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

Sundry Print Report

05/09/2025

Well Name: POKER LAKE UNIT 20 BD
Well Location: T25S / R30E / SEC 20 / SWSE / 32.108598 / -103.9011
County or Parish/State: EDDY / NM

Well Number: 309H
Type of Well: OIL WELL
Allottee or Tribe Name:

Lease Number: NMLC064894
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: 2844291

Type of Submission: Notice of Intent
Type of Action: APD Change

Date Sundry Submitted: 03/28/2025
Time Sundry Submitted: 12:45

Date proposed operation will begin: 04/04/2025

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, pool, and dedicated acreage. FROM: TO: KOP: 105’ FSL & 1948’ FEL OF SECTION 20-T25S-R30E 616’ FSL & 1385’ FEL OF SECTION 20-T25S-R30E FTP: 100' FNL & 1925' FEL OF SECTION 29-T25S-R30E 100' FNL & 1384' FEL OF SECTION 29-T25S-R30E LTP: 100' FSL & 1925' FEL OF SECTION 32-T25S-R30E 330' FSL & 1361' FEL OF SECTION 32-T25S-R30E BHL: 50' FSL & 1925' FEL OF SECTION 32-T25S-R30E 280' FSL & 1360' FEL OF SECTION 32-T25S-R30E The proposed total depth is changing from 20823’ MD; 10001’ TVD to 22493’ MD; 11762’ TVD. The pool is changing from WC-015 G-06 S243119C; Bone Spring (97975) to Purple Sage; Wolfcamp (Gas) (98220). Dedicated Acreage is changing from 320 Acres to 640 Acres. There is no new surface disturbance.

NOI Attachments

Procedure Description

POKER_LAKE_UNIT_20BD_309H_Sundry_Docs_20250401125111.pdf

Well Name: POKER LAKE UNIT 20 BD	**Well Location:** T25S / R30E / SEC 20 / SWSE / 32.108598 / -103.9011	**County or Parish/State:** EDDY / NM
Well Number: 309H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMLC064894	**Unit or CA Name:** POKER LAKE UNIT	**Unit or CA Number:** NMNM71016X
US Well Number:	**Operator:** XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

PLU_20_BD_309H_COA_20250412100554.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: SHARMON TUBBS

Signed on: APR 01, 2025 12:50 PM

Name: XTO PERMIAN OPERATING LLC

Title: Data Entry Clerk

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING **State:** TX

Phone: (346) 502-7023

Email address: SHARMON.TUBBS@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: 05/09/2025

Signature: Chris Walls

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMLC064894

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No. POKER LAKE UNIT 20 BD/309H

2. Name of Operator XTO PERMIAN OPERATING LLC

9. API Well No.

3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,

3b. Phone No. *(include area code)* (432) 683-2277

10. Field and Pool or Exploratory Area WC-015 G-06 S243119C/Bone Spring

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SEC 20/T25S/R30E/NMP

11. Country or Parish, State EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

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

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

XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include KOP, FTP, LTP, BHL, proposed total depth, pool, and dedicated acreage.

FROM: TO:

KOP: 105 FSL & 1948 FEL OF SECTION 20-T25S-R30E 616 FSL & 1385 FEL OF SECTION 20-T25S-R30E
FTP: 100' FNL & 1925' FEL OF SECTION 29-T25S-R30E 100' FNL & 1384' FEL OF SECTION 29-T25S-R30E
LTP: 100' FSL & 1925' FEL OF SECTION 32-T25S-R30E 330' FSL & 1361' FEL OF SECTION 32-T25S-R30E
BHL: 50' FSL & 1925' FEL OF SECTION 32-T25S-R30E 280' FSL & 1360' FEL OF SECTION 32-T25S-R30E

The proposed total depth is changing from 20823 MD; 10001 TVD to 22493 MD; 11762 TVD.

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name *(Printed/Typed)* SHARMON TUBBS / Ph: (346) 502-7023

Title Data Entry Clerk

Signature (Electronic Submission)

Date 04/01/2025

THE SPACE FOR FEDERAL OR STATE OFICE USE

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

Title Petroleum Engineer

Date 05/09/2025

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

Office CARLSBAD

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

Additional Information

Additional Remarks

The pool is changing from WC-015 G-06 S243119C; Bone Spring (97975) to Purple Sage; Wolfcamp (Gas) (98220).

Dedicated Acreage is changing from 320 Acres to 640 Acres.

There is no new surface disturbance.

Location of Well

0. SHL: SWSE / 105 FSL / 1948 FEL / TWSP: 25S / RANGE: 30E / SECTION: 20 / LAT: 32.108598 / LONG: -103.9011 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 1925 FEL / TWSP: 25S / RANGE: 30E / SECTION: 29 / LAT: 32.108035 / LONG: -103.901025 (TVD: 10001 feet, MD: 10400 feet)

BHL: SWSE / 50 FSL / 1925 FEL / TWSP: 25S / RANGE: 30E / SECTION: 32 / LAT: 32.079211 / LONG: -103.901102 (TVD: 10001 feet, MD: 20823 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	**NMLC064894**
LOCATION:	Sec. 20, T.25 S, R 30 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Poker Lake Unit 20 BD 309H
SURFACE HOLE FOOTAGE:	105'/S & 1948'/E
BOTTOM HOLE FOOTAGE:	280'/S & 1360'/E

*Changes approved through engineering via **Sundry 2844291_** on 4-12-2025_. Any previous COAs not addressed within the updated COAs still apply.*

COA

H_2S	○ No		◉ Yes	
Potash / WIPP	◉ None	○ Secretary	○ R-111-Q	☐ Open Annulus
	Choose an option (including blank option.)			☐ WIPP
Cave / Karst	◉ Low	○ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☑ Primary Squeeze	☐ Cont. Squeeze	☑ 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	☑ Casing Clearance	☐ Pilot Hole	☑ Break Testing
	☐ Four-String	☑ Offline Cementing	☑ Fluid-Filled	

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **958** 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 6181'.**

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.**

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 **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

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

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

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

BOPE Break Testing Variance

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

Offline Cementing

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

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

Casing Clearance

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

GENERAL REQUIREMENTS

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

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

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
    b. When the operator proposes to set surface casing with Spudder Rig
        i. Notify the BLM when moving in and removing the Spudder Rig.
        ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
        iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

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

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

B. PRESSURE CONTROL

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

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

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

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

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

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

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

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

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

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

Approved by Zota Stevens on 4/12/2025
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

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015	98220	Purple Sage, Wolfcamp (Gas)

Property Code	Property Name	Well Number
	POKER LAKE UNIT 20 BD	309H

ORGID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,178'

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
O	20	25 S	30 E		105' FSL	1,948' FEL	32.108598	-103.901100	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	32	25 S	30 E		280' FSL	1,360' FEL	32.079849	-103.899272	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
640	INFILL	30-015-45625	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
O	20	25 S	30 E		616' FSL	1,385' FEL	32.110015	-103.899277	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	29	25 S	30 E		100' FNL	1,384' FEL	32.108046	-103.899278	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	32	25 S	30 E		330' FSL	1,361' FEL	32.079987	-103.899274	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
NMNM-071016X	☒ Horizontal ☐ Vertical	3,178'

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.

Samantha Weis 4/1/2025

Signature Date

Samantha Weis

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.

31 March 2025

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

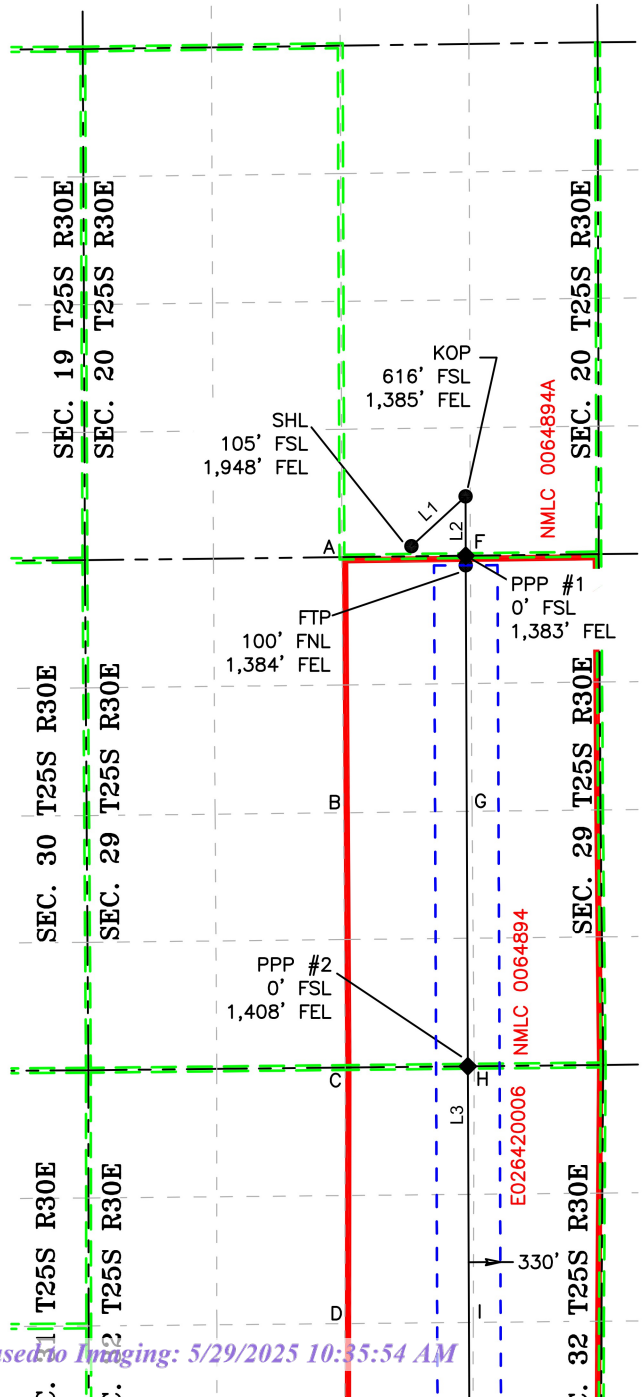
TIM C. PAPPAS NEW MEXICO 21209 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

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.



LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	47° 20'50"	764.50'
L2	179° 46'21"	716.24'
L3	179° 45'35"	10,257.58'

COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	403,512.5	N	Y =	393,106.8	N
X =	675,167.0	E	X =	675,774.3	E
LAT. =	32.108598	°N	LAT. =	32.079987	°N
LONG. =	103.901100	°W	LONG. =	103.899274	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	404,030.5	N	Y =	393,056.8	N
X =	675,729.3	E	X =	675,775.2	E
LAT. =	32.110015	°N	LAT. =	32.079849	°N
LONG. =	103.899277	°W	LONG. =	103.899272	°W
FTP (NAD 83 NME)					
Y =	403,314.3	N			
X =	675,732.2	E			
LAT. =	32.108046	°N			
LONG. =	103.899278	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	403,454.2	N	Y =	393,048.8	N
X =	633,982.1	E	X =	634,589.0	E
LAT. =	32.108472	°N	LAT. =	32.079862	°N
LONG. =	103.900617	°W	LONG. =	103.898792	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	403,972.2	N	Y =	392,998.8	N
X =	634,544.4	E	X =	634,589.9	E
LAT. =	32.109890	°N	LAT. =	32.079724	°N
LONG. =	103.898795	°W	LONG. =	103.898790	°W
FTP (NAD 27 NME)					
Y =	403,256.0	N			
X =	634,547.3	E			
LAT. =	32.107921	°N			
LONG. =	103.898794	°W			
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	403,414.3	N	Y =	403,356.0	N
X =	675,731.8	E	X =	634,546.9	E
LAT. =	32.108321	°N	LAT. =	32.108196	°N
LONG. =	103.899278	°W	LONG. =	103.898794	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 27 NME)		
Y =	398,096.1	N	Y =	398,037.9	N
X =	675,753.7	E	X =	634,568.6	E
LAT. =	32.093702	°N	LAT. =	32.093577	°N
LONG. =	103.899276	°W	LONG. =	103.898794	°W

CORNER COORDINATES (NAD83 NME)					
A - Y =	403,398.9	N	A - X =	674,444.4	E
B - Y =	400,741.1	N	B - X =	674,461.5	E
C - Y =	398,083.4	N	C - X =	674,478.6	E
D - Y =	395,424.5	N	D - X =	674,476.0	E
E - Y =	392,766.4	N	E - X =	674,473.4	E
F - Y =	403,414.8	N	F - X =	675,779.8	E
G - Y =	400,756.1	N	G - X =	675,797.5	E
H - Y =	398,096.8	N	H - X =	675,820.0	E
I - Y =	395,436.9	N	I - X =	675,809.7	E
J - Y =	392,777.0	N	J - X =	675,803.8	E

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

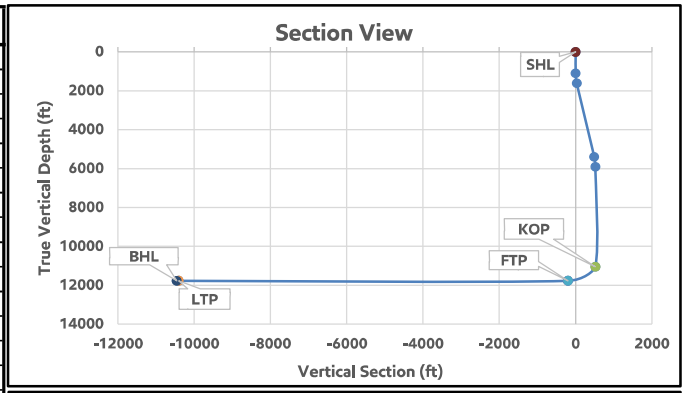
ExxonMobil
Poker Lake Unit 20BD - 309H
Projected TD: 22493' MD / 11762' TVD
SHL: 105' FSL & 1948' FEL , Section 20, T25S, R30E
BHL: 280' FSL & 1360' FEL , Section 32, T25S, R30E
Eddy County, NM

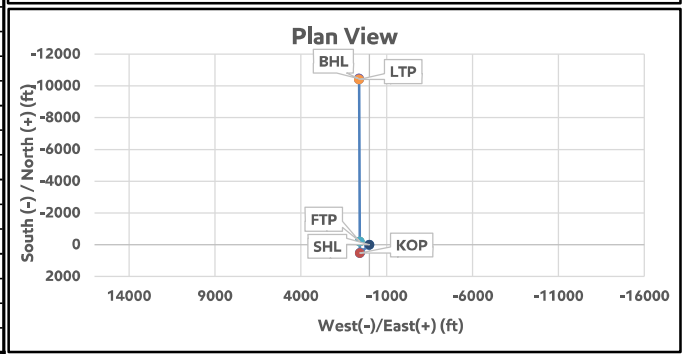
1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth	Water/Oil/Gas
Rustler	626'	Water
Salado	983'	Water
Base of Salt	3435'	Water
Delaware	3673'	Water
Cherry Canyon	4579'	Water/Oil/Gas
Brushy Canyon	6181'	Water/Oil/Gas
Basal Brushy Canyon	7225'	Water/Oil/Gas
Bone Spring Lm.	7471'	Water/Oil/Gas
Avalon	7607'	Water/Oil/Gas
Lower Avalon	8021'	Water/Oil/Gas
1st Bone Spring Lime	8200'	Water/Oil/Gas
1st Bone Spring Sand	8428'	Water/Oil/Gas
2nd Bone Spring Shale	8696'	Water/Oil/Gas
2nd Bone Spring Lime	8899'	Water/Oil/Gas
2nd Bone Spring Sand	8939'	Water/Oil/Gas
2nd Bone Spring T/B Carb	9407'	Water/Oil/Gas
3rd Bone Spring Lime	9550'	Water/Oil/Gas
Harkey	9982'	Water/Oil/Gas
3rd Bone Spring Shale	10013'	Water/Oil/Gas
Wolfcamp X	10782'	Water/Oil/Gas
Wolfcamp Y	10844'	Water/Oil/Gas
Wolfcamp A	10897'	Water/Oil/Gas
Wolfcamp B	11309'	Water/Oil/Gas
Wolfcamp C	11463'	Water/Oil/Gas
Wolfcamp D	11687'	Water/Oil/Gas
Landing	11762'	Water/Oil/Gas
Wolfcamp E	11793'	Water/Oil/Gas
Wolfcamp F	12061'	Water/Oil/Gas





	Inclination (°)	Azimuth (°)	True Vertical Depth (ft)	Y Offset (ft)	X Offset (ft)
SHL	0	0	0	0	0
KOP	0	0	11046	518	562
LP	90	180	11762	-198	565
FTP	90	180	11762	-198	565
LTP	90	180	11762	-10405	607
BHL	90	180	11762	-10455	607

Section 2 Summary:

*** Deepest Expected Groundwater Depth: 40' (per NM State Engineers Office).

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 9-5/8" inch casing at 958' and circulating cement back to surface.

3. Primary Casing Design

Primary Design:

Hole Size (in.)	MD	Casing TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25"	0' – 958'	958'	9-5/8"	40	J55	BTC	New	13.44	12.39	5.27
8.75"	0' – 4000'	3960'	7-5/8"	29.7	P110-ICY	Tenaris Wedge 511	New	6.00	8.58	2.88
8.75"	4000' – 10961'	10896'	7-5/8"	29.7	L80-IC	Tenaris Wedge 511	New	1.78	3.95	2.03
6.75"	0' – 10861'	10796'	5-1/2"	20	P110-CY	TPN	New	1.18	2.37	2.16
6.75"	10861' – 22493'	11762'	5-1/2"	20	P110-IC	Tenaris Wedge 441	New	1.18	2.41	2.30

Section 3 Summary:

XTO will keep casing fluid filled to meet BLM's collapse requirement.
The planned kick off point is located at: 11111' MD / 11046' TVD.

Wellhead:

A multi-bowl wellhead system will be utilized. The well design chosen is: 3-String Slim Non-Potash

Wellhead will be installed by manufacturer's representatives.

Manufacturer will monitor welding process to ensure appropriate temperature of seal.

4. Cement Program

Primary Cementing

Hole Section	Slurry Type	No. Sacks	Density (ppg)	Yield (ft3/sack)	TOC (ft)	Casing Setting Depth (MD)	Excess (%)	Slurry Description
Surface 1	Lead	195	12.4	2.11	0	958	100%	
Surface 1	Tail	141	14.8	1.33	658	958	100%	
Intermediate 1	Lead							
Intermediate 1	Tail	447	14.8	1.45	6181	10,961	0%	
Production 1	Lead							
Production 1	Tail	2639	13.2	1.44	10461	22,493	25%	

Remedial Cementing

Casing	Slurry Type	No. Sacks	Density (ppg)	Yield (ft3/sack)	Cemented Interval	Excess (%)	Slurry Description
Intermediate 1	Bradenhead Squeeze	643	14.8	1.45	0 - 6181'	50%	Intermediate Class C Bradenhead Squeeze Cement

Section 4 Summary:

*Bradenhead Squeeze 2nd Stage Offline

5. Pressure Control Equipment

Section 5 Summary:

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

All BOP testing will be done by an independent service company. Operator will Test as per 43CFR-3172

Requested Variances

4A) Offline Cementing Variance
XOM 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. XOM 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. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence. The TA cap will also be installed when applicable per wellhead manufacturer's procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

5A) Flex Hose Variance
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.

5B) 10M Annular Variance
XOM requests a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables attached along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOP).

8A) Open Hole Logging Variance
Open hole logging will not be done on this well.

10A) Spudder Rig Variance
XOM requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing.

10B) Batch Drilling Variance
XOM requests a variance to be able to batch drill this well. In doing so, XOM will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. XOM will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XOM will begin drilling the production hole on each of the wells.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Comments

0' – 958'	12.25"	FW/Native	8.3 - 8.7	35-40	NC	Fresh Water or Native Water
958' – 10961'	8.75"	BDE/OBM or FW/Brine		30-32	NC	Fluid type will be based upon on well conditions. A fully saturated system will be used across the salt interval.
10961' – 22493'	6.75"	OBM	9.5 - 12.5	50-60	NC - 20	OBM or Cut Brine depending on Well Conditions

Section 6 Summary:

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 a fully saturated brine 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. An EDR (Electronic Drilling Recorder) 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

Section 7 Summary:

A Kelly cock will be in the drill string at all times.

A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.

H2S monitors will be on location when drilling below the 9-5/8" casing.

8. Logging, Coring and Testing Program

Section 8 Summary:

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

Section 9 Summary:

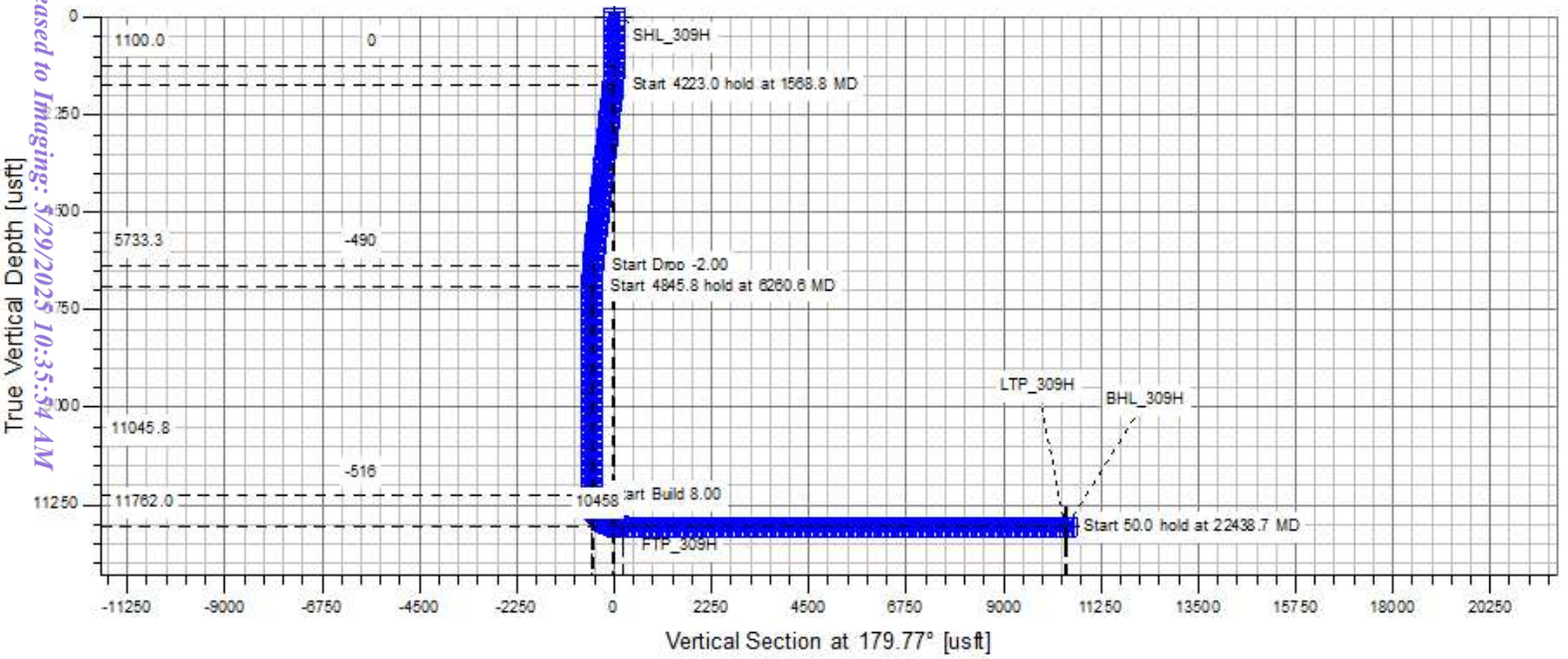
The estimated bottom hole temperature of 181F to 201F. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation is possible throughout the well.

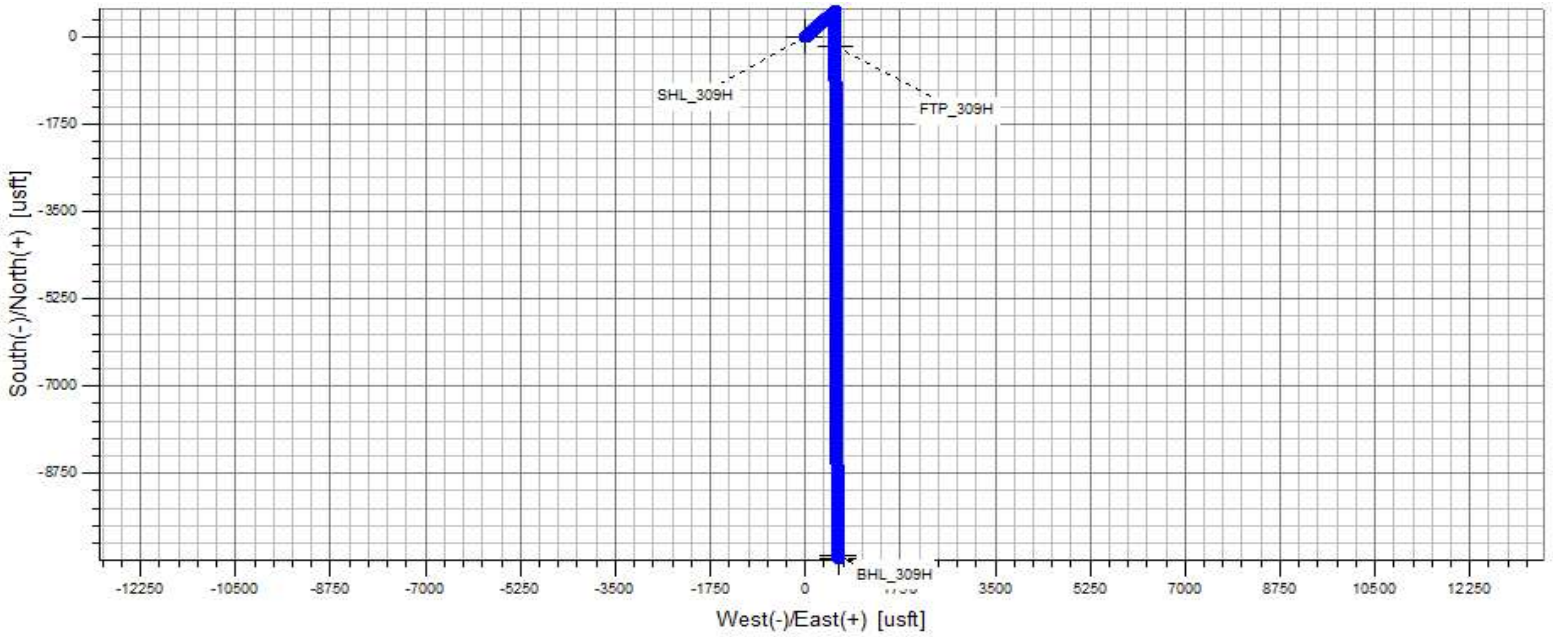
10. Anticipated Starting Date and Duration of Operations

Section 10 Summary:

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

Poker Lake Unit 20 BD 309H





Formation	T
Rustler	
Salado	
Base of Salt	
Delaware	
Cherry Canyon	
Brushy Canyon	
Basal Brushy Canyon	
Bone Spring Lm.	
Avalon	
Lower Avalon	
1st Bone Spring Lime	
1st Bone Spring Sand	
2nd Bone Spring Shale	
2nd Bone Spring Lime	
2nd Bone Spring Sand	
2nd Bone Spring T/B Carb	
2nd Bone Spring Sand (Lwr)	
3rd Bone Spring Lime	
Harkey	
3rd Bone Spring Shale	
3rd Bone Spring Sand	
Wolfcamp	
Wolfcamp X	
Wolfcamp Y	
Wolfcamp A	
Wolfcamp B	
Wolfcamp C	
Wolfcamp D	
Landing	
Wolfcamp E	
Wolfcamp F	

Well Plan Report - Poker Lake Unit 20 BD 309H

Measured Depth:	22493.04 ft	**Site:**	B
TVD RKB:	11762.00 ft	**Slot:**	Poker Lake Unit 20 BD 309H
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	403454.20 ft		
Easting:	633982.10 ft		
RKB:	3210.00 ft		
Ground Level:	3178.00 ft		
North Reference:	Grid		
Convergence Angle:	0.23 Deg		

Plan Sections Poker Lake Unit 20 BD 309H

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	
1604.77	10.10	47.35	1602.16	30.05	32.62	2.00	0.00	2.00	
5460.14	10.10	47.35	5397.84	487.94	529.65	0.00	0.00	0.00	
5964.91	0.00	0.00	5900.00	517.99	562.27	-2.00	0.00	2.00	
11110.71	0.00	0.00	11045.80	517.99	562.27	0.00	0.00	0.00	
12235.71	90.00	179.77	11762.00	-198.20	565.20	8.00	0.00	8.00	FTP 5
22442.99	90.00	179.77	11762.00	-10405.40	606.90	0.00	0.00	0.00	LTP 5
22493.04	90.00	179.77	11762.00	-10455.44	607.10	0.00	0.00	0.00	BHL 5

Position Uncertainty Poker Lake Unit 20 BD 309H

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

Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	of Bias (ft)	Error (ft)	Error (ft)	Azimuth (°)	Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.346	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.373	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.405	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.441	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.483	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.528	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.577	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.630	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	47.347	1199.980	5.271	0.000	4.235	0.000	2.686	0.000	0.000	5.278	4.228	133.021	MWD+IFR1+MS
1300.000	4.000	47.347	1299.838	6.018	0.000	4.626	0.000	2.746	0.000	0.000	6.030	4.624	-40.456	MWD+IFR1+MS
1400.000	6.000	47.347	1399.452	6.695	0.000	5.012	0.000	2.811	0.000	0.000	6.729	4.995	-37.308	MWD+IFR1+MS
1500.000	8.000	47.347	1498.702	7.318	0.000	5.395	0.000	2.883	0.000	0.000	7.381	5.358	-35.506	MWD+IFR1+MS
1604.767	10.095	47.347	1602.160	7.963	0.000	5.798	0.000	2.973	0.000	0.000	8.060	5.738	-34.192	MWD+IFR1+MS
1700.000	10.095	47.347	1695.918	8.330	0.000	6.159	0.000	3.047	0.000	0.000	8.430	6.088	-33.464	MWD+IFR1+MS
1800.000	10.095	47.347	1794.370	8.611	0.000	6.538	0.000	3.123	0.000	0.000	8.709	6.466	-33.089	MWD+IFR1+MS
1900.000	10.095	47.347	1892.821	8.900	0.000	6.919	0.000	3.203	0.000	0.000	8.997	6.845	-32.695	MWD+IFR1+MS
2000.000	10.095	47.347	1991.273	9.195	0.000	7.299	0.000	3.286	0.000	0.000	9.290	7.223	-32.308	MWD+IFR1+MS
2100.000	10.095	47.347	2089.725	9.497	0.000	7.679	0.000	3.371	0.000	0.000	9.590	7.602	-31.928	MWD+IFR1+MS
2200.000	10.095	47.347	2188.177	9.803	0.000	8.059	0.000	3.458	0.000	0.000	9.894	7.980	-31.554	MWD+IFR1+MS
2300.000	10.095	47.347	2286.628	10.115	0.000	8.439	0.000	3.548	0.000	0.000	10.203	8.358	-31.188	MWD+IFR1+MS
2400.000	10.095	47.347	2385.080	10.432	0.000	8.818	0.000	3.640	0.000	0.000	10.517	8.736	-30.828	MWD+IFR1+MS
2500.000	10.095	47.347	2483.532	10.752	0.000	9.198	0.000	3.735	0.000	0.000	10.834	9.114	-30.474	MWD+IFR1+MS
2600.000	10.095	47.347	2581.983	11.076	0.000	9.577	0.000	3.831	0.000	0.000	11.155	9.493	-30.126	MWD+IFR1+MS
2700.000	10.095	47.347	2680.435	11.403	0.000	9.957	0.000	3.929	0.000	0.000	11.479	9.871	-29.784	MWD+IFR1+MS
2800.000	10.095	47.347	2778.887	11.734	0.000	10.336	0.000	4.029	0.000	0.000	11.806	10.249	-29.447	MWD+IFR1+MS
2900.000	10.095	47.347	2877.339	12.068	0.000	10.715	0.000	4.130	0.000	0.000	12.136	10.627	-29.116	MWD+IFR1+MS
3000.000	10.095	47.347	2975.790	12.404	0.000	11.095	0.000	4.234	0.000	0.000	12.468	11.005	-28.790	MWD+IFR1+MS

3100.000	10.095	47.347	3074.242	12.742	0.000	11.474	0.000	4.339	0.000	0.000	12.803	11.384	-28.469	MWD+IFR1+MS
3200.000	10.095	47.347	3172.694	13.083	0.000	11.853	0.000	4.445	0.000	0.000	13.140	11.762	-28.152	MWD+IFR1+MS
3300.000	10.095	47.347	3271.146	13.426	0.000	12.232	0.000	4.553	0.000	0.000	13.478	12.140	-27.840	MWD+IFR1+MS
3400.000	10.095	47.347	3369.597	13.771	0.000	12.611	0.000	4.663	0.000	0.000	13.819	12.518	-27.533	MWD+IFR1+MS
3500.000	10.095	47.347	3468.049	14.117	0.000	12.990	0.000	4.775	0.000	0.000	14.161	12.897	-27.229	MWD+IFR1+MS
3600.000	10.095	47.347	3566.501	14.466	0.000	13.369	0.000	4.888	0.000	0.000	14.505	13.275	-26.930	MWD+IFR1+MS
3700.000	10.095	47.347	3664.953	14.815	0.000	13.748	0.000	5.002	0.000	0.000	14.850	13.653	-26.634	MWD+IFR1+MS
3800.000	10.095	47.347	3763.404	15.167	0.000	14.127	0.000	5.118	0.000	0.000	15.197	14.032	-26.342	MWD+IFR1+MS
3900.000	10.095	47.347	3861.856	15.519	0.000	14.506	0.000	5.236	0.000	0.000	15.545	14.410	-26.054	MWD+IFR1+MS
4000.000	10.095	47.347	3960.308	15.873	0.000	14.885	0.000	5.355	0.000	0.000	15.894	14.788	-25.768	MWD+IFR1+MS
4100.000	10.095	47.347	4058.760	16.228	0.000	15.264	0.000	5.476	0.000	0.000	16.244	15.167	-25.486	MWD+IFR1+MS
4200.000	10.095	47.347	4157.211	16.584	0.000	15.643	0.000	5.598	0.000	0.000	16.596	15.545	-25.206	MWD+IFR1+MS
4300.000	10.095	47.347	4255.663	16.941	0.000	16.021	0.000	5.722	0.000	0.000	16.948	15.924	-24.929	MWD+IFR1+MS
4400.000	10.095	47.347	4354.115	17.299	0.000	16.400	0.000	5.848	0.000	0.000	17.301	16.302	-24.655	MWD+IFR1+MS
4500.000	10.095	47.347	4452.567	17.658	0.000	16.779	0.000	5.975	0.000	0.000	17.655	16.681	-24.383	MWD+IFR1+MS
4600.000	10.095	47.347	4551.018	18.018	0.000	17.158	0.000	6.104	0.000	0.000	18.010	17.059	-24.113	MWD+IFR1+MS
4700.000	10.095	47.347	4649.470	18.378	0.000	17.537	0.000	6.235	0.000	0.000	18.366	17.438	-23.846	MWD+IFR1+MS
4800.000	10.095	47.347	4747.922	18.739	0.000	17.916	0.000	6.367	0.000	0.000	18.722	17.817	-23.580	MWD+IFR1+MS
4900.000	10.095	47.347	4846.374	19.101	0.000	18.294	0.000	6.501	0.000	0.000	19.079	18.195	-23.315	MWD+IFR1+MS
5000.000	10.095	47.347	4944.825	19.464	0.000	18.673	0.000	6.637	0.000	0.000	19.436	18.574	-23.053	MWD+IFR1+MS
5100.000	10.095	47.347	5043.277	19.827	0.000	19.052	0.000	6.774	0.000	0.000	19.795	18.953	-22.791	MWD+IFR1+MS
5200.000	10.095	47.347	5141.729	20.191	0.000	19.431	0.000	6.913	0.000	0.000	20.153	19.332	-22.531	MWD+IFR1+MS
5300.000	10.095	47.347	5240.181	20.556	0.000	19.809	0.000	7.055	0.000	0.000	20.513	19.710	-22.272	MWD+IFR1+MS
5400.000	10.095	47.347	5338.632	20.921	0.000	20.188	0.000	7.197	0.000	0.000	20.873	20.089	-22.013	MWD+IFR1+MS
5460.139	10.095	47.347	5397.840	21.137	0.000	20.412	0.000	7.284	0.000	0.000	21.084	20.316	-22.040	MWD+IFR1+MS
5500.000	9.298	47.347	5437.131	21.291	0.000	20.560	0.000	7.342	0.000	0.000	21.224	20.465	-22.119	MWD+IFR1+MS
5600.000	7.298	47.347	5536.079	21.712	0.000	20.928	0.000	7.490	0.000	0.000	21.631	20.835	-22.832	MWD+IFR1+MS
5700.000	5.298	47.347	5635.471	22.165	0.000	21.294	0.000	7.637	0.000	0.000	22.098	21.198	-23.823	MWD+IFR1+MS
5800.000	3.298	47.347	5735.184	22.584	0.000	21.652	0.000	7.777	0.000	0.000	22.559	21.553	-24.591	MWD+IFR1+MS
5900.000	1.298	47.347	5835.099	22.968	0.000	22.003	0.000	7.914	0.000	0.000	23.011	21.901	-25.188	MWD+IFR1+MS
5964.907	0.000	0.000	5900.000	22.342	0.000	23.036	0.000	8.001	0.000	0.000	23.244	22.126	-25.821	MWD+IFR1+MS
6000.000	0.000	0.000	5935.093	22.463	0.000	23.147	0.000	8.047	0.000	0.000	23.355	22.247	-25.923	MWD+IFR1+MS
6100.000	0.000	0.000	6035.093	22.803	0.000	23.469	0.000	8.182	0.000	0.000	23.677	22.587	-26.164	MWD+IFR1+MS

6200.000	0.000	0.000	6135.093	23.149	0.000	23.796	0.000	8.318	0.000	0.000	24.008	22.929	-26.541	MWD+IFR1+MS
6300.000	0.000	0.000	6235.093	23.495	0.000	24.124	0.000	8.458	0.000	0.000	24.339	23.272	-26.915	MWD+IFR1+MS
6400.000	0.000	0.000	6335.093	23.841	0.000	24.453	0.000	8.600	0.000	0.000	24.672	23.615	-27.285	MWD+IFR1+MS
6500.000	0.000	0.000	6435.093	24.187	0.000	24.783	0.000	8.744	0.000	0.000	25.005	23.958	-27.653	MWD+IFR1+MS
6600.000	0.000	0.000	6535.093	24.534	0.000	25.113	0.000	8.891	0.000	0.000	25.339	24.302	-28.018	MWD+IFR1+MS
6700.000	0.000	0.000	6635.093	24.881	0.000	25.445	0.000	9.041	0.000	0.000	25.673	24.646	-28.379	MWD+IFR1+MS
6800.000	0.000	0.000	6735.093	25.229	0.000	25.777	0.000	9.194	0.000	0.000	26.009	24.990	-28.737	MWD+IFR1+MS
6900.000	0.000	0.000	6835.093	25.577	0.000	26.109	0.000	9.349	0.000	0.000	26.345	25.334	-29.092	MWD+IFR1+MS
7000.000	0.000	0.000	6935.093	25.925	0.000	26.443	0.000	9.507	0.000	0.000	26.681	25.679	-29.443	MWD+IFR1+MS
7100.000	0.000	0.000	7035.093	26.273	0.000	26.777	0.000	9.667	0.000	0.000	27.019	26.024	-29.791	MWD+IFR1+MS
7200.000	0.000	0.000	7135.093	26.622	0.000	27.111	0.000	9.830	0.000	0.000	27.356	26.370	-30.135	MWD+IFR1+MS
7300.000	0.000	0.000	7235.093	26.971	0.000	27.446	0.000	9.996	0.000	0.000	27.695	26.716	-30.475	MWD+IFR1+MS
7400.000	0.000	0.000	7335.093	27.320	0.000	27.782	0.000	10.165	0.000	0.000	28.034	27.062	-30.812	MWD+IFR1+MS
7500.000	0.000	0.000	7435.093	27.670	0.000	28.118	0.000	10.337	0.000	0.000	28.374	27.408	-31.146	MWD+IFR1+MS
7600.000	0.000	0.000	7535.093	28.019	0.000	28.455	0.000	10.511	0.000	0.000	28.714	27.754	-31.475	MWD+IFR1+MS
7700.000	0.000	0.000	7635.093	28.369	0.000	28.793	0.000	10.689	0.000	0.000	29.054	28.101	-31.801	MWD+IFR1+MS
7800.000	0.000	0.000	7735.093	28.719	0.000	29.131	0.000	10.869	0.000	0.000	29.395	28.448	-32.124	MWD+IFR1+MS
7900.000	0.000	0.000	7835.093	29.069	0.000	29.469	0.000	11.052	0.000	0.000	29.737	28.795	-32.442	MWD+IFR1+MS
8000.000	0.000	0.000	7935.093	29.420	0.000	29.808	0.000	11.238	0.000	0.000	30.079	29.143	-32.757	MWD+IFR1+MS
8100.000	0.000	0.000	8035.093	29.771	0.000	30.147	0.000	11.427	0.000	0.000	30.421	29.490	-33.068	MWD+IFR1+MS
8200.000	0.000	0.000	8135.093	30.121	0.000	30.487	0.000	11.618	0.000	0.000	30.764	29.838	-33.375	MWD+IFR1+MS
8300.000	0.000	0.000	8235.093	30.472	0.000	30.827	0.000	11.813	0.000	0.000	31.108	30.186	-33.678	MWD+IFR1+MS
8400.000	0.000	0.000	8335.093	30.824	0.000	31.168	0.000	12.010	0.000	0.000	31.451	30.534	-33.978	MWD+IFR1+MS
8500.000	0.000	0.000	8435.093	31.175	0.000	31.509	0.000	12.211	0.000	0.000	31.795	30.883	-34.274	MWD+IFR1+MS
8600.000	0.000	0.000	8535.093	31.527	0.000	31.850	0.000	12.414	0.000	0.000	32.140	31.231	-34.566	MWD+IFR1+MS
8700.000	0.000	0.000	8635.093	31.878	0.000	32.192	0.000	12.621	0.000	0.000	32.484	31.580	-34.854	MWD+IFR1+MS
8800.000	0.000	0.000	8735.093	32.230	0.000	32.534	0.000	12.830	0.000	0.000	32.830	31.929	-35.139	MWD+IFR1+MS
8900.000	0.000	0.000	8835.093	32.582	0.000	32.876	0.000	13.042	0.000	0.000	33.175	32.278	-35.420	MWD+IFR1+MS
9000.000	0.000	0.000	8935.093	32.934	0.000	33.219	0.000	13.258	0.000	0.000	33.521	32.627	-35.697	MWD+IFR1+MS
9100.000	0.000	0.000	9035.093	33.286	0.000	33.562	0.000	13.476	0.000	0.000	33.867	32.977	-35.971	MWD+IFR1+MS
9200.000	0.000	0.000	9135.093	33.639	0.000	33.906	0.000	13.697	0.000	0.000	34.213	33.326	-36.241	MWD+IFR1+MS
9300.000	0.000	0.000	9235.093	33.991	0.000	34.249	0.000	13.922	0.000	0.000	34.560	33.676	-36.507	MWD+IFR1+MS
9400.000	0.000	0.000	9335.093	34.344	0.000	34.594	0.000	14.149	0.000	0.000	34.907	34.026	-36.769	MWD+IFR1+MS

9500.000	0.000	0.000	9435.093	34.697	0.000	34.938	0.000	14.380	0.000	0.000	35.254	34.376	-37.029	MWD+IFR1+MS
9600.000	0.000	0.000	9535.093	35.050	0.000	35.282	0.000	14.613	0.000	0.000	35.601	34.726	-37.284	MWD+IFR1+MS
9700.000	0.000	0.000	9635.093	35.403	0.000	35.627	0.000	14.849	0.000	0.000	35.949	35.076	-37.536	MWD+IFR1+MS
9800.000	0.000	0.000	9735.093	35.756	0.000	35.973	0.000	15.089	0.000	0.000	36.297	35.426	-37.785	MWD+IFR1+MS
9900.000	0.000	0.000	9835.093	36.109	0.000	36.318	0.000	15.331	0.000	0.000	36.645	35.777	-38.030	MWD+IFR1+MS
10000.000	0.000	0.000	9935.093	36.462	0.000	36.664	0.000	15.577	0.000	0.000	36.993	36.128	-38.272	MWD+IFR1+MS
10100.000	0.000	0.000	10035.093	36.816	0.000	37.009	0.000	15.826	0.000	0.000	37.342	36.478	-38.510	MWD+IFR1+MS
10200.000	0.000	0.000	10135.093	37.169	0.000	37.356	0.000	16.077	0.000	0.000	37.691	36.829	-38.745	MWD+IFR1+MS
10300.000	0.000	0.000	10235.093	37.523	0.000	37.702	0.000	16.332	0.000	0.000	38.040	37.180	-38.977	MWD+IFR1+MS
10400.000	0.000	0.000	10335.093	37.876	0.000	38.049	0.000	16.590	0.000	0.000	38.389	37.531	-39.206	MWD+IFR1+MS
10500.000	0.000	0.000	10435.093	38.230	0.000	38.395	0.000	16.851	0.000	0.000	38.738	37.883	-39.431	MWD+IFR1+MS
10600.000	0.000	0.000	10535.093	38.584	0.000	38.742	0.000	17.115	0.000	0.000	39.088	38.234	-39.653	MWD+IFR1+MS
10700.000	0.000	0.000	10635.093	38.938	0.000	39.090	0.000	17.382	0.000	0.000	39.438	38.585	-39.872	MWD+IFR1+MS
10800.000	0.000	0.000	10735.093	39.292	0.000	39.437	0.000	17.652	0.000	0.000	39.788	38.937	-40.088	MWD+IFR1+MS
10900.000	0.000	0.000	10835.093	39.646	0.000	39.785	0.000	17.925	0.000	0.000	40.138	39.289	-40.301	MWD+IFR1+MS
11000.000	0.000	0.000	10935.093	40.000	0.000	40.133	0.000	18.201	0.000	0.000	40.488	39.640	-40.511	MWD+IFR1+MS
11100.000	0.000	0.000	11035.093	40.354	0.000	40.481	0.000	18.481	0.000	0.000	40.839	39.992	-40.718	MWD+IFR1+MS
11110.709	0.000	0.000	11045.803	40.392	0.000	40.517	0.000	18.511	0.000	0.000	40.875	40.030	-40.735	MWD+IFR1+MS
11200.000	7.143	179.766	11134.862	40.389	0.000	40.810	-0.000	18.765	0.000	0.000	41.246	40.403	133.625	MWD+IFR1+MS
11300.000	15.143	179.766	11232.897	40.556	0.000	41.108	-0.000	19.113	0.000	0.000	42.224	40.908	112.554	MWD+IFR1+MS
11400.000	23.143	179.766	11327.291	40.243	0.000	41.387	-0.000	19.603	0.000	0.000	43.326	41.244	104.761	MWD+IFR1+MS
11500.000	31.143	179.766	11416.205	39.401	0.000	41.644	-0.000	20.283	0.000	0.000	44.308	41.520	101.748	MWD+IFR1+MS
11600.000	39.143	179.766	11497.910	38.119	0.000	41.877	-0.000	21.178	0.000	0.000	45.129	41.759	100.352	MWD+IFR1+MS
11700.000	47.143	179.766	11570.816	36.517	0.000	42.085	-0.000	22.290	0.000	0.000	45.778	41.967	99.706	MWD+IFR1+MS
11800.000	55.143	179.766	11633.502	34.753	0.000	42.269	-0.000	23.595	0.000	0.000	46.257	42.146	99.496	MWD+IFR1+MS
11900.000	63.143	179.766	11684.750	33.020	0.000	42.428	-0.000	25.054	0.000	0.000	46.581	42.297	99.581	MWD+IFR1+MS
12000.000	71.143	179.766	11723.561	31.547	0.000	42.561	-0.000	26.618	0.000	0.000	46.775	42.420	99.879	MWD+IFR1+MS
12100.000	79.143	179.766	11749.181	30.572	0.000	42.670	-0.000	28.230	0.000	0.000	46.870	42.517	100.321	MWD+IFR1+MS
12200.000	87.143	179.766	11761.110	30.301	0.000	42.753	-0.000	29.838	0.000	0.000	46.905	42.586	100.823	MWD+IFR1+MS
12235.709	90.000	179.766	11762.000	29.974	0.000	42.773	-0.000	29.974	0.000	0.000	46.911	42.602	100.984	MWD+IFR1+MS
12300.000	90.000	179.766	11762.000	30.093	0.000	42.812	-0.000	30.093	0.000	0.000	46.922	42.633	101.287	MWD+IFR1+MS
12400.000	90.000	179.766	11762.000	30.261	0.000	42.891	-0.000	30.261	0.000	0.000	46.940	42.698	101.813	MWD+IFR1+MS
12500.000	90.000	179.766	11762.000	30.451	0.000	42.990	-0.000	30.451	0.000	0.000	46.960	42.781	102.402	MWD+IFR1+MS

12600.000	90.000	179.766	11762.000	30.660	0.000	43.106	-0.000	30.660	0.000	0.000	46.982	42.879	103.059	MWD+IFR1+MS
12700.000	90.000	179.766	11762.000	30.887	0.000	43.240	-0.000	30.887	0.000	0.000	47.007	42.994	103.794	MWD+IFR1+MS
12800.000	90.000	179.766	11762.000	31.132	0.000	43.392	-0.000	31.132	0.000	0.000	47.035	43.124	104.619	MWD+IFR1+MS
12900.000	90.000	179.766	11762.000	31.395	0.000	43.560	-0.000	31.395	0.000	0.000	47.067	43.268	105.550	MWD+IFR1+MS
13000.000	90.000	179.766	11762.000	31.676	0.000	43.746	-0.000	31.676	0.000	0.000	47.102	43.426	106.603	MWD+IFR1+MS
13100.000	90.000	179.766	11762.000	31.973	0.000	43.949	-0.000	31.973	0.000	0.000	47.142	43.597	107.800	MWD+IFR1+MS
13200.000	90.000	179.766	11762.000	32.286	0.000	44.168	-0.000	32.286	0.000	0.000	47.188	43.779	109.167	MWD+IFR1+MS
13300.000	90.000	179.766	11762.000	32.616	0.000	44.404	-0.000	32.616	0.000	0.000	47.240	43.972	110.732	MWD+IFR1+MS
13400.000	90.000	179.766	11762.000	32.960	0.000	44.656	-0.000	32.960	0.000	0.000	47.300	44.174	112.529	MWD+IFR1+MS
13500.000	90.000	179.766	11762.000	33.320	0.000	44.923	-0.000	33.320	0.000	0.000	47.370	44.382	114.595	MWD+IFR1+MS
13600.000	90.000	179.766	11762.000	33.694	0.000	45.206	-0.000	33.694	0.000	0.000	47.452	44.595	116.965	MWD+IFR1+MS
13700.000	90.000	179.766	11762.000	34.082	0.000	45.505	-0.000	34.082	0.000	0.000	47.548	44.808	119.672	MWD+IFR1+MS
13800.000	90.000	179.766	11762.000	34.484	0.000	45.819	-0.000	34.484	0.000	0.000	47.663	45.020	122.732	MWD+IFR1+MS
13900.000	90.000	179.766	11762.000	34.898	0.000	46.147	-0.000	34.898	0.000	0.000	47.798	45.226	126.133	MWD+IFR1+MS
14000.000	90.000	179.766	11762.000	35.325	0.000	46.489	-0.000	35.325	0.000	0.000	47.959	45.422	129.822	MWD+IFR1+MS
14100.000	90.000	179.766	11762.000	35.765	0.000	46.846	-0.000	35.765	0.000	0.000	48.147	45.604	133.703	MWD+IFR1+MS
14200.000	90.000	179.766	11762.000	36.216	0.000	47.216	-0.000	36.216	0.000	0.000	48.367	45.771	-42.359	MWD+IFR1+MS
14300.000	90.000	179.766	11762.000	36.678	0.000	47.600	-0.000	36.678	0.000	0.000	48.617	45.919	-38.510	MWD+IFR1+MS
14400.000	90.000	179.766	11762.000	37.151	0.000	47.997	-0.000	37.151	0.000	0.000	48.899	46.051	-34.879	MWD+IFR1+MS
14500.000	90.000	179.766	11762.000	37.634	0.000	48.407	-0.000	37.634	0.000	0.000	49.210	46.166	-31.552	MWD+IFR1+MS
14600.000	90.000	179.766	11762.000	38.128	0.000	48.829	-0.000	38.128	0.000	0.000	49.549	46.268	-28.571	MWD+IFR1+MS
14700.000	90.000	179.766	11762.000	38.631	0.000	49.263	-0.000	38.631	0.000	0.000	49.912	46.356	-25.940	MWD+IFR1+MS
14800.000	90.000	179.766	11762.000	39.143	0.000	49.709	-0.000	39.143	0.000	0.000	50.298	46.435	-23.637	MWD+IFR1+MS
14900.000	90.000	179.766	11762.000	39.665	0.000	50.166	-0.000	39.665	0.000	0.000	50.705	46.506	-21.631	MWD+IFR1+MS
15000.000	90.000	179.766	11762.000	40.194	0.000	50.635	-0.000	40.194	0.000	0.000	51.130	46.569	-19.883	MWD+IFR1+MS
15100.000	90.000	179.766	11762.000	40.733	0.000	51.115	-0.000	40.733	0.000	0.000	51.572	46.628	-18.358	MWD+IFR1+MS
15200.000	90.000	179.766	11762.000	41.279	0.000	51.605	-0.000	41.279	0.000	0.000	52.030	46.682	-17.023	MWD+IFR1+MS
15300.000	90.000	179.766	11762.000	41.832	0.000	52.105	-0.000	41.832	0.000	0.000	52.502	46.732	-15.850	MWD+IFR1+MS
15400.000	90.000	179.766	11762.000	42.393	0.000	52.616	-0.000	42.393	0.000	0.000	52.987	46.780	-14.814	MWD+IFR1+MS
15500.000	90.000	179.766	11762.000	42.961	0.000	53.136	-0.000	42.961	0.000	0.000	53.485	46.825	-13.895	MWD+IFR1+MS
15600.000	90.000	179.766	11762.000	43.536	0.000	53.665	-0.000	43.536	0.000	0.000	53.995	46.869	-13.076	MWD+IFR1+MS
15700.000	90.000	179.766	11762.000	44.117	0.000	54.204	-0.000	44.117	0.000	0.000	54.516	46.911	-12.343	MWD+IFR1+MS
15800.000	90.000	179.766	11762.000	44.704	0.000	54.752	-0.000	44.704	0.000	0.000	55.048	46.952	-11.683	MWD+IFR1+MS

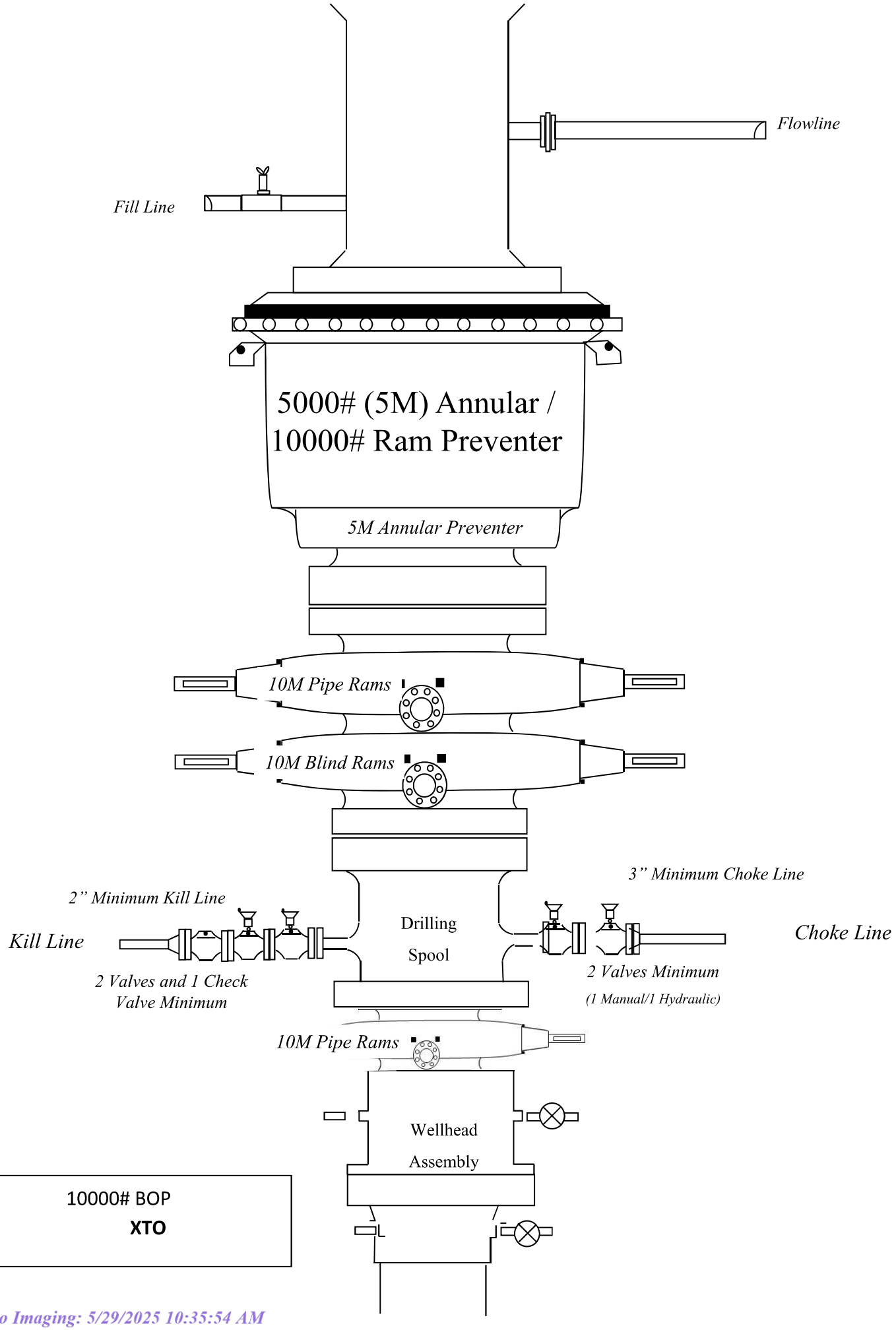
15900.000	90.000	179.766	11762.000	45.297	0.000	55.308	-0.000	45.297	0.000	0.000	55.590	46.992	-11.087	MWD+IFR1+MS
16000.000	90.000	179.766	11762.000	45.896	0.000	55.872	-0.000	45.896	0.000	0.000	56.141	47.032	-10.547	MWD+IFR1+MS
16100.000	90.000	179.766	11762.000	46.501	0.000	56.445	-0.000	46.501	0.000	0.000	56.702	47.071	-10.055	MWD+IFR1+MS
16200.000	90.000	179.766	11762.000	47.111	0.000	57.025	-0.000	47.111	0.000	0.000	57.271	47.110	-9.606	MWD+IFR1+MS
16300.000	90.000	179.766	11762.000	47.726	0.000	57.613	-0.000	47.726	0.000	0.000	57.849	47.148	-9.194	MWD+IFR1+MS
16400.000	90.000	179.766	11762.000	48.346	0.000	58.209	-0.000	48.346	0.000	0.000	58.436	47.186	-8.815	MWD+IFR1+MS
16500.000	90.000	179.766	11762.000	48.971	0.000	58.811	-0.000	48.971	0.000	0.000	59.030	47.225	-8.466	MWD+IFR1+MS
16600.000	90.000	179.766	11762.000	49.600	0.000	59.421	-0.000	49.600	0.000	0.000	59.631	47.263	-8.143	MWD+IFR1+MS
16700.000	90.000	179.766	11762.000	50.233	0.000	60.037	-0.000	50.233	0.000	0.000	60.240	47.301	-7.843	MWD+IFR1+MS
16800.000	90.000	179.766	11762.000	50.871	0.000	60.660	-0.000	50.871	0.000	0.000	60.856	47.339	-7.565	MWD+IFR1+MS
16900.000	90.000	179.766	11762.000	51.513	0.000	61.289	-0.000	51.513	0.000	0.000	61.479	47.378	-7.305	MWD+IFR1+MS
17000.000	90.000	179.766	11762.000	52.159	0.000	61.924	-0.000	52.159	0.000	0.000	62.108	47.417	-7.063	MWD+IFR1+MS
17100.000	90.000	179.766	11762.000	52.808	0.000	62.566	-0.000	52.808	0.000	0.000	62.743	47.456	-6.836	MWD+IFR1+MS
17200.000	90.000	179.766	11762.000	53.462	0.000	63.212	-0.000	53.462	0.000	0.000	63.385	47.495	-6.623	MWD+IFR1+MS
17300.000	90.000	179.766	11762.000	54.118	0.000	63.865	-0.000	54.118	0.000	0.000	64.032	47.535	-6.423	MWD+IFR1+MS
17400.000	90.000	179.766	11762.000	54.778	0.000	64.523	-0.000	54.778	0.000	0.000	64.686	47.575	-6.235	MWD+IFR1+MS
17500.000	90.000	179.766	11762.000	55.442	0.000	65.186	-0.000	55.442	0.000	0.000	65.344	47.615	-6.058	MWD+IFR1+MS
17600.000	90.000	179.766	11762.000	56.108	0.000	65.855	-0.000	56.108	0.000	0.000	66.008	47.655	-5.891	MWD+IFR1+MS
17700.000	90.000	179.766	11762.000	56.778	0.000	66.528	-0.000	56.778	0.000	0.000	66.678	47.696	-5.732	MWD+IFR1+MS
17800.000	90.000	179.766	11762.000	57.450	0.000	67.206	-0.000	57.450	0.000	0.000	67.352	47.738	-5.582	MWD+IFR1+MS
17900.000	90.000	179.766	11762.000	58.125	0.000	67.889	-0.000	58.125	0.000	0.000	68.031	47.780	-5.440	MWD+IFR1+MS
18000.000	90.000	179.766	11762.000	58.803	0.000	68.576	-0.000	58.803	0.000	0.000	68.715	47.822	-5.305	MWD+IFR1+MS
18100.000	90.000	179.766	11762.000	59.484	0.000	69.268	-0.000	59.484	0.000	0.000	69.403	47.865	-5.177	MWD+IFR1+MS
18200.000	90.000	179.766	11762.000	60.167	0.000	69.963	-0.000	60.167	0.000	0.000	70.095	47.908	-5.055	MWD+IFR1+MS
18300.000	90.000	179.766	11762.000	60.852	0.000	70.663	-0.000	60.852	0.000	0.000	70.792	47.951	-4.939	MWD+IFR1+MS
18400.000	90.000	179.766	11762.000	61.540	0.000	71.367	-0.000	61.540	0.000	0.000	71.493	47.995	-4.828	MWD+IFR1+MS
18500.000	90.000	179.766	11762.000	62.230	0.000	72.075	-0.000	62.230	0.000	0.000	72.199	48.040	-4.722	MWD+IFR1+MS
18600.000	90.000	179.766	11762.000	62.923	0.000	72.787	-0.000	62.923	0.000	0.000	72.908	48.085	-4.620	MWD+IFR1+MS
18700.000	90.000	179.766	11762.000	63.617	0.000	73.502	-0.000	63.617	0.000	0.000	73.620	48.130	-4.524	MWD+IFR1+MS
18800.000	90.000	179.766	11762.000	64.314	0.000	74.221	-0.000	64.314	0.000	0.000	74.337	48.176	-4.431	MWD+IFR1+MS
18900.000	90.000	179.766	11762.000	65.013	0.000	74.944	-0.000	65.013	0.000	0.000	75.057	48.223	-4.342	MWD+IFR1+MS
19000.000	90.000	179.766	11762.000	65.713	0.000	75.669	-0.000	65.713	0.000	0.000	75.780	48.269	-4.256	MWD+IFR1+MS
19100.000	90.000	179.766	11762.000	66.416	0.000	76.398	-0.000	66.416	0.000	0.000	76.507	48.317	-4.175	MWD+IFR1+MS

19200.000	90.000	179.766	11762.000	67.120	0.000	77.130	-0.000	67.120	0.000	0.000	77.237	48.365	-4.096	MWD+IFR1+MS
19300.000	90.000	179.766	11762.000	67.826	0.000	77.865	-0.000	67.826	0.000	0.000	77.970	48.413	-4.020	MWD+IFR1+MS
19400.000	90.000	179.766	11762.000	68.534	0.000	78.604	-0.000	68.534	0.000	0.000	78.706	48.462	-3.947	MWD+IFR1+MS
19500.000	90.000	179.766	11762.000	69.243	0.000	79.345	-0.000	69.243	0.000	0.000	79.445	48.511	-3.877	MWD+IFR1+MS
19600.000	90.000	179.766	11762.000	69.954	0.000	80.089	-0.000	69.954	0.000	0.000	80.187	48.561	-3.810	MWD+IFR1+MS
19700.000	90.000	179.766	11762.000	70.667	0.000	80.835	-0.000	70.667	0.000	0.000	80.932	48.612	-3.745	MWD+IFR1+MS
19800.000	90.000	179.766	11762.000	71.381	0.000	81.585	-0.000	71.381	0.000	0.000	81.680	48.662	-3.682	MWD+IFR1+MS
19900.000	90.000	179.766	11762.000	72.097	0.000	82.337	-0.000	72.097	0.000	0.000	82.430	48.714	-3.621	MWD+IFR1+MS
20000.000	90.000	179.766	11762.000	72.814	0.000	83.091	-0.000	72.814	0.000	0.000	83.183	48.766	-3.562	MWD+IFR1+MS
20100.000	90.000	179.766	11762.000	73.532	0.000	83.848	-0.000	73.532	0.000	0.000	83.938	48.818	-3.506	MWD+IFR1+MS
20200.000	90.000	179.766	11762.000	74.252	0.000	84.607	-0.000	74.252	0.000	0.000	84.696	48.871	-3.451	MWD+IFR1+MS
20300.000	90.000	179.766	11762.000	74.973	0.000	85.369	-0.000	74.973	0.000	0.000	85.456	48.924	-3.398	MWD+IFR1+MS
20400.000	90.000	179.766	11762.000	75.695	0.000	86.133	-0.000	75.695	0.000	0.000	86.219	48.978	-3.347	MWD+IFR1+MS
20500.000	90.000	179.766	11762.000	76.419	0.000	86.899	-0.000	76.419	0.000	0.000	86.984	49.033	-3.297	MWD+IFR1+MS
20600.000	90.000	179.766	11762.000	77.143	0.000	87.667	-0.000	77.143	0.000	0.000	87.751	49.088	-3.249	MWD+IFR1+MS
20700.000	90.000	179.766	11762.000	77.869	0.000	88.438	-0.000	77.869	0.000	0.000	88.520	49.143	-3.202	MWD+IFR1+MS
20800.000	90.000	179.766	11762.000	78.596	0.000	89.210	-0.000	78.596	0.000	0.000	89.291	49.199	-3.157	MWD+IFR1+MS
20900.000	90.000	179.766	11762.000	79.325	0.000	89.985	-0.000	79.325	0.000	0.000	90.064	49.256	-3.113	MWD+IFR1+MS
21000.000	90.000	179.766	11762.000	80.054	0.000	90.761	-0.000	80.054	0.000	0.000	90.839	49.313	-3.070	MWD+IFR1+MS
21100.000	90.000	179.766	11762.000	80.784	0.000	91.539	-0.000	80.784	0.000	0.000	91.616	49.370	-3.029	MWD+IFR1+MS
21200.000	90.000	179.766	11762.000	81.515	0.000	92.319	-0.000	81.515	0.000	0.000	92.395	49.428	-2.989	MWD+IFR1+MS
21300.000	90.000	179.766	11762.000	82.248	0.000	93.101	-0.000	82.248	0.000	0.000	93.176	49.487	-2.950	MWD+IFR1+MS
21400.000	90.000	179.766	11762.000	82.981	0.000	93.885	-0.000	82.981	0.000	0.000	93.959	49.546	-2.912	MWD+IFR1+MS
21500.000	90.000	179.766	11762.000	83.715	0.000	94.670	-0.000	83.715	0.000	0.000	94.743	49.605	-2.875	MWD+IFR1+MS
21600.000	90.000	179.766	11762.000	84.450	0.000	95.457	-0.000	84.450	0.000	0.000	95.529	49.665	-2.839	MWD+IFR1+MS
21700.000	90.000	179.766	11762.000	85.186	0.000	96.246	-0.000	85.186	0.000	0.000	96.317	49.726	-2.804	MWD+IFR1+MS
21800.000	90.000	179.766	11762.000	85.923	0.000	97.036	-0.000	85.923	0.000	0.000	97.106	49.787	-2.769	MWD+IFR1+MS
21900.000	90.000	179.766	11762.000	86.660	0.000	97.828	-0.000	86.660	0.000	0.000	97.897	49.848	-2.736	MWD+IFR1+MS
22000.000	90.000	179.766	11762.000	87.399	0.000	98.621	-0.000	87.399	0.000	0.000	98.689	49.910	-2.704	MWD+IFR1+MS
22100.000	90.000	179.766	11762.000	88.138	0.000	99.416	-0.000	88.138	0.000	0.000	99.483	49.973	-2.672	MWD+IFR1+MS
22200.000	90.000	179.766	11762.000	88.878	0.000	100.212	-0.000	88.878	0.000	0.000	100.278	50.036	-2.641	MWD+IFR1+MS
22300.000	90.000	179.766	11762.000	89.619	0.000	101.009	-0.000	89.619	0.000	0.000	101.075	50.099	-2.611	MWD+IFR1+MS
22400.000	90.000	179.766	11762.000	90.361	0.000	101.808	-0.000	90.361	0.000	0.000	101.873	50.163	-2.582	MWD+IFR1+MS

22442.995	90.000	179.766	11762.000	90.679	0.000	102.151	-0.000	90.679	0.000	0.000	102.216	50.191	-2.570	MWD+IFR1+MS
22493.036	90.000	179.766	11762.000	91.050	0.000	102.550	-0.000	91.050	0.000	0.000	102.614	50.223	-2.556	MWD+IFR1+MS

Plan Targets Poker Lake Unit 20 BD 309H

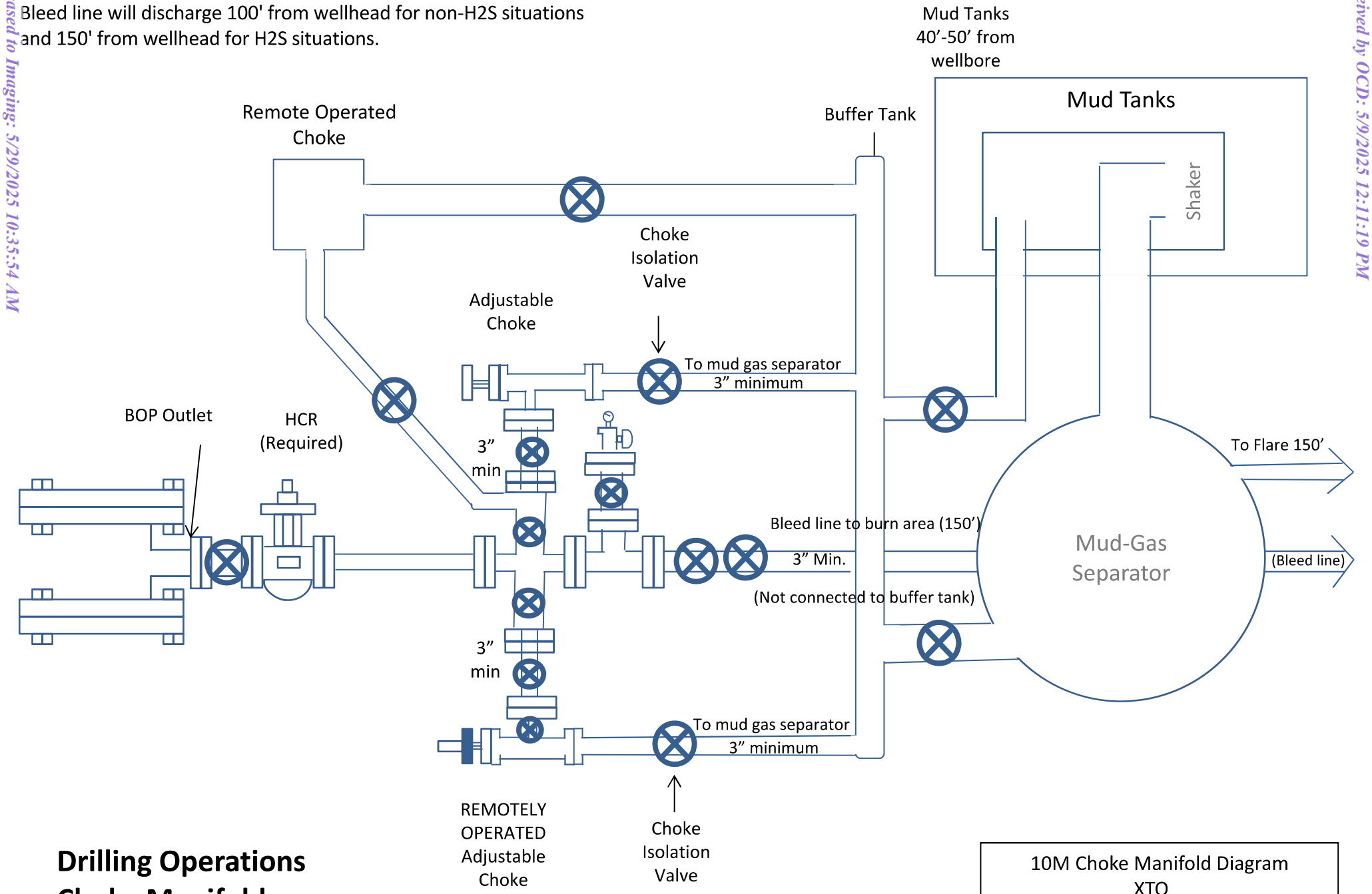
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 5	12235.71	403256.00	634547.30	8552.00	CIRCLE
LTP 5	22442.99	393048.80	634589.00	8552.00	CIRCLE
BHL 5	22493.00	392998.80	634589.90	8552.00	CIRCLE



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

Tenaris

TenarisHydril Wedge 511

Coupling	Pipe Body
Grade: **L80-IC**	Grade: **L80-IC**
Body: **Red**	1st Band: **Red**
1st Band: **Brown**	2nd Band: **Brown**
2nd Band: **-**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.625 in.	**Wall Thickness**	0.375 in.	**Grade**	L80-IC
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	**Wall Thickness**	0.375 in.	**Body Yield Strength**	683 x1000 lb
Nominal Weight	29.70 lb/ft	**Plain End Weight**	29.06 lb/ft	**Min. Internal Yield Pressure**	6890 psi
Drift	6.750 in.	**OD Tolerance**	API	**SMYS**	80,000 psi
Nominal ID	6.875 in.			**Collapse Pressure**	5900 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	**Tension Efficiency**	61.10 %	**Minimum**	5900 ft-lb
Connection ID	6.787 in.	**Joint Yield Strength**	417 x1000 lb	**Optimum**	7100 ft-lb
Make-up Loss	3.704 in.	**Internal Pressure Capacity**	6890 psi	**Maximum**	10,300 ft-lb
Threads per inch	3.28	**Compression Efficiency**	73.80 %		
Connection OD Option	Regular	**Compression Strength**	504 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	29.33 °/100 ft	**Operating Torque**	35,000 ft-lb
		External Pressure Capacity	5900 psi	**Yield Torque**	52,000 ft-lb

Notes

For the lastest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris

TenarisHydril Wedge 511

Coupling	Pipe Body
Grade: **P110-ICY**	Grade: **P110-ICY**
Body: **White**	1st Band: **White**
1st Band: **Pale Green**	2nd Band: **Pale Green**
2nd Band: **-**	3rd Band: **Pale Green**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	7.625 in.	**Wall Thickness**	0.375 in.	**Grade**	P110-ICY
Min. Wall Thickness	90.00 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	**Wall Thickness**	0.375 in.	**Body Yield Strength**	1068 x1000 lb
Nominal Weight	29.70 lb/ft	**Plain End Weight**	29.06 lb/ft	**Min. Internal Yield Pressure**	11,070 psi
Drift	6.750 in.	**OD Tolerance**	API	**SMYS**	125,000 psi
Nominal ID	6.875 in.			**Collapse Pressure**	7360 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	**Tension Efficiency**	61.10 %	**Minimum**	5900 ft-lb
Connection ID	6.787 in.	**Joint Yield Strength**	653 x1000 lb	**Optimum**	7100 ft-lb
Make-up Loss	3.704 in.	**Internal Pressure Capacity**	11,070 psi	**Maximum**	10,300 ft-lb
Threads per inch	3.28	**Compression Efficiency**	73.80 %		
Connection OD Option	Regular	**Compression Strength**	788 x1000 lb	**Operation Limit Torques**	
		Max. Allowable Bending	45.83 °/100 ft	**Operating Torque**	55,000 ft-lb
		External Pressure Capacity	7360 psi	**Yield Torque**	82,000 ft-lb

Notes

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For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris

TPN™

Coupling	Pipe Body
Grade: **P110-CY**	Grade: **P110-CY**
Body: **White**	1st Band: **White**
1st Band: **Grey**	2nd Band: **Grey**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.361 in.	**Grade**	P110-CY
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry

Nominal OD	5.500 in.	**Wall Thickness**	0.361 in.
Nominal Weight	20.00 lb/ft	**Plain End Weight**	19.83 lb/ft
Drift	4.653 in.	**OD Tolerance**	API
Nominal ID	4.778 in.		

Performance

Body Yield Strength	641 x1000 lb
Min. Internal Yield Pressure	12,640 psi
SMYS	110,000 psi
Collapse Pressure	11,100 psi

Connection Data

Geometry

Connection OD	6.300 in.
Coupling Length	8.408 in.
Connection ID	4.778 in.
Make-up Loss	4.204 in.
Threads per inch	5
Connection OD Option	Regular

Performance

Tension Efficiency	100 %
Joint Yield Strength	641 x1000 lb
Internal Pressure Capacity	12,640 psi
Compression Efficiency	100 %
Compression Strength	641 x1000 lb
Max. Allowable Bending	92 °/100 ft
External Pressure Capacity	11,100 psi

Make-Up Torques

Minimum	13,860 ft-lb
Optimum	15,400 ft-lb
Maximum	16,940 ft-lb

Operation Limit Torques

Operating Torque	26,350 ft-lb
Yield Torque	29,300 ft-lb

Notes

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For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

PI/CIII

Tenaris

TenarisHydril Wedge 441®

Coupling	Pipe Body
Grade: **P110-IC**	Grade: **P110-IC**
Body: **White**	1st Band: **White**
1st Band: **-**	2nd Band: **Pale Green**
2nd Band: **-**	3rd Band: **-**
3rd Band: **-**	4th Band: **-**
	5th Band: **-**
	6th Band: **-**

Outside Diameter	5.500 in.	**Wall Thickness**	0.361 in.	**Grade**	P110-IC
Min. Wall Thickness	87.50 %	**Pipe Body Drift**	API Standard	**Type**	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	**Wall Thickness**	0.361 in.	**Body Yield Strength**	641 x1000 lb
Nominal Weight	20.00 lb/ft	**Plain End Weight**	19.83 lb/ft	**Min. Internal Yield Pressure**	12,640 psi
Drift	4.653 in.	**OD Tolerance**	API	**SMYS**	110,000 psi
Nominal ID	4.778 in.			**Collapse Pressure**	12,300 psi

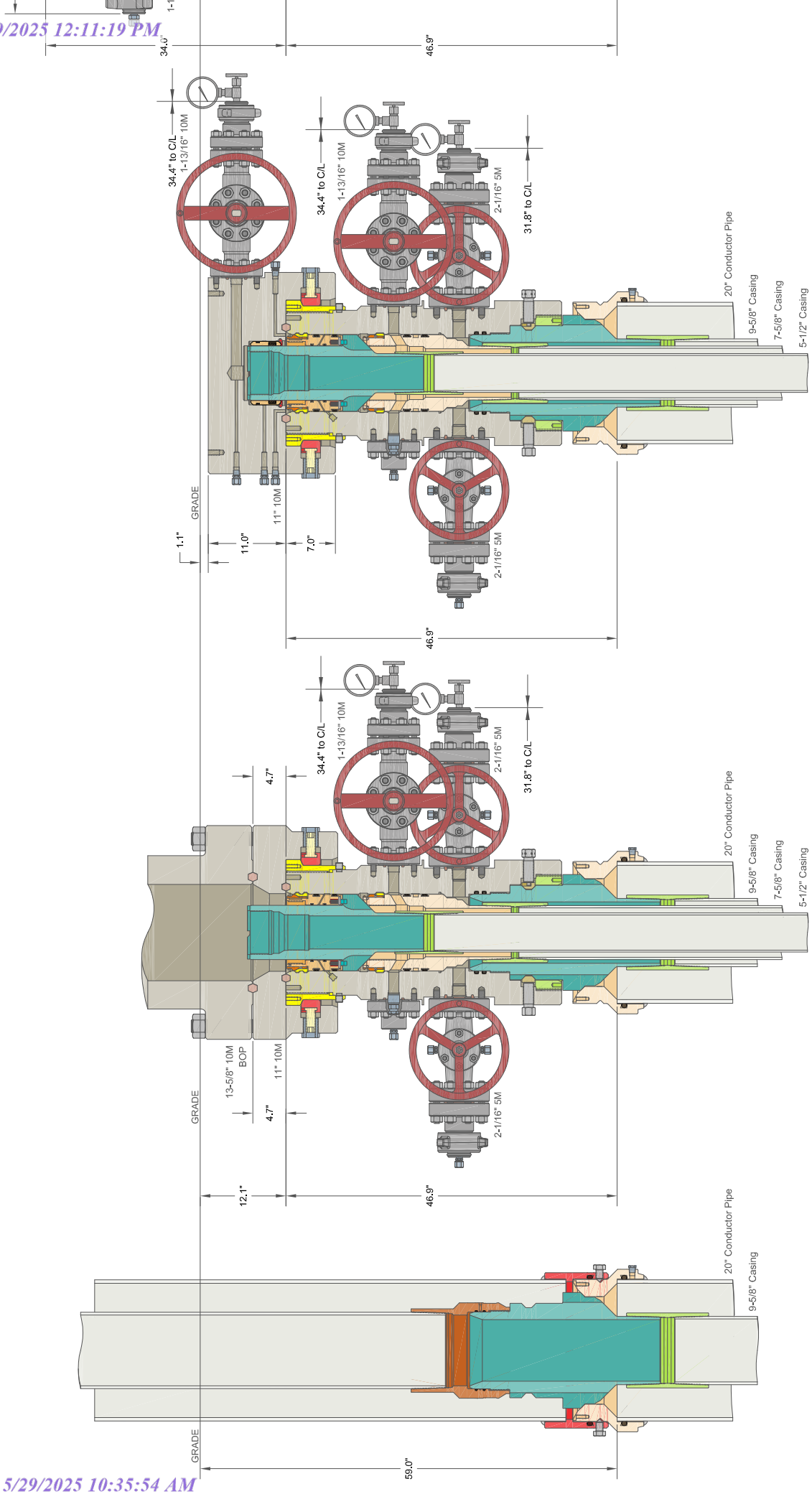
Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.852 in.	**Tension Efficiency**	81.50 %	**Minimum**	15,000 ft-lb
Coupling Length	8.714 in.	**Joint Yield Strength**	522 x1000 lb	**Optimum**	16,000 ft-lb
Connection ID	4.778 in.	**Internal Pressure Capacity**	12,640 psi	**Maximum**	19,200 ft-lb
Make-up Loss	3.780 in.	**Compression Efficiency**	81.50 %		
Threads per inch	3.40	**Compression Strength**	522 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	74.98 °/100 ft	**Operating Torque**	32,000 ft-lb
		External Pressure Capacity	12,300 psi	**Yield Torque**	38,000 ft-lb
				Buck-On	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.304 (17.00) in. (lb/ft)
Wedge 461® - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) / 0.415 (23.00) in. (lb/ft)
Connections with Dopeless® Technology are fully compatible with the same connection in its doped version
Connection performance values are related to structural capabilities. For sealability-related performance information, request the Connection Service Envelope from your local Tenaris Representative.

For the lastest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com


34.4" to C/L
1-13/16" 10M
34.4" to C/L
1-13/16" 10M
2-1/16" 5M
31.8" to C/L
20" Conductor Pipe
9-5/8" Casing
7-5/8" Casing
5-1/2" Casing
GRADE
1.1"
11.0"
11" 10M
7.0"
2-1/16" 5M
46.9"
34.4" to C/L
1-13/16" 10M
2-1/16" 5M
31.8" to C/L
4.7"
20" Conductor Pipe
9-5/8" Casing
7-5/8" Casing
5-1/2" Casing
13-5/8" 10M
BOP
11" 10M
4.7"
GRADE
2-1/16" 5M
12.1"
46.9"
20" Conductor Pipe
9-5/8" Casing
GRADE
59.0"

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.

10,000 PSI Annular BOP Variance Request

XTO Energy/Permian request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOPL).

1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

12-1/4" Intermediate Hole Section 10M psi Requirement					
Component	**OD**	**Primary Preventer**	**RWP**	**Alternate Preventer(s)**	**RWP**
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	8.000"-9.625"	Annular	5M	-	-
Intermediate Casing	9.625"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

8-3/4" Production Hole Section 10M psi Requirement					
Component	**OD**	**Primary Preventer**	**RWP**	**Alternate Preventer(s)**	**RWP**
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	6.750"-8.000"	Annular	5M	-	-
Production Casing	7"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

6-1/8" Lateral Hole Section 10M psi Requirement					
Component	**OD**	**Primary Preventer**	**RWP**	**Alternate Preventer(s)**	**RWP**
Drillpipe	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
DCs and MWD tools	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Mud Motor	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Production Casing	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Upper 3.5"-5.5" VBR	10M 10M
Open-Hole	-	Blind Rams	10M	-	-

VBR = Variable Bore Ram

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the Mewbourne Oil Company drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP & SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full-opening safety valve & close
3. Space out drill string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP & SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

1. Sound alarm (alert crew)
2. Stab crossover and full-opening safety valve and close
3. Space out string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP & SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams (HCR & choke will already be in the closed position)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
    a. SICP
    b. Pit gain
    c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA Through Stack

1. PRIOR to pulling last joint of drillpipe through stack:
    a. Perform flow check. If flowing, continue to (b).
    b. Sound alarm (alert crew)
    c. Stab full-opening safety valve and close
    d. Space out drill string with tool joint just beneath the upper variable bore rams
    e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
    f. Confirm shut-in
    g. Notify toolpusher/company representative
    h. Read and record the following:
        i. SIDPP & SICP
        ii. Pit gain
        iii. Time
    i. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
    a. Sound alarm (alert crew)
    b. Stab crossover and full-opening safety valve and close
    c. Space out drill string with upset just beneath the upper variable bore rams
    d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
    e. Confirm shut-in
    f. Notify toolpusher/company representative
    g. Read and record the following:
        i. SIDPP & SICP

ii. Pit gain
iii. Time

h. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
   a. Sound alarm (alert crew)
   b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
   c. If impossible to pull string clear of the stack:
   d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
   e. Space out drill string with tooljoint just beneath the upper variable bore ram
   f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
   g. Confirm shut-in
   h. Notify toolpusher/company representative
   i. Read and record the following:
      i. SIDPP & SICP
      ii. Pit gain
      iii. Time
   j. Regroup and identify forward plan

BLACK GOLD®

GATES ENGINEERING & SERVICES NORTH AMERICA
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Houston, TX. 77086

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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. OSPINOS

TITLE: QUALITY ASSURANCE

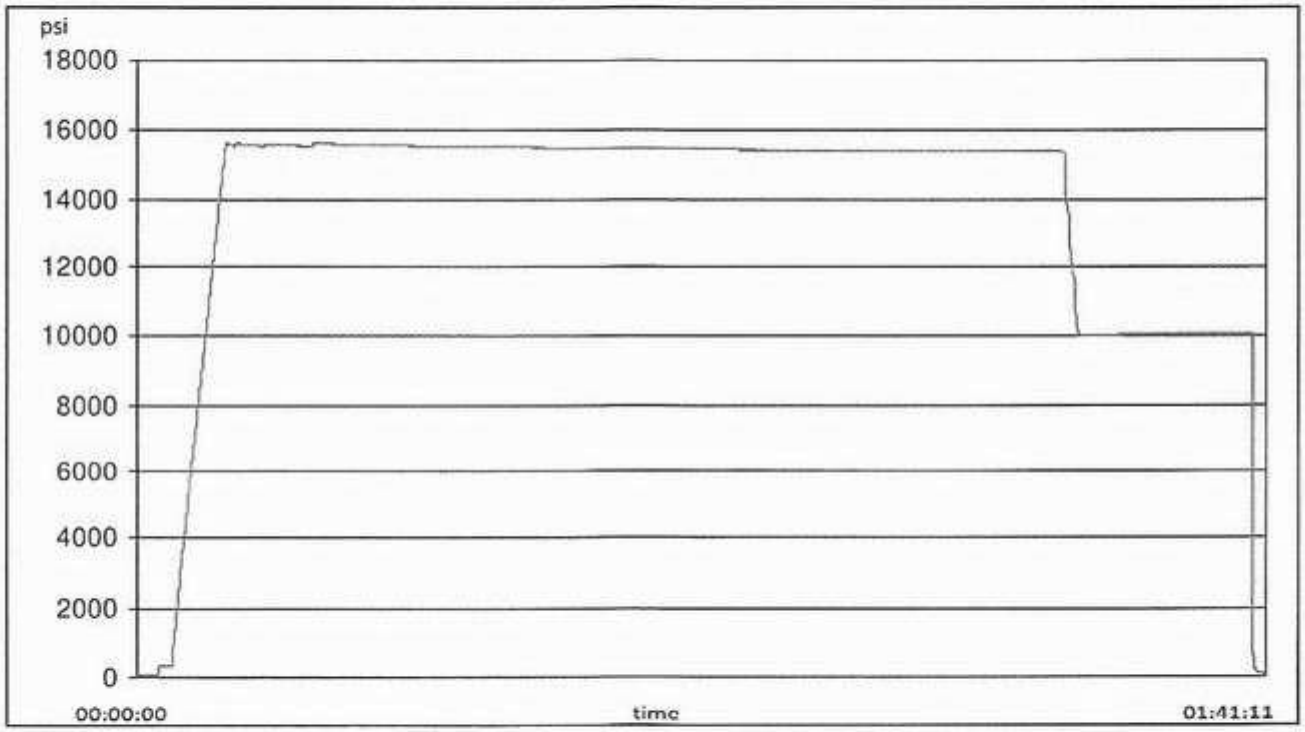
DATE: 1/25/2024

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

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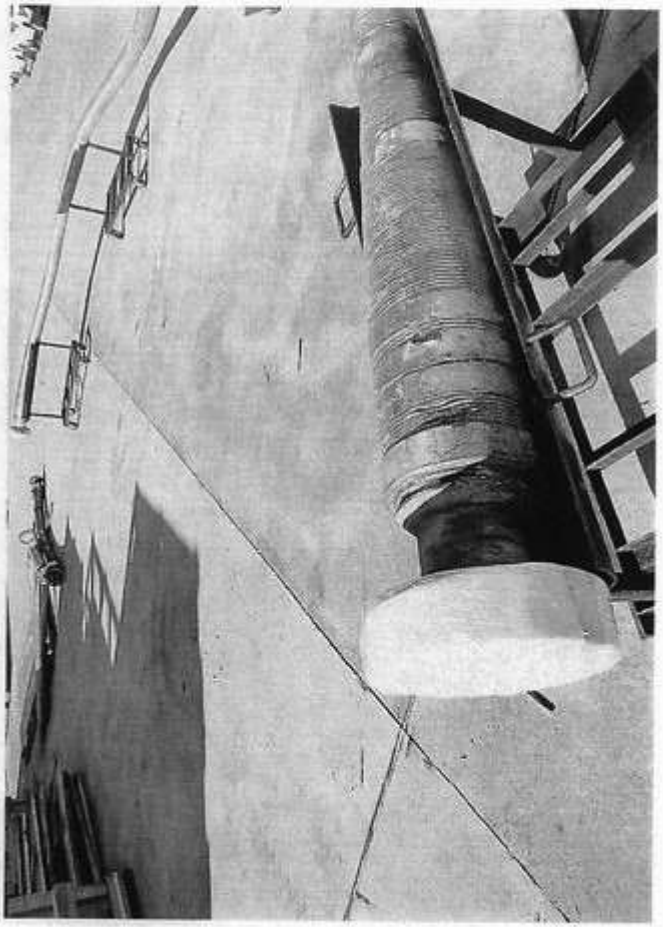
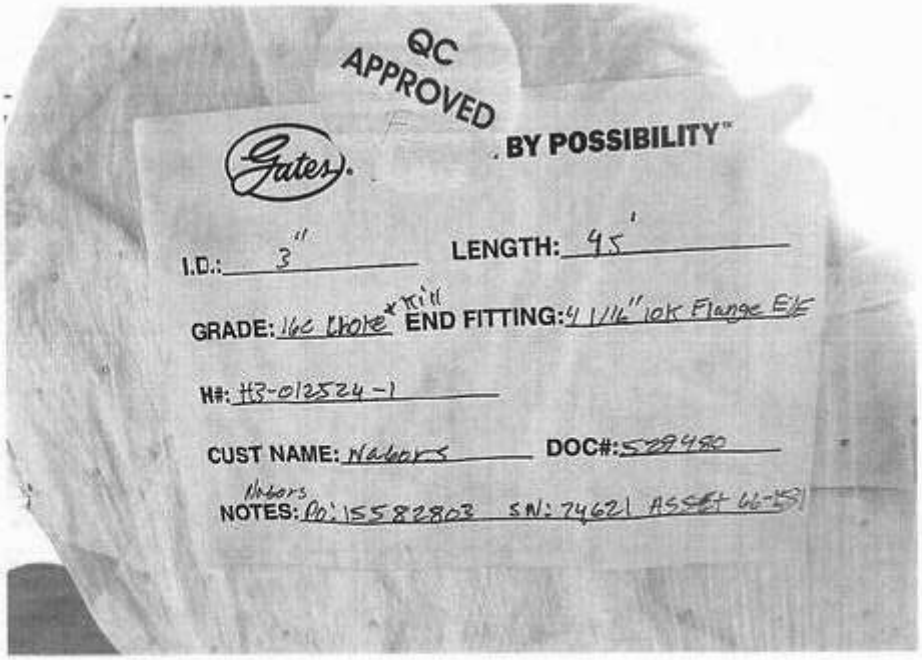
TEST REPORT

GAUGE TRACEABILITY

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

Comment





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.

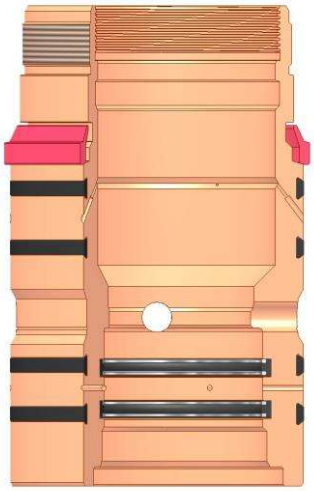
1. Cement Program

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

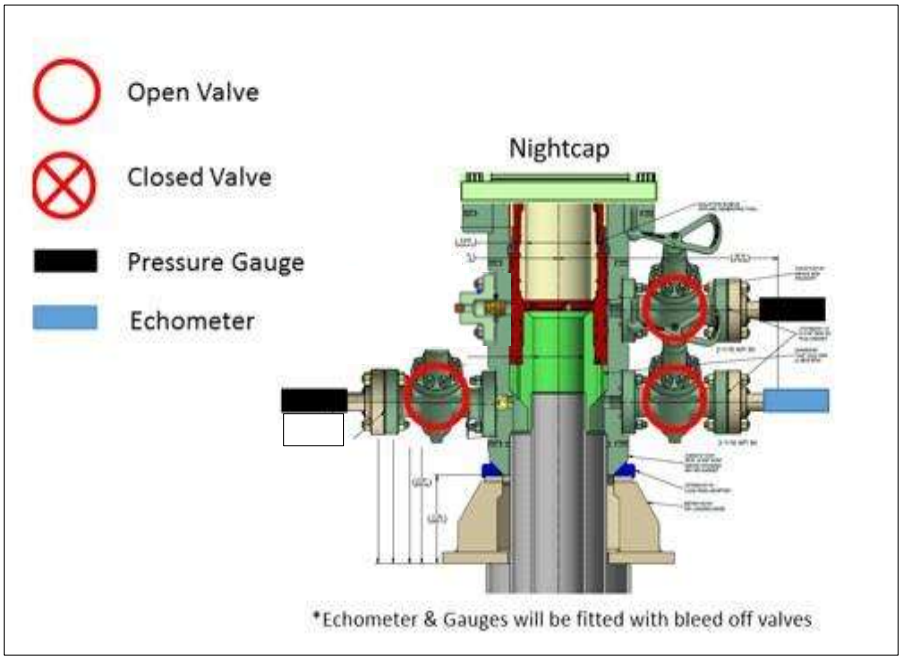
2. Offline Cementing Procedure

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.



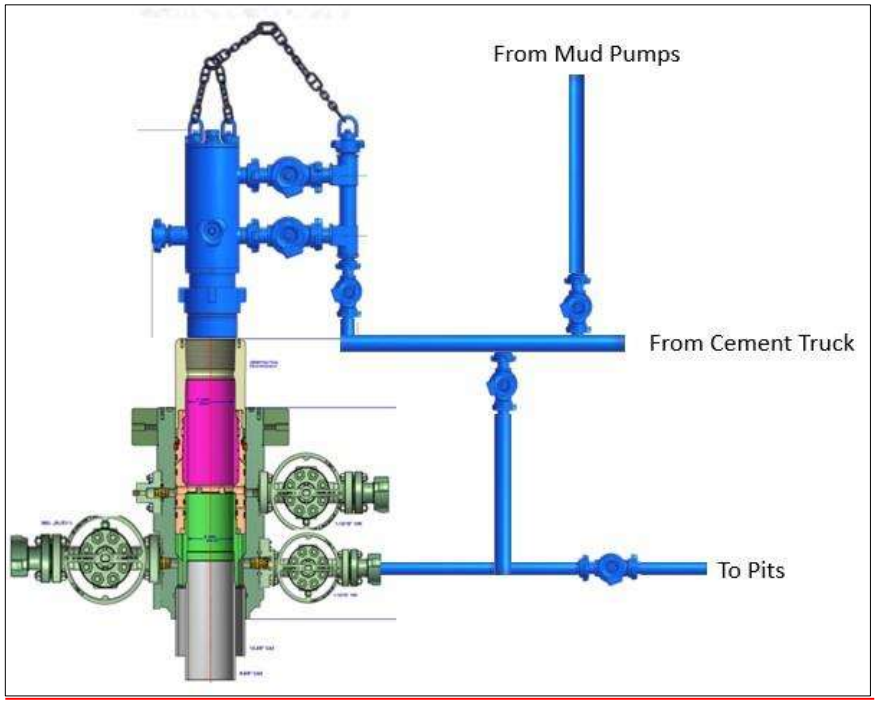
Annular packoff with both external and internal seals



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.

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 460592

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 460592
	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.	5/29/2025