+IFR1+MS
7300.000	0.000	0.000	7279.126	26.290	0.000	25.991	0.000	9.673	0.000	0.000	26.291	25.991	88.384	XOMR2_OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7379.126	26.644	0.000	26.344	0.000	9.845	0.000	0.000	26.644	26.344	88.512	XOMR2_OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7479.126	26.998	0.000	26.698	0.000	10.020	0.000	0.000	26.998	26.698	88.637	XOMR2_OWSG MWD+IFR1+MS

7600.000	0.000	0.000	7579.126	27.351	0.000	27.052	0.000	10.198	0.000	0.000	27.351	27.052	88.758	XOMR2_OWSG MWD+IFR1+MS
7700.000	0.000	0.000	7679.126	27.705	0.000	27.406	0.000	10.379	0.000	0.000	27.705	27.406	88.877	XOMR2_OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7779.126	28.059	0.000	27.760	0.000	10.562	0.000	0.000	28.059	27.760	88.992	XOMR2_OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7879.126	28.413	0.000	28.114	0.000	10.748	0.000	0.000	28.413	28.114	89.104	XOMR2_OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7979.126	28.768	0.000	28.468	0.000	10.936	0.000	0.000	28.768	28.468	89.214	XOMR2_OWSG MWD+IFR1+MS
8100.000	0.000	0.000	8079.126	29.122	0.000	28.822	0.000	11.128	0.000	0.000	29.122	28.822	89.321	XOMR2_OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8179.126	29.476	0.000	29.177	0.000	11.322	0.000	0.000	29.476	29.177	89.425	XOMR2_OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8279.126	29.831	0.000	29.531	0.000	11.519	0.000	0.000	29.831	29.531	89.527	XOMR2_OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8379.126	30.186	0.000	29.886	0.000	11.719	0.000	0.000	30.186	29.886	89.627	XOMR2_OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8479.126	30.540	0.000	30.241	0.000	11.922	0.000	0.000	30.540	30.241	89.724	XOMR2_OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8579.126	30.895	0.000	30.595	0.000	12.128	0.000	0.000	30.895	30.595	89.819	XOMR2_OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8679.126	31.250	0.000	30.950	0.000	12.336	0.000	0.000	31.250	30.950	89.912	XOMR2_OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8779.126	31.605	0.000	31.305	0.000	12.547	0.000	0.000	31.605	31.305	90.002	XOMR2_OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8879.126	31.960	0.000	31.660	0.000	12.762	0.000	0.000	31.960	31.660	90.091	XOMR2_OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8979.126	32.315	0.000	32.015	0.000	12.979	0.000	0.000	32.315	32.015	90.178	XOMR2_OWSG MWD+IFR1+MS
9100.000	0.000	0.000	9079.126	32.670	0.000	32.371	0.000	13.199	0.000	0.000	32.670	32.371	90.262	XOMR2_OWSG MWD+IFR1+MS
9200.000	0.000	0.000	9179.126	33.026	0.000	32.726	0.000	13.422	0.000	0.000	33.026	32.726	90.345	XOMR2_OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9279.126	33.381	0.000	33.081	0.000	13.648	0.000	0.000	33.381	33.081	90.426	XOMR2_OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9379.126	33.736	0.000	33.437	0.000	13.877	0.000	0.000	33.736	33.437	90.506	XOMR2_OWSG MWD+IFR1+MS
9489.677	0.000	0.000	9468.803	34.055	0.000	33.755	0.000	14.084	0.000	0.000	34.055	33.755	90.575	XOMR2_OWSG MWD+IFR1+MS

9500.000	0.826	179.789	9479.126	34.069	0.000	33.790	-0.000	14.108	0.000	0.000	34.090	33.790	90.583	XOMR2_OWSG MWD+IFR1+MS
9600.000	8.826	179.789	9578.690	33.876	0.000	34.107	-0.000	14.337	0.000	0.000	34.402	34.107	90.756	XOMR2_OWSG MWD+IFR1+MS
9700.000	16.826	179.789	9676.116	33.127	0.000	34.409	-0.000	14.553	0.000	0.000	34.697	34.408	91.112	XOMR2_OWSG MWD+IFR1+MS
9800.000	24.826	179.789	9769.507	31.849	0.000	34.691	-0.000	14.753	0.000	0.000	34.963	34.691	91.631	XOMR2_OWSG MWD+IFR1+MS
9900.000	32.826	179.789	9857.044	30.087	0.000	34.952	-0.000	14.935	0.000	0.000	35.196	34.952	92.300	XOMR2_OWSG MWD+IFR1+MS
10000.000	40.826	179.789	9937.025	27.915	0.000	35.189	-0.000	15.101	0.000	0.000	35.390	35.189	93.142	XOMR2_OWSG MWD+IFR1+MS
10100.000	48.826	179.789	10007.893	25.436	0.000	35.401	-0.000	15.257	0.000	0.000	35.546	35.400	94.278	XOMR2_OWSG MWD+IFR1+MS
10200.000	56.826	179.789	10068.268	22.798	0.000	35.586	-0.000	15.409	0.000	0.000	35.663	35.585	96.371	XOMR2_OWSG MWD+IFR1+MS
10300.000	64.826	179.789	10116.975	20.214	0.000	35.745	-0.000	15.567	0.000	0.000	35.747	35.740	-34.730	XOMR2_OWSG MWD+IFR1+MS
10400.000	72.826	179.789	10153.066	17.985	0.000	35.876	-0.000	15.739	0.000	0.000	35.876	35.791	3.154	XOMR2_OWSG MWD+IFR1+MS
10500.000	80.826	179.789	10175.839	16.498	0.000	35.979	-0.000	15.931	0.000	0.000	35.981	35.815	5.645	XOMR2_OWSG MWD+IFR1+MS
10600.000	88.826	179.789	10184.850	16.127	0.000	36.053	-0.000	16.146	0.000	0.000	36.058	35.823	7.696	XOMR2_OWSG MWD+IFR1+MS
10614.677	90.000	179.789	10185.000	16.179	0.000	36.061	-0.000	16.179	0.000	0.000	36.066	35.824	8.061	XOMR2_OWSG MWD+IFR1+MS
10700.000	90.000	179.789	10185.000	16.388	0.000	36.113	-0.000	16.388	0.000	0.000	36.122	35.825	9.440	XOMR2_OWSG MWD+IFR1+MS
10800.000	90.000	179.789	10185.000	16.664	0.000	36.190	-0.000	16.664	0.000	0.000	36.202	35.826	10.097	XOMR2_OWSG MWD+IFR1+MS
10900.000	90.000	179.789	10185.000	16.971	0.000	36.283	-0.000	16.971	0.000	0.000	36.298	35.828	10.177	XOMR2_OWSG MWD+IFR1+MS
11000.000	90.000	179.789	10185.000	17.309	0.000	36.392	-0.000	17.309	0.000	0.000	36.409	35.831	9.956	XOMR2_OWSG MWD+IFR1+MS
11100.000	90.000	179.789	10185.000	17.675	0.000	36.516	-0.000	17.675	0.000	0.000	36.536	35.836	9.587	XOMR2_OWSG MWD+IFR1+MS
11200.000	90.000	179.789	10185.000	18.068	0.000	36.656	-0.000	18.068	0.000	0.000	36.678	35.842	9.155	XOMR2_OWSG MWD+IFR1+MS
11300.000	90.000	179.789	10185.000	18.485	0.000	36.811	-0.000	18.485	0.000	0.000	36.834	35.848	8.706	XOMR2_OWSG MWD+IFR1+MS

11400.000	90.000	179.789	10185.000	18.926	0.000	36.981	-0.000	18.926	0.000	0.000	37.006	35.856	8.264	XOMR2_OWSG MWD+IFR1+MS
11500.000	90.000	179.789	10185.000	19.389	0.000	37.167	-0.000	19.389	0.000	0.000	37.192	35.864	7.840	XOMR2_OWSG MWD+IFR1+MS
11600.000	90.000	179.789	10185.000	19.872	0.000	37.367	-0.000	19.872	0.000	0.000	37.393	35.873	7.442	XOMR2_OWSG MWD+IFR1+MS
11700.000	90.000	179.789	10185.000	20.374	0.000	37.581	-0.000	20.374	0.000	0.000	37.608	35.883	7.070	XOMR2_OWSG MWD+IFR1+MS
11800.000	90.000	179.789	10185.000	20.893	0.000	37.810	-0.000	20.893	0.000	0.000	37.837	35.893	6.724	XOMR2_OWSG MWD+IFR1+MS
11900.000	90.000	179.789	10185.000	21.429	0.000	38.053	-0.000	21.429	0.000	0.000	38.081	35.905	6.404	XOMR2_OWSG MWD+IFR1+MS
12000.000	90.000	179.789	10185.000	21.979	0.000	38.309	-0.000	21.979	0.000	0.000	38.337	35.917	6.108	XOMR2_OWSG MWD+IFR1+MS
12100.000	90.000	179.789	10185.000	22.543	0.000	38.579	-0.000	22.543	0.000	0.000	38.608	35.930	5.834	XOMR2_OWSG MWD+IFR1+MS
12200.000	90.000	179.789	10185.000	23.121	0.000	38.862	-0.000	23.121	0.000	0.000	38.891	35.943	5.580	XOMR2_OWSG MWD+IFR1+MS
12300.000	90.000	179.789	10185.000	23.710	0.000	39.158	-0.000	23.710	0.000	0.000	39.187	35.958	5.345	XOMR2_OWSG MWD+IFR1+MS
12400.000	90.000	179.789	10185.000	24.310	0.000	39.466	-0.000	24.310	0.000	0.000	39.496	35.973	5.126	XOMR2_OWSG MWD+IFR1+MS
12500.000	90.000	179.789	10185.000	24.920	0.000	39.787	-0.000	24.920	0.000	0.000	39.817	35.988	4.923	XOMR2_OWSG MWD+IFR1+MS
12600.000	90.000	179.789	10185.000	25.540	0.000	40.120	-0.000	25.540	0.000	0.000	40.149	36.004	4.733	XOMR2_OWSG MWD+IFR1+MS
12700.000	90.000	179.789	10185.000	26.169	0.000	40.465	-0.000	26.169	0.000	0.000	40.494	36.021	4.556	XOMR2_OWSG MWD+IFR1+MS
12800.000	90.000	179.789	10185.000	26.806	0.000	40.821	-0.000	26.806	0.000	0.000	40.850	36.039	4.391	XOMR2_OWSG MWD+IFR1+MS
12900.000	90.000	179.789	10185.000	27.451	0.000	41.188	-0.000	27.451	0.000	0.000	41.217	36.057	4.237	XOMR2_OWSG MWD+IFR1+MS
13000.000	90.000	179.789	10185.000	28.102	0.000	41.566	-0.000	28.102	0.000	0.000	41.595	36.076	4.091	XOMR2_OWSG MWD+IFR1+MS
13100.000	90.000	179.789	10185.000	28.761	0.000	41.954	-0.000	28.761	0.000	0.000	41.983	36.096	3.955	XOMR2_OWSG MWD+IFR1+MS
13200.000	90.000	179.789	10185.000	29.425	0.000	42.353	-0.000	29.425	0.000	0.000	42.382	36.116	3.827	XOMR2_OWSG MWD+IFR1+MS
13300.000	90.000	179.789	10185.000	30.096	0.000	42.761	-0.000	30.096	0.000	0.000	42.790	36.137	3.706	XOMR2_OWSG MWD+IFR1+MS

13400.000	90.000	179.789	10185.000	30.772	0.000	43.180	-0.000	30.772	0.000	0.000	43.208	36.158	3.592	XOMR2_OWSG MWD+IFR1+MS
13500.000	90.000	179.789	10185.000	31.453	0.000	43.607	-0.000	31.453	0.000	0.000	43.636	36.180	3.484	XOMR2_OWSG MWD+IFR1+MS
13600.000	90.000	179.789	10185.000	32.138	0.000	44.044	-0.000	32.138	0.000	0.000	44.072	36.203	3.382	XOMR2_OWSG MWD+IFR1+MS
13700.000	90.000	179.789	10185.000	32.828	0.000	44.490	-0.000	32.828	0.000	0.000	44.518	36.227	3.285	XOMR2_OWSG MWD+IFR1+MS
13800.000	90.000	179.789	10185.000	33.523	0.000	44.944	-0.000	33.523	0.000	0.000	44.972	36.251	3.193	XOMR2_OWSG MWD+IFR1+MS
13900.000	90.000	179.789	10185.000	34.221	0.000	45.407	-0.000	34.221	0.000	0.000	45.434	36.275	3.106	XOMR2_OWSG MWD+IFR1+MS
14000.000	90.000	179.789	10185.000	34.923	0.000	45.877	-0.000	34.923	0.000	0.000	45.905	36.301	3.023	XOMR2_OWSG MWD+IFR1+MS
14100.000	90.000	179.789	10185.000	35.628	0.000	46.356	-0.000	35.628	0.000	0.000	46.383	36.327	2.944	XOMR2_OWSG MWD+IFR1+MS
14200.000	90.000	179.789	10185.000	36.336	0.000	46.842	-0.000	36.336	0.000	0.000	46.869	36.353	2.869	XOMR2_OWSG MWD+IFR1+MS
14300.000	90.000	179.789	10185.000	37.048	0.000	47.335	-0.000	37.048	0.000	0.000	47.362	36.380	2.797	XOMR2_OWSG MWD+IFR1+MS
14400.000	90.000	179.789	10185.000	37.763	0.000	47.836	-0.000	37.763	0.000	0.000	47.863	36.408	2.729	XOMR2_OWSG MWD+IFR1+MS
14500.000	90.000	179.789	10185.000	38.480	0.000	48.344	-0.000	38.480	0.000	0.000	48.370	36.437	2.663	XOMR2_OWSG MWD+IFR1+MS
14600.000	90.000	179.789	10185.000	39.200	0.000	48.858	-0.000	39.200	0.000	0.000	48.884	36.466	2.600	XOMR2_OWSG MWD+IFR1+MS
14700.000	90.000	179.789	10185.000	39.922	0.000	49.378	-0.000	39.922	0.000	0.000	49.404	36.495	2.540	XOMR2_OWSG MWD+IFR1+MS
14800.000	90.000	179.789	10185.000	40.647	0.000	49.905	-0.000	40.647	0.000	0.000	49.931	36.526	2.482	XOMR2_OWSG MWD+IFR1+MS
14900.000	90.000	179.789	10185.000	41.373	0.000	50.438	-0.000	41.373	0.000	0.000	50.464	36.557	2.427	XOMR2_OWSG MWD+IFR1+MS
15000.000	90.000	179.789	10185.000	42.102	0.000	50.977	-0.000	42.102	0.000	0.000	51.002	36.588	2.374	XOMR2_OWSG MWD+IFR1+MS
15100.000	90.000	179.789	10185.000	42.833	0.000	51.522	-0.000	42.833	0.000	0.000	51.547	36.620	2.323	XOMR2_OWSG MWD+IFR1+MS
15200.000	90.000	179.789	10185.000	43.566	0.000	52.072	-0.000	43.566	0.000	0.000	52.097	36.653	2.274	XOMR2_OWSG MWD+IFR1+MS
15300.000	90.000	179.789	10185.000	44.300	0.000	52.627	-0.000	44.300	0.000	0.000	52.652	36.687	2.226	XOMR2_OWSG MWD+IFR1+MS

15400.000	90.000	179.789	10185.000	45.037	0.000	53.188	-0.000	45.037	0.000	0.000	53.212	36.721	2.181	XOMR2_OWSG MWD+IFR1+MS
15500.000	90.000	179.789	10185.000	45.774	0.000	53.754	-0.000	45.774	0.000	0.000	53.778	36.755	2.137	XOMR2_OWSG MWD+IFR1+MS
15600.000	90.000	179.789	10185.000	46.514	0.000	54.324	-0.000	46.514	0.000	0.000	54.348	36.790	2.095	XOMR2_OWSG MWD+IFR1+MS
15700.000	90.000	179.789	10185.000	47.255	0.000	54.900	-0.000	47.255	0.000	0.000	54.923	36.826	2.054	XOMR2_OWSG MWD+IFR1+MS
15800.000	90.000	179.789	10185.000	47.997	0.000	55.480	-0.000	47.997	0.000	0.000	55.503	36.863	2.014	XOMR2_OWSG MWD+IFR1+MS
15900.000	90.000	179.789	10185.000	48.740	0.000	56.064	-0.000	48.740	0.000	0.000	56.087	36.900	1.976	XOMR2_OWSG MWD+IFR1+MS
16000.000	90.000	179.789	10185.000	49.485	0.000	56.653	-0.000	49.485	0.000	0.000	56.676	36.937	1.940	XOMR2_OWSG MWD+IFR1+MS
16100.000	90.000	179.789	10185.000	50.231	0.000	57.245	-0.000	50.231	0.000	0.000	57.268	36.975	1.904	XOMR2_OWSG MWD+IFR1+MS
16200.000	90.000	179.789	10185.000	50.979	0.000	57.842	-0.000	50.979	0.000	0.000	57.865	37.014	1.869	XOMR2_OWSG MWD+IFR1+MS
16300.000	90.000	179.789	10185.000	51.727	0.000	58.443	-0.000	51.727	0.000	0.000	58.465	37.054	1.836	XOMR2_OWSG MWD+IFR1+MS
16400.000	90.000	179.789	10185.000	52.476	0.000	59.047	-0.000	52.476	0.000	0.000	59.069	37.093	1.804	XOMR2_OWSG MWD+IFR1+MS
16500.000	90.000	179.789	10185.000	53.227	0.000	59.655	-0.000	53.227	0.000	0.000	59.677	37.134	1.773	XOMR2_OWSG MWD+IFR1+MS
16600.000	90.000	179.789	10185.000	53.978	0.000	60.267	-0.000	53.978	0.000	0.000	60.289	37.175	1.742	XOMR2_OWSG MWD+IFR1+MS
16700.000	90.000	179.789	10185.000	54.730	0.000	60.882	-0.000	54.730	0.000	0.000	60.904	37.217	1.713	XOMR2_OWSG MWD+IFR1+MS
16800.000	90.000	179.789	10185.000	55.484	0.000	61.501	-0.000	55.484	0.000	0.000	61.522	37.259	1.684	XOMR2_OWSG MWD+IFR1+MS
16900.000	90.000	179.789	10185.000	56.238	0.000	62.123	-0.000	56.238	0.000	0.000	62.144	37.302	1.656	XOMR2_OWSG MWD+IFR1+MS
17000.000	90.000	179.789	10185.000	56.993	0.000	62.748	-0.000	56.993	0.000	0.000	62.768	37.346	1.629	XOMR2_OWSG MWD+IFR1+MS
17100.000	90.000	179.789	10185.000	57.748	0.000	63.376	-0.000	57.748	0.000	0.000	63.396	37.390	1.603	XOMR2_OWSG MWD+IFR1+MS
17200.000	90.000	179.789	10185.000	58.505	0.000	64.006	-0.000	58.505	0.000	0.000	64.027	37.434	1.578	XOMR2_OWSG MWD+IFR1+MS
17300.000	90.000	179.789	10185.000	59.262	0.000	64.640	-0.000	59.262	0.000	0.000	64.661	37.479	1.553	XOMR2_OWSG MWD+IFR1+MS

17400.000	90.000	179.789	10185.000	60.020	0.000	65.277	-0.000	60.020	0.000	0.000	65.297	37.525	1.529	XOMR2_OWSG MWD+IFR1+MS
17500.000	90.000	179.789	10185.000	60.779	0.000	65.916	-0.000	60.779	0.000	0.000	65.936	37.571	1.505	XOMR2_OWSG MWD+IFR1+MS
17600.000	90.000	179.789	10185.000	61.538	0.000	66.558	-0.000	61.538	0.000	0.000	66.578	37.618	1.483	XOMR2_OWSG MWD+IFR1+MS
17700.000	90.000	179.789	10185.000	62.298	0.000	67.203	-0.000	62.298	0.000	0.000	67.222	37.666	1.460	XOMR2_OWSG MWD+IFR1+MS
17800.000	90.000	179.789	10185.000	63.058	0.000	67.850	-0.000	63.058	0.000	0.000	67.869	37.714	1.439	XOMR2_OWSG MWD+IFR1+MS
17900.000	90.000	179.789	10185.000	63.819	0.000	68.499	-0.000	63.819	0.000	0.000	68.519	37.762	1.418	XOMR2_OWSG MWD+IFR1+MS
18000.000	90.000	179.789	10185.000	64.581	0.000	69.151	-0.000	64.581	0.000	0.000	69.170	37.811	1.397	XOMR2_OWSG MWD+IFR1+MS
18100.000	90.000	179.789	10185.000	65.343	0.000	69.805	-0.000	65.343	0.000	0.000	69.824	37.861	1.377	XOMR2_OWSG MWD+IFR1+MS
18200.000	90.000	179.789	10185.000	66.106	0.000	70.462	-0.000	66.106	0.000	0.000	70.480	37.911	1.357	XOMR2_OWSG MWD+IFR1+MS
18300.000	90.000	179.789	10185.000	66.869	0.000	71.120	-0.000	66.869	0.000	0.000	71.139	37.962	1.338	XOMR2_OWSG MWD+IFR1+MS
18400.000	90.000	179.789	10185.000	67.633	0.000	71.781	-0.000	67.633	0.000	0.000	71.799	38.013	1.320	XOMR2_OWSG MWD+IFR1+MS
18500.000	90.000	179.789	10185.000	68.397	0.000	72.443	-0.000	68.397	0.000	0.000	72.462	38.065	1.302	XOMR2_OWSG MWD+IFR1+MS
18600.000	90.000	179.789	10185.000	69.162	0.000	73.108	-0.000	69.162	0.000	0.000	73.126	38.117	1.284	XOMR2_OWSG MWD+IFR1+MS
18700.000	90.000	179.789	10185.000	69.927	0.000	73.775	-0.000	69.927	0.000	0.000	73.793	38.170	1.266	XOMR2_OWSG MWD+IFR1+MS
18800.000	90.000	179.789	10185.000	70.693	0.000	74.443	-0.000	70.693	0.000	0.000	74.461	38.224	1.249	XOMR2_OWSG MWD+IFR1+MS
18900.000	90.000	179.789	10185.000	71.459	0.000	75.113	-0.000	71.459	0.000	0.000	75.131	38.278	1.233	XOMR2_OWSG MWD+IFR1+MS
19000.000	90.000	179.789	10185.000	72.225	0.000	75.785	-0.000	72.225	0.000	0.000	75.803	38.332	1.217	XOMR2_OWSG MWD+IFR1+MS
19100.000	90.000	179.789	10185.000	72.992	0.000	76.459	-0.000	72.992	0.000	0.000	76.477	38.388	1.201	XOMR2_OWSG MWD+IFR1+MS
19200.000	90.000	179.789	10185.000	73.759	0.000	77.135	-0.000	73.759	0.000	0.000	77.152	38.443	1.185	XOMR2_OWSG MWD+IFR1+MS
19300.000	90.000	179.789	10185.000	74.526	0.000	77.812	-0.000	74.526	0.000	0.000	77.829	38.499	1.170	XOMR2_OWSG MWD+IFR1+MS

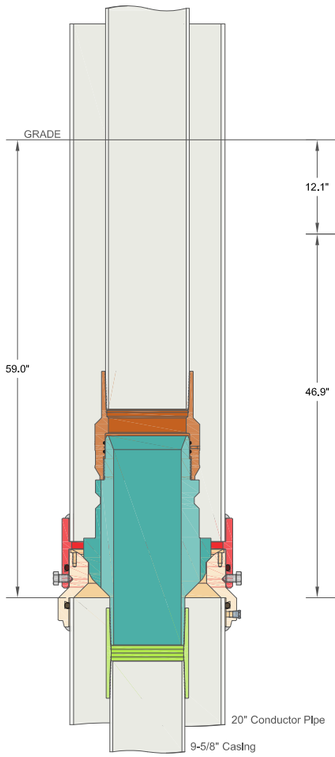
19400.000	90.000	179.789	10185.000	75.294	0.000	78.491	-0.000	75.294	0.000	0.000	78.508	38.556	1.155	XOMR2_OWSG MWD+IFR1+MS
19500.000	90.000	179.789	10185.000	76.063	0.000	79.171	-0.000	76.063	0.000	0.000	79.188	38.613	1.141	XOMR2_OWSG MWD+IFR1+MS
19600.000	90.000	179.789	10185.000	76.831	0.000	79.853	-0.000	76.831	0.000	0.000	79.870	38.671	1.127	XOMR2_OWSG MWD+IFR1+MS
19700.000	90.000	179.789	10185.000	77.600	0.000	80.536	-0.000	77.600	0.000	0.000	80.553	38.729	1.113	XOMR2_OWSG MWD+IFR1+MS
19800.000	90.000	179.789	10185.000	78.369	0.000	81.221	-0.000	78.369	0.000	0.000	81.237	38.788	1.099	XOMR2_OWSG MWD+IFR1+MS
19900.000	90.000	179.789	10185.000	79.139	0.000	81.907	-0.000	79.139	0.000	0.000	81.923	38.847	1.086	XOMR2_OWSG MWD+IFR1+MS
20000.000	90.000	179.789	10185.000	79.908	0.000	82.595	-0.000	79.908	0.000	0.000	82.611	38.907	1.072	XOMR2_OWSG MWD+IFR1+MS
20100.000	90.000	179.789	10185.000	80.679	0.000	83.284	-0.000	80.679	0.000	0.000	83.300	38.967	1.060	XOMR2_OWSG MWD+IFR1+MS
20200.000	90.000	179.789	10185.000	81.449	0.000	83.974	-0.000	81.449	0.000	0.000	83.990	39.028	1.047	XOMR2_OWSG MWD+IFR1+MS
20300.000	90.000	179.789	10185.000	82.220	0.000	84.665	-0.000	82.220	0.000	0.000	84.681	39.089	1.035	XOMR2_OWSG MWD+IFR1+MS
20400.000	90.000	179.789	10185.000	82.990	0.000	85.358	-0.000	82.990	0.000	0.000	85.374	39.151	1.023	XOMR2_OWSG MWD+IFR1+MS
20500.000	90.000	179.789	10185.000	83.762	0.000	86.052	-0.000	83.762	0.000	0.000	86.067	39.213	1.011	XOMR2_OWSG MWD+IFR1+MS
20600.000	90.000	179.789	10185.000	84.533	0.000	86.747	-0.000	84.533	0.000	0.000	86.763	39.276	0.999	XOMR2_OWSG MWD+IFR1+MS
20700.000	90.000	179.789	10185.000	85.305	0.000	87.443	-0.000	85.305	0.000	0.000	87.459	39.339	0.988	XOMR2_OWSG MWD+IFR1+MS
20800.000	90.000	179.789	10185.000	86.077	0.000	88.141	-0.000	86.077	0.000	0.000	88.156	39.403	0.977	XOMR2_OWSG MWD+IFR1+MS
20900.000	90.000	179.789	10185.000	86.849	0.000	88.839	-0.000	86.849	0.000	0.000	88.854	39.467	0.966	XOMR2_OWSG MWD+IFR1+MS
21000.000	90.000	179.789	10185.000	87.621	0.000	89.539	-0.000	87.621	0.000	0.000	89.554	39.532	0.955	XOMR2_OWSG MWD+IFR1+MS
21100.000	90.000	179.789	10185.000	88.394	0.000	90.240	-0.000	88.394	0.000	0.000	90.254	39.597	0.944	XOMR2_OWSG MWD+IFR1+MS
21200.000	90.000	179.789	10185.000	89.166	0.000	90.941	-0.000	89.166	0.000	0.000	90.956	39.662	0.934	XOMR2_OWSG MWD+IFR1+MS
21300.000	90.000	179.789	10185.000	89.939	0.000	91.644	-0.000	89.939	0.000	0.000	91.659	39.729	0.924	XOMR2_OWSG MWD+IFR1+MS

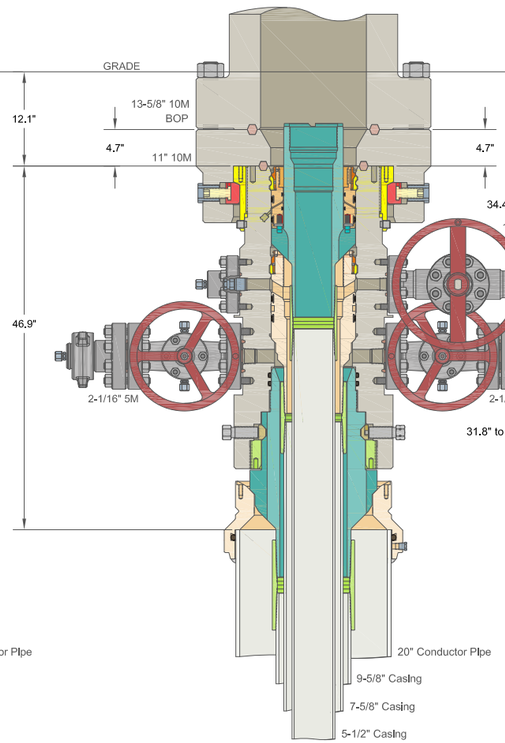
21400.000	90.000	179.789	10185.000	90.713	0.000	92.348	-0.000	90.713	0.000	0.000	92.362	39.795	0.913	XOMR2_OWSG MWD+IFR1+MS
21500.000	90.000	179.789	10185.000	91.486	0.000	93.052	-0.000	91.486	0.000	0.000	93.067	39.862	0.904	XOMR2_OWSG MWD+IFR1+MS
21600.000	90.000	179.789	10185.000	92.260	0.000	93.758	-0.000	92.260	0.000	0.000	93.772	39.930	0.894	XOMR2_OWSG MWD+IFR1+MS
21700.000	90.000	179.789	10185.000	93.033	0.000	94.464	-0.000	93.033	0.000	0.000	94.479	39.998	0.884	XOMR2_OWSG MWD+IFR1+MS
21800.000	90.000	179.789	10185.000	93.807	0.000	95.172	-0.000	93.807	0.000	0.000	95.186	40.067	0.875	XOMR2_OWSG MWD+IFR1+MS
21900.000	90.000	179.789	10185.000	94.581	0.000	95.880	-0.000	94.581	0.000	0.000	95.894	40.136	0.866	XOMR2_OWSG MWD+IFR1+MS
22000.000	90.000	179.789	10185.000	95.356	0.000	96.589	-0.000	95.356	0.000	0.000	96.603	40.205	0.857	XOMR2_OWSG MWD+IFR1+MS
22100.000	90.000	179.789	10185.000	96.130	0.000	97.299	-0.000	96.130	0.000	0.000	97.313	40.275	0.848	XOMR2_OWSG MWD+IFR1+MS
22200.000	90.000	179.789	10185.000	96.905	0.000	98.010	-0.000	96.905	0.000	0.000	98.024	40.345	0.839	XOMR2_OWSG MWD+IFR1+MS
22300.000	90.000	179.789	10185.000	97.680	0.000	98.722	-0.000	97.680	0.000	0.000	98.735	40.416	0.830	XOMR2_OWSG MWD+IFR1+MS
22400.000	90.000	179.789	10185.000	98.455	0.000	99.434	-0.000	98.455	0.000	0.000	99.447	40.487	0.822	XOMR2_OWSG MWD+IFR1+MS
22500.000	90.000	179.789	10185.000	99.230	0.000	100.147	-0.000	99.230	0.000	0.000	100.161	40.559	0.814	XOMR2_OWSG MWD+IFR1+MS
22600.000	90.000	179.789	10185.000	100.005	0.000	100.861	-0.000	100.005	0.000	0.000	100.874	40.631	0.805	XOMR2_OWSG MWD+IFR1+MS
22700.000	90.000	179.789	10185.000	100.780	0.000	101.576	-0.000	100.780	0.000	0.000	101.589	40.704	0.797	XOMR2_OWSG MWD+IFR1+MS
22800.000	90.000	179.789	10185.000	101.556	0.000	102.291	-0.000	101.556	0.000	0.000	102.304	40.777	0.789	XOMR2_OWSG MWD+IFR1+MS
22900.000	90.000	179.789	10185.000	102.332	0.000	103.007	-0.000	102.332	0.000	0.000	103.020	40.850	0.782	XOMR2_OWSG MWD+IFR1+MS
23000.000	90.000	179.789	10185.000	103.107	0.000	103.724	-0.000	103.107	0.000	0.000	103.737	40.924	0.774	XOMR2_OWSG MWD+IFR1+MS
23100.000	90.000	179.789	10185.000	103.883	0.000	104.441	-0.000	103.883	0.000	0.000	104.454	40.999	0.766	XOMR2_OWSG MWD+IFR1+MS
23200.000	90.000	179.789	10185.000	104.660	0.000	105.159	-0.000	104.660	0.000	0.000	105.172	41.073	0.759	XOMR2_OWSG MWD+IFR1+MS
23300.000	90.000	179.789	10185.000	105.436	0.000	105.878	-0.000	105.436	0.000	0.000	105.891	41.149	0.752	XOMR2_OWSG MWD+IFR1+MS

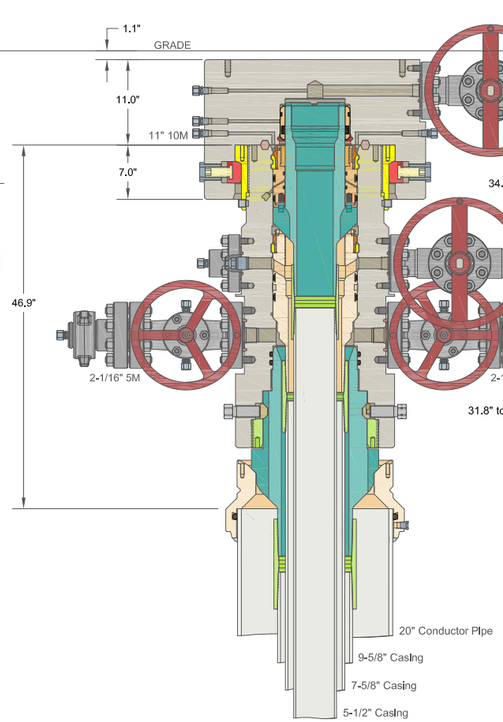
23400.000	90.000	179.789	10185.000	106.212	0.000	106.598	-0.000	106.212	0.000	0.000	106.610	41.224	0.744	XOMR2_OWSG MWD+IFR1+MS
23500.000	90.000	179.789	10185.000	106.989	0.000	107.318	-0.000	106.989	0.000	0.000	107.330	41.300	0.737	XOMR2_OWSG MWD+IFR1+MS
23600.000	90.000	179.789	10185.000	107.765	0.000	108.038	-0.000	107.765	0.000	0.000	108.051	41.377	0.730	XOMR2_OWSG MWD+IFR1+MS
23699.965	90.000	179.789	10185.000	108.542	0.000	108.759	-0.000	108.542	0.000	0.000	108.771	41.454	0.723	XOMR2_OWSG MWD+IFR1+MS
23749.964	90.000	179.789	10185.000	108.930	0.000	109.120	-0.000	108.930	0.000	0.000	109.132	41.493	0.720	XOMR2_OWSG MWD+IFR1+MS

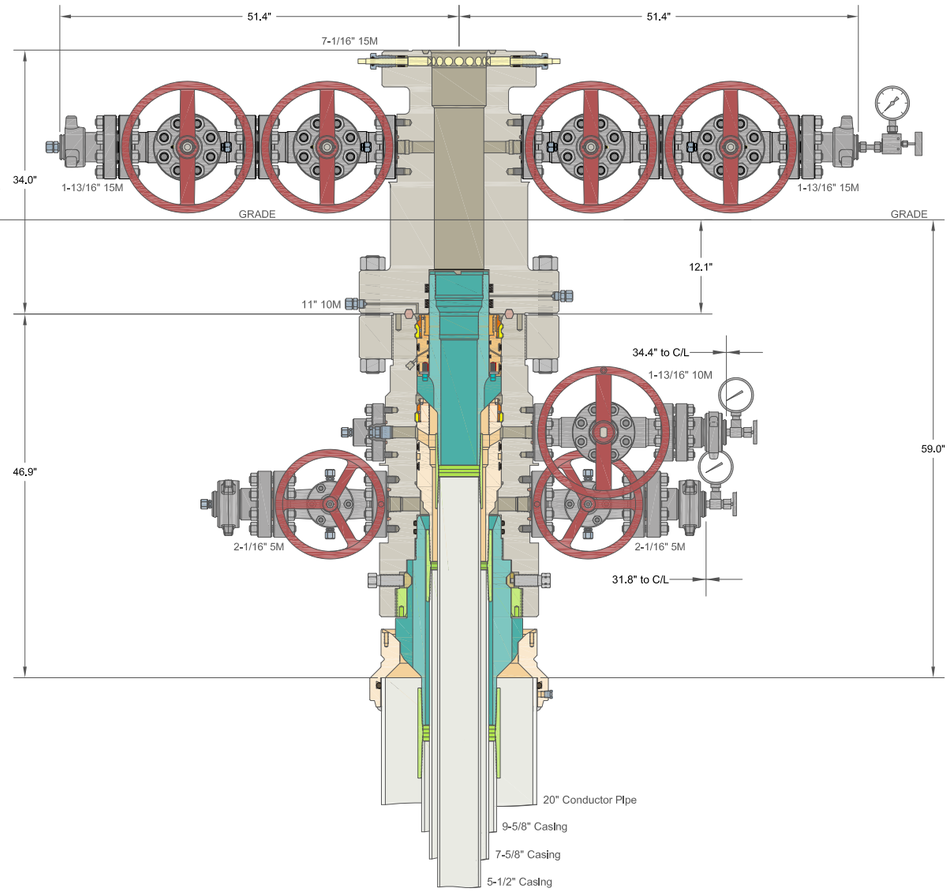
Plan Targets Poker Lake Unit 28 BS 209H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 11	10614.68	400852.10	669607.10	6818.00	CIRCLE
LTP 11	23699.97	387766.90	669655.20	6818.00	CIRCLE
BHL 5	23750.08	387716.90	669655.50	6818.00	CIRCLE









ALL DIMENSIONS APPROXIMA

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

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

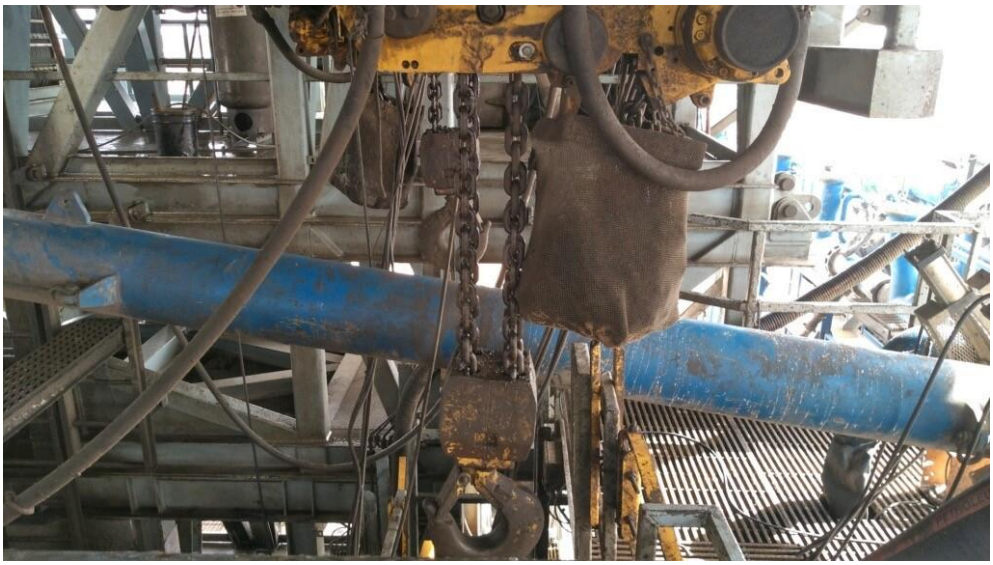


Figure 2: BOP Winch System

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.

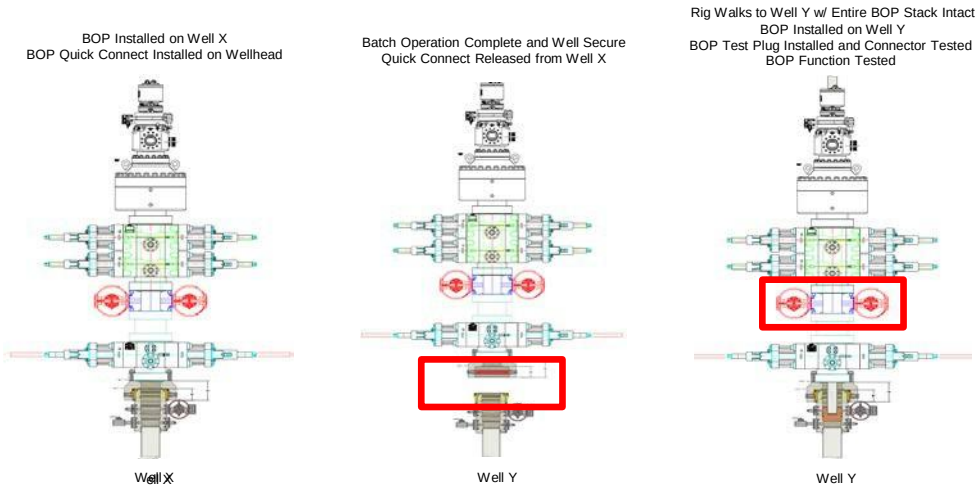
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often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

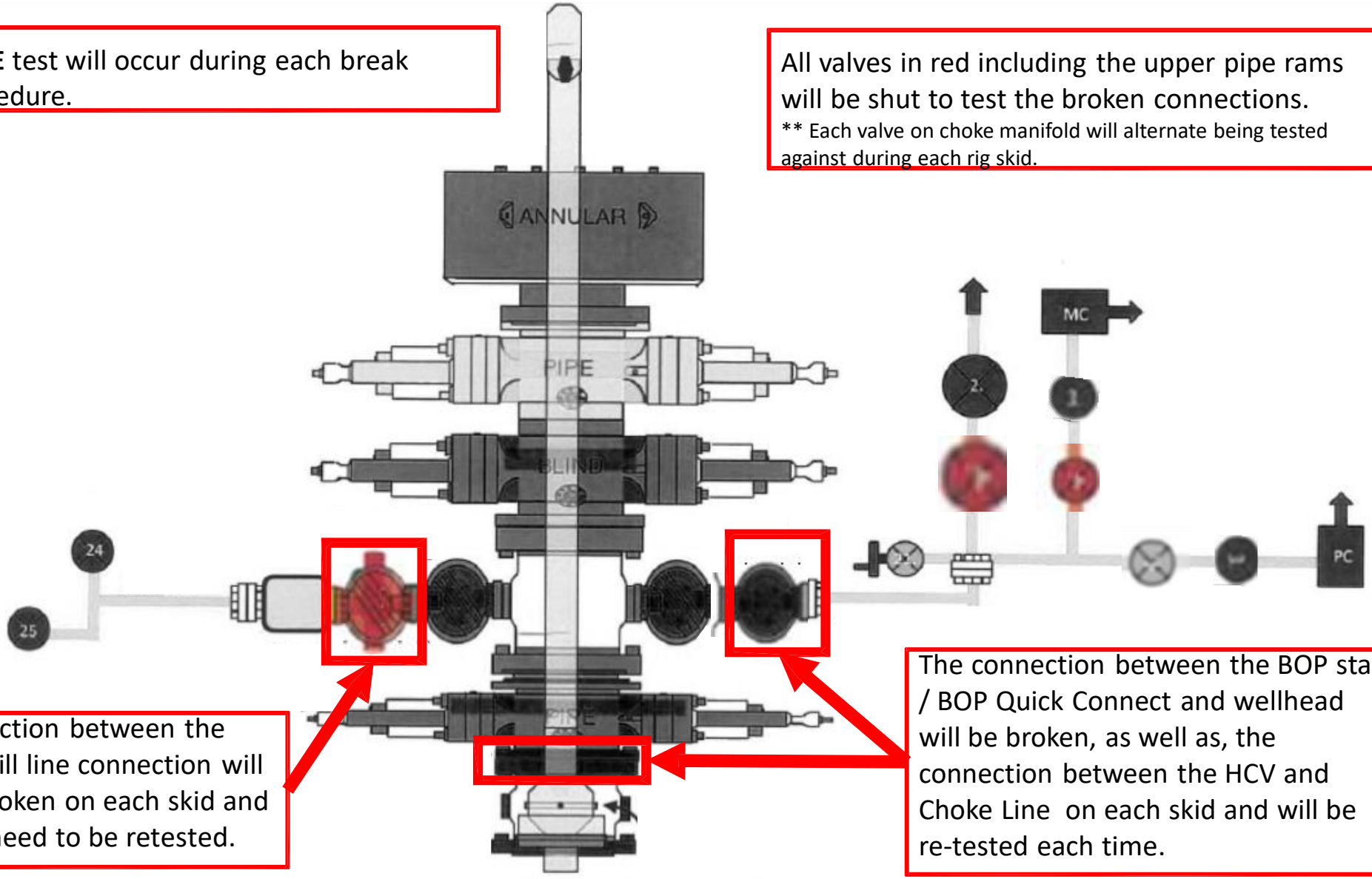
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

4. Full BOP test will be required prior to drilling the production hole.

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

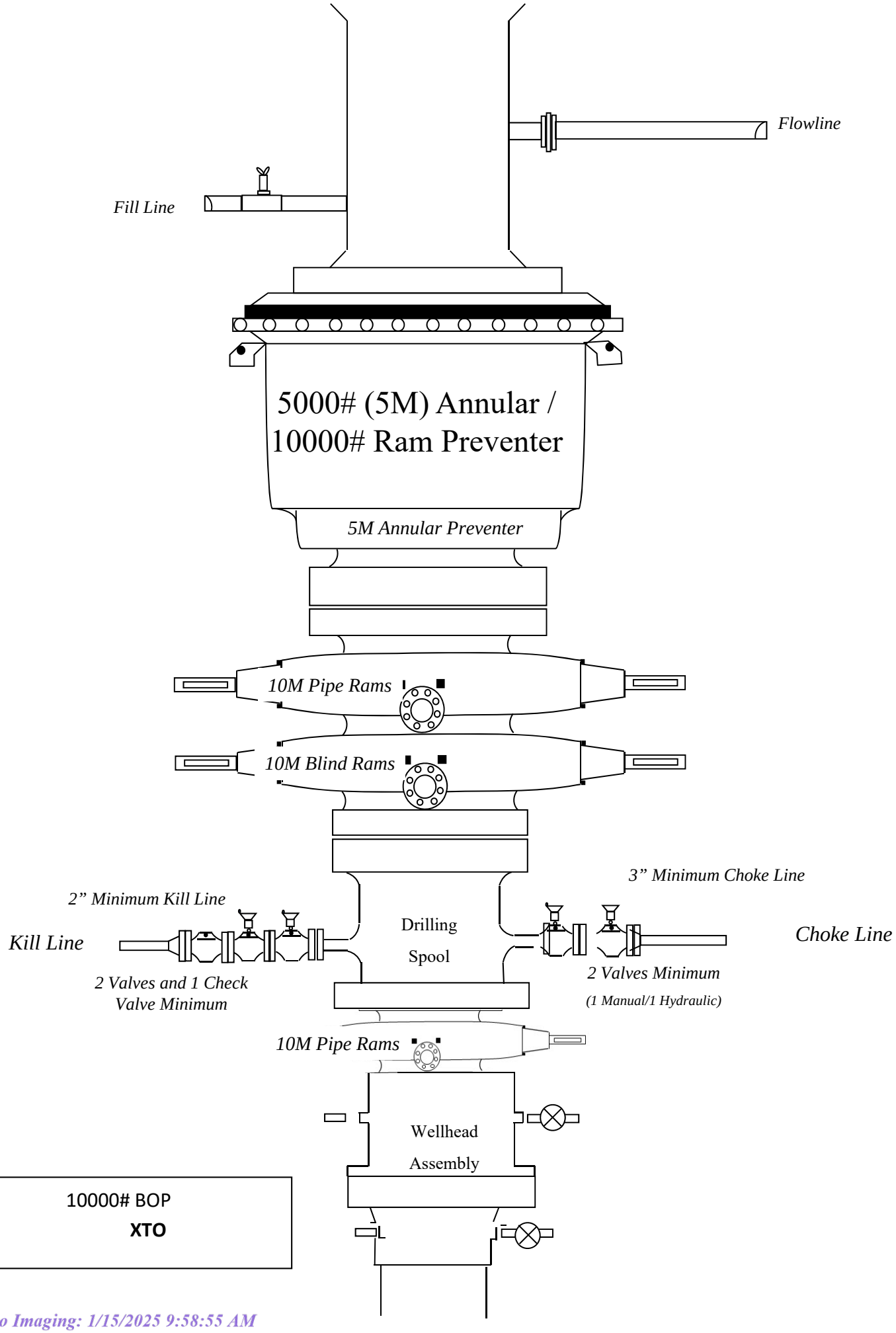
All valves in red including the upper pipe rams will be shut to test the broken connections.

** 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.

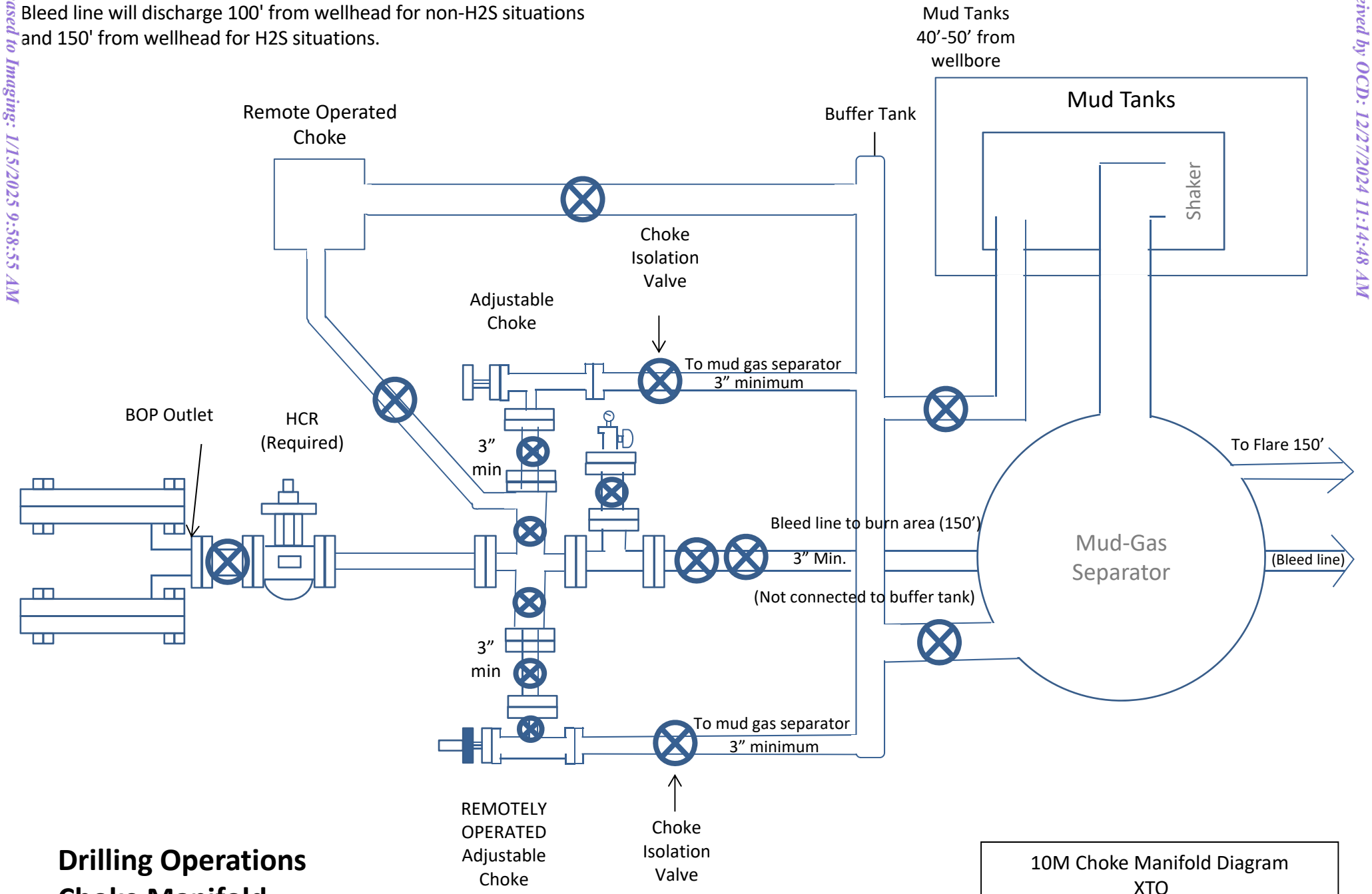
The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.



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.

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

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

XTO Permian Operating, LLC Offline Cementing Variance Request

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

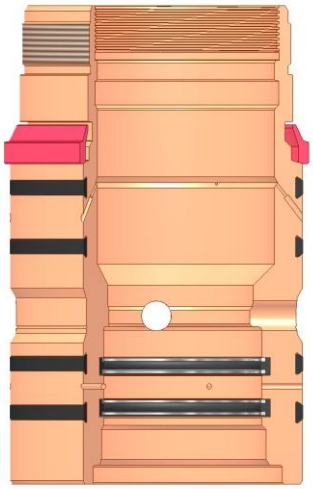
1. Cement Program

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

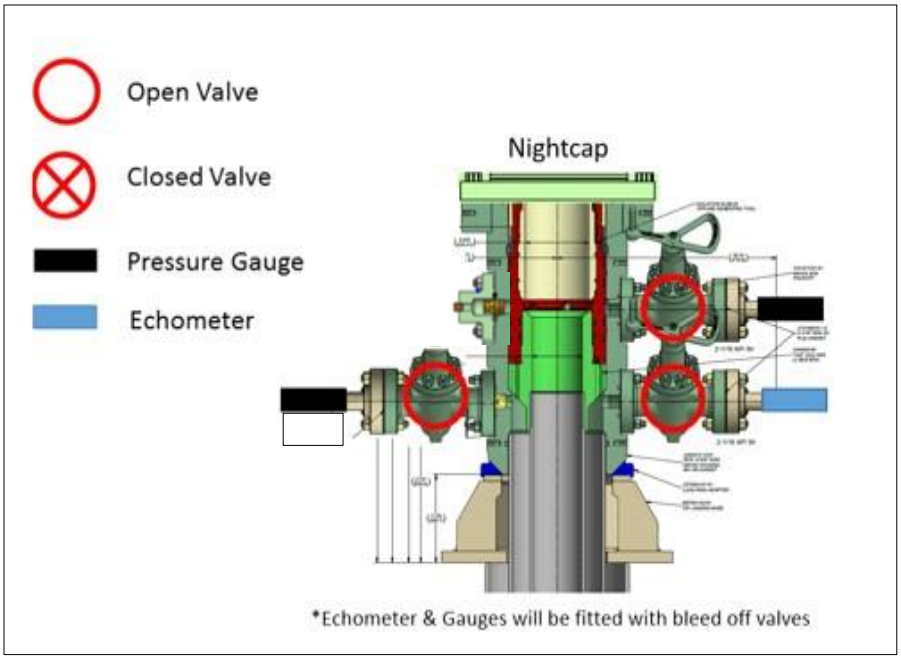
2. Offline Cementing Procedure

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

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



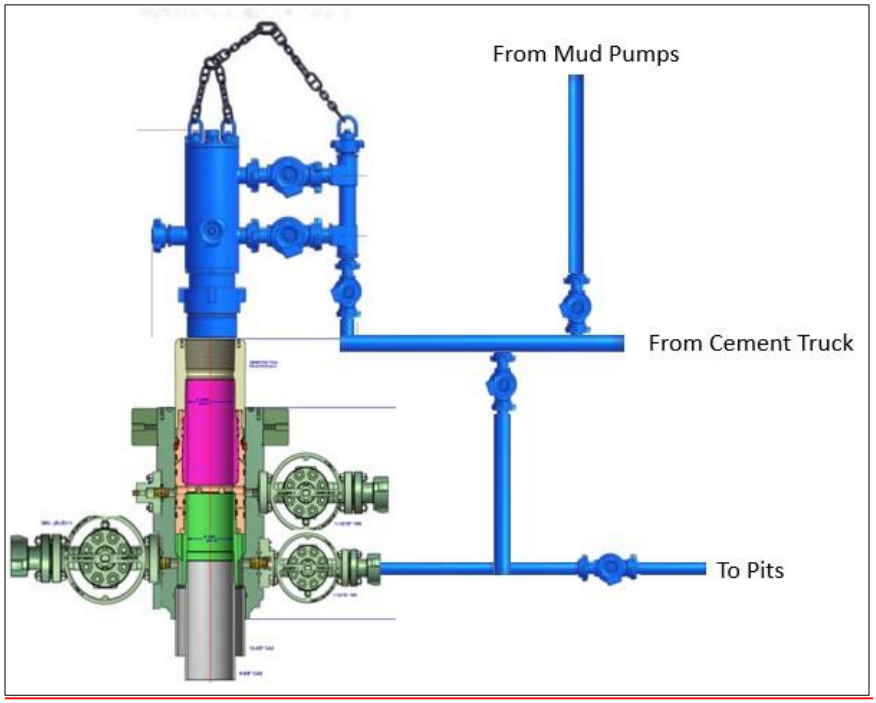
Annular packoff with both external and internal seals



Wellhead diagram during skidding operations

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

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

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

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

Description of Operations:

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

U. S. Steel Tubular Products

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.

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

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

BLACK GOLD®

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

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

NEW CHOKE HOSE
INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

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

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

SIGNATURE: F. OSUNOS

TITLE: QUALITY ASSURANCE

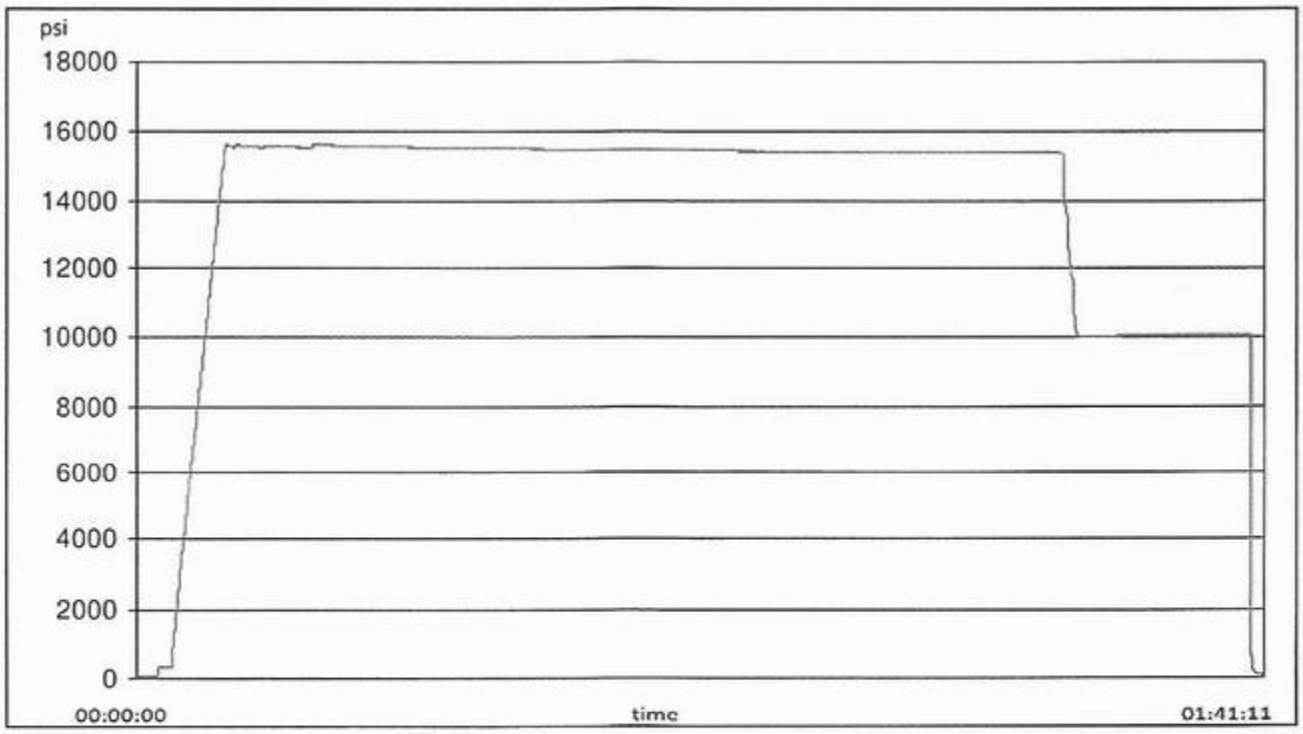
DATE: 1/25/2024

H3-15716

1/25/2024 11:48:06 AM

TEST REPORT

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



H3-15/16

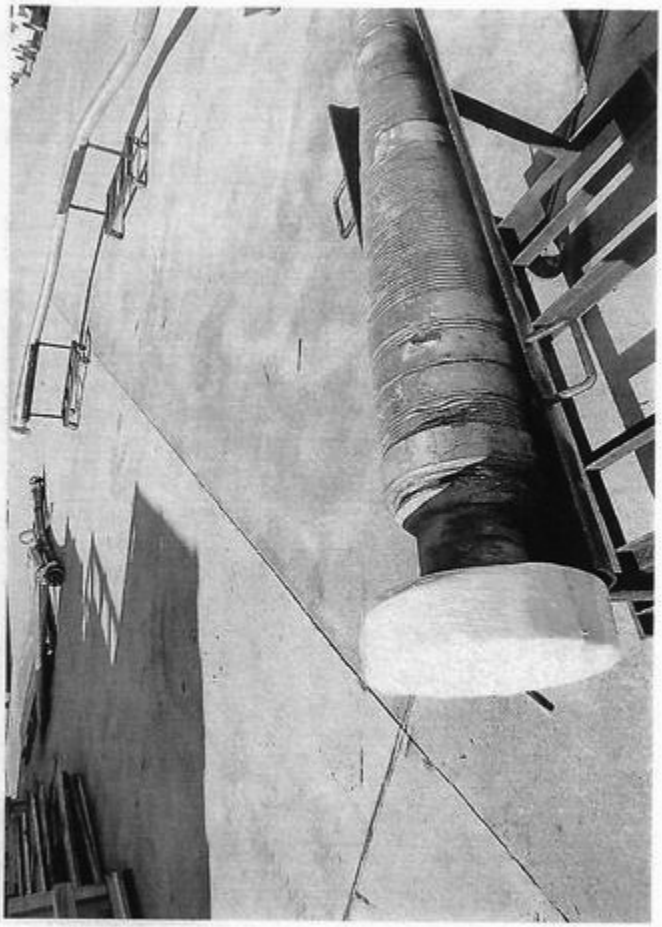
1/25/2024 11:48:06 AM

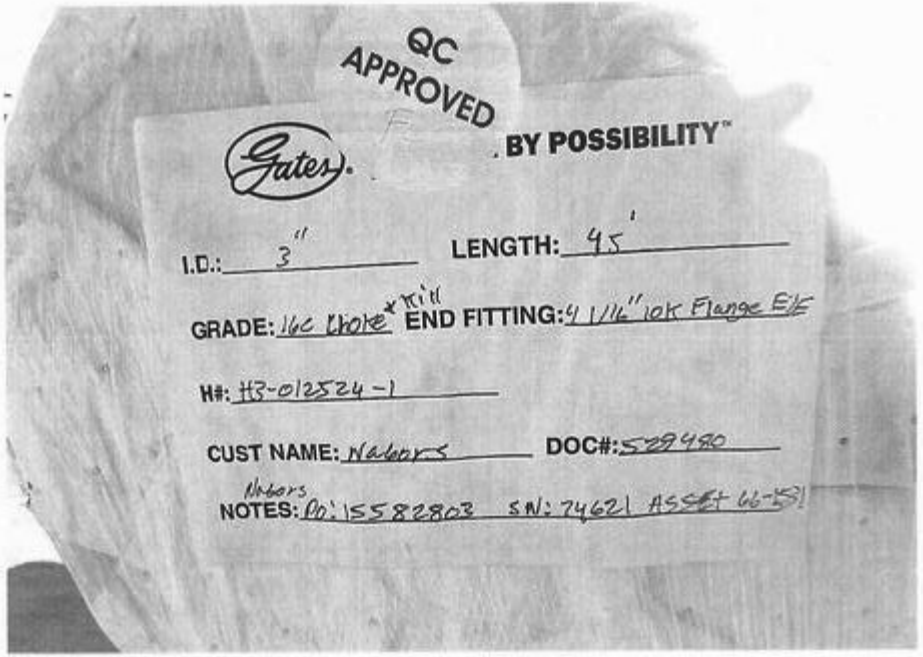
TEST REPORT

GAUGE TRACEABILITY

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

Comment





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

General Information
Phone: (505) 629-6116

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

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

CONDITIONS

Action 415501

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 415501
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	1/15/2025