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

Sundry Print Report
05/09/2025

Well Name: POKER LAKE UNIT 21 BD

Well Location: T25S / R30E / SEC 28 / NWNE / 32.108021 / -103.886051

County or Parish/State: EDDY / NM

Well Number: 507H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM05039A

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: 2842646

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/20/2025

Time Sundry Submitted: 12:30

Date proposed operation will begin: 03/27/2025

Procedure Description: Poker Lake Unit 21 BD 507H 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, and well design. FROM: TO: KOP: 136' FNL & 2637' FEL OF SECTION 28-T25S-R30E 616' FSL & 997' FEL OF SECTION 21-T25S-R30E FTP: 100' FNL & 2325' FEL OF SECTION 28-T25S-R30E 100' FNL & 999' FEL OF SECTION 28-T25S-R30E LTP: 2550' FNL & 2325' FEL OF SECTION 4-T26S-R30E 2440' FNL & 966' FEL OF SECTION 4-T26S-R30E BHL: 2600' FNL & 2325' FEL OF SECTION 4-T26S-R30E 2590' FNL & 965' FEL OF SECTION 4-T26S-R30E The proposed total depth is changing from 22911' MD; 9401' TVD to 23536' MD; 9634' TVD. The well design is changing from a 3-string Slimhole to a 3-string Bighole. See updated Drilling Program attached. There is no new surface disturbance.

NOI Attachments

Procedure Description

PLU_21_BD_507H_Sundry_Docs_20250328161226.pdf

Well Name: POKER LAKE UNIT 21 BD	**Well Location:** T25S / R30E / SEC 28 / NWNE / 32.108021 / -103.886051	**County or Parish/State:** EDDY / NM
Well Number: 507H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM05039A	**Unit or CA Name:** POKER LAKE UNIT	**Unit or CA Number:** NMNM71016X
US Well Number:	**Operator:** XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

253028_Poker_Lake_Unit_21_BD_507H_04_28_2025_COAs_20250428104728.pdf

Operator

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

Operator Electronic Signature: SAMANTHA WEIS

Signed on: MAR 28, 2025 04:14 PM

Name: XTO PERMIAN OPERATING LLC

Title: Permitting Advisor

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING **State:** TX

Phone: (832) 625-7361

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

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 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. NMNM05039A

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 21 BD/507H

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 CORRAL CANYON/BONE SPRING SOUTH

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)* SEC 28/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
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

Poker Lake Unit 21 BD 507H

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, and well design.

FROM: TO:

KOP: 136 FNL & 2637 FEL OF SECTION 28-T25S-R30E 616 FSL & 997 FEL OF SECTION 21-T25S-R30E
FTP: 100 FNL & 2325' FEL OF SECTION 28-T25S-R30E 100' FNL & 999' FEL OF SECTION 28-T25S-R30E
LTP: 2550' FNL & 2325' FEL OF SECTION 4-T26S-R30E 2440' FNL & 966' FEL OF SECTION 4-T26S-R30E
BHL: 2600' FNL & 2325' FEL OF SECTION 4-T26S-R30E 2590' FNL & 965' FEL OF SECTION 4-T26S-R30E

Continued on page 3 additional information

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

Title Permitting Advisor

Signature (Electronic Submission)

Date 03/28/2025

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 proposed total depth is changing from 22911 MD; 9401 TVD to 23536 MD; 9634 TVD.

The well design is changing from a 3-string Slimhole to a 3-string Bighole. See updated Drilling Program attached.

There is no new surface disturbance.

Location of Well

0. SHL: NWNE / 136 FNL / 2637 FEL / TWSP: 25S / RANGE: 30E / SECTION: 28 / LAT: 32.108021 / LONG: -103.886051 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 2325 FEL / TWSP: 25S / RANGE: 30E / SECTION: 28 / LAT: 32.108121 / LONG: -103.885041 (TVD: 9401 feet, MD: 9800 feet)

PPP: NWSE / 2664 FNL / 2323 FEL / TWSP: 25S / RANGE: 30E / SECTION: 28 / LAT: 32.101071 / LONG: -103.885074 (TVD: 9401 feet, MD: 12500 feet)

BHL: SWNE / 2600 FNL / 2325 FEL / TWSP: 26S / RANGE: 30E / SECTION: 4 / LAT: 32.071975 / LONG: -103.88521 (TVD: 9401 feet, MD: 22911 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 21 BD 507H
LOCATION:	Section 28, T.25S., R.30E.
COUNTY:	Eddy County

COA

H2S	◉ Yes	○ No	
Potash	◉ None	○ Secretary	○ R-111-P
Cave/Karst Potential	◉ Low	○ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Wellhead Variance	○ Diverter		
Other	☐ 4 String	☐ Capitan Reef	☐ WIPP
Other	☑ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☑ Contingency Cement Squeeze	☐ EchoMeter	☐ Primary Cement Squeeze
Special Requirements	☐ Water Disposal	☐ COM	☑ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements Variance	☑ Break Testing	☑ Offline Cementing	☐ Casing Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

Possibility of water flows in the Salado
Possibility of lost circulation in the Red Beds, Rustler, and Delaware.
Abnormal pressures may be encountered within the 3rd Bone Spring and Wolfcamp Formations.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **1000** 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. The surface hole shall be **17-1/2**inch in diameter.

    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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

    - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down 13-3/8" X 9-5/8" 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 9-5/8" casing to surface 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 run one CBL per Well Pad.

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

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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. This assembly will only be tested when installed on the **13-3/8** inch surface casing. 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** i 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.

E. SPECIAL REQUIREMENT (S)

BOPE Break Testing Variance

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

Offline Cementing

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

GENERAL REQUIREMENTS

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

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

☒ Eddy County
EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@BLM.GOV
(575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

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.

JS 4/28/2025

C-102	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
Submit Electronically Via OCD Permitting		Submittal Type: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name	
30-015	13354	Corral Canyon; Bone Spring, South	
Property Code	Property Name		Well Number
	POKER LAKE UNIT 21 BD		507H
ORGID No.	Operator Name		Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.		3,231'

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
B	28	25 S	30 E		136' FNL	2,637' FEL	32.108021	-103.886051	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	4	26 S	30 E		2,590' FNL	965' FEL	32.072016	-103.880820	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
400	DEFINING		N	U

Order Numbers.

Well setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	21	25 S	30 E		616' FSL	997' FEL	32.110097	-103.880756	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	28	25 S	30 E		100' FNL	999' FEL	32.108128	-103.880760	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	4	26 S	30 E		2,440' FNL	966' FEL	32.072428	-103.880822	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
NMNM-071016X	☒ Horizontal ☐ Vertical	3,231'

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 3/28/2025

Signature Date

Samantha Weis

Printed Name

samantha.r.bartnik@exxonmobil.com

Email Address

SURVEYOR CERTIFICATIONS

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

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.

5 Mar 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

Printed Name	Certificate Number	Date of Survey
Email Address	TIM C. PAPPAS 21209	3/5/2025

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

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

DATE:	3-5-2025	PROJECT NO:	2023040209
DRAWN BY:	LM	SCALE:	
CHECKED BY:	CH	SHEET:	1 OF 2
FIELD CREW:	IR	REVISION:	

ACREAGE DEDICATION PLATS

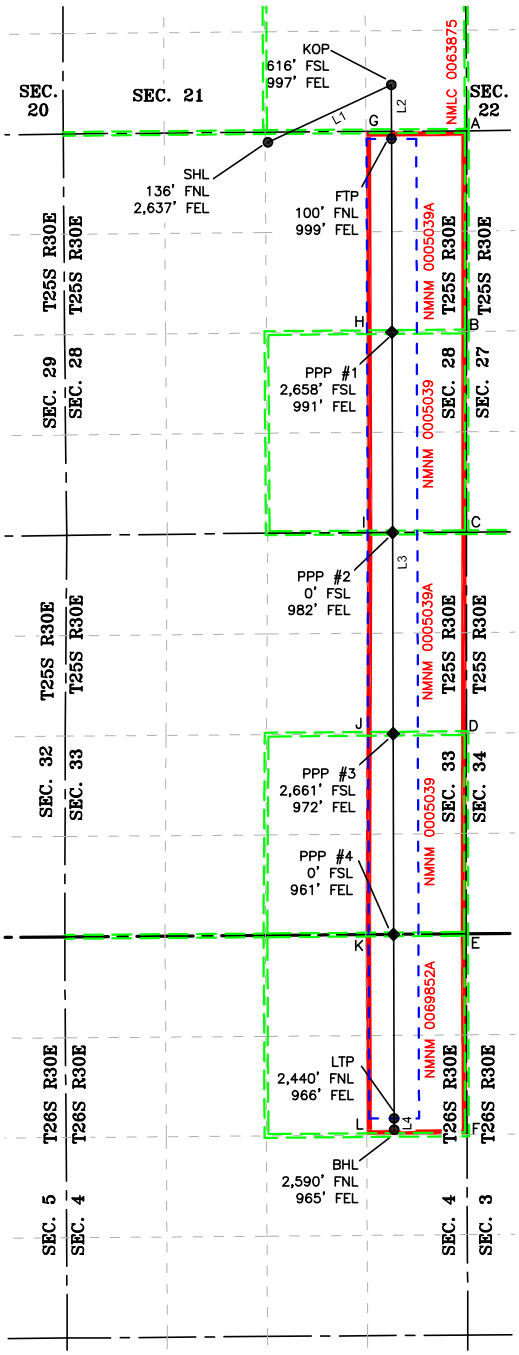
This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the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

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

LEGEND

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	65° 01'36"	1,804.85'
L2	179° 50'28"	716.16'
L3	179° 50'39"	12,986.92'
L4	179° 36'12"	150.0'



COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	403,321.8	N	Y =	390,380.7	N
X =	679,827.6	E	X =	681,501.0	E
LAT. =	32.108021	°N	LAT. =	32.072428	°N
LONG. =	103.886051	°W	LONG. =	103.880822	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	404,083.8	N	Y =	390,230.7	N
X =	681,463.7	E	X =	681,502.1	E
LAT. =	32.110097	°N	LAT. =	32.072016	°N
LONG. =	103.880756	°W	LONG. =	103.880820	°W
FTP (NAD 83 NME)					
Y =	403,367.6	N			
X =	681,465.7	E			
LAT. =	32.108128	°N			
LONG. =	103.880760	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	403,263.5	N	Y =	390,322.8	N
X =	638,642.6	E	X =	640,315.5	E
LAT. =	32.107896	°N	LAT. =	32.072303	°N
LONG. =	103.885568	°W	LONG. =	103.880341	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	404,025.5	N	Y =	390,172.8	N
X =	640,278.7	E	X =	640,316.6	E
LAT. =	32.109972	°N	LAT. =	32.071891	°N
LONG. =	103.880274	°W	LONG. =	103.880340	°W
FTP (NAD 27 NME)					
Y =	403,309.3	N			
X =	640,280.6	E			
LAT. =	32.108003	°N			
LONG. =	103.880278	°W			
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	400,805.5	N	Y =	400,747.3	N
X =	681,472.7	E	X =	640,287.6	E
LAT. =	32.101085	°N	LAT. =	32.100960	°N
LONG. =	103.880772	°W	LONG. =	103.880290	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 27 NME)		
Y =	398,147.4	N	Y =	398,089.3	N
X =	681,479.9	E	X =	640,294.7	E
LAT. =	32.093778	°N	LAT. =	32.093653	°N
LONG. =	103.880785	°W	LONG. =	103.880303	°W
PPP #3 (NAD 83 NME)			PPP #3 (NAD 27 NME)		
Y =	395,482.0	N	Y =	395,423.9	N
X =	681,487.1	E	X =	640,301.8	E
LAT. =	32.086451	°N	LAT. =	32.086326	°N
LONG. =	103.880797	°W	LONG. =	103.880316	°W
PPP #4 (NAD 83 NME)			PPP #4 (NAD 27 NME)		
Y =	392,820.8	N	Y =	392,762.8	N
X =	681,494.4	E	X =	640,309.0	E
LAT. =	32.079136	°N	LAT. =	32.079011	°N
LONG. =	103.880810	°W	LONG. =	103.880329	°W

CORNER COORDINATES (NAD83 NME)					
A - Y =	403,473.8	N	A - X =	682,465.2	E
B - Y =	400,813.4	N	B - X =	682,463.6	E
C - Y =	398,152.3	N	C - X =	682,461.9	E
D - Y =	395,489.3	N	D - X =	682,459.2	E
E - Y =	392,828.3	N	E - X =	682,455.8	E
F - Y =	390,169.9	N	F - X =	682,467.5	E
G - Y =	403,465.5	N	G - X =	681,128.1	E
H - Y =	400,802.9	N	H - X =	681,136.1	E
I - Y =	398,145.7	N	I - X =	681,144.0	E
J - Y =	395,479.4	N	J - X =	681,135.0	E
K - Y =	392,817.9	N	K - X =	681,125.6	E
J - Y =	390,159.5	N	L - X =	681,138.4	E
CORNER COORDINATES (NAD27 NME)					
A - Y =	403,415.5	N	A - X =	641,280.1	E
B - Y =	400,755.2	N	B - X =	641,278.4	E
C - Y =	398,094.2	N	C - X =	641,276.6	E
D - Y =	395,431.2	N	D - X =	641,273.9	E
E - Y =	392,770.3	N	E - X =	641,270.4	E
F - Y =	390,112.0	N	F - X =	641,282.0	E
G - Y =	403,407.2	N	G - X =	639,943.0	E
H - Y =	400,744.7	N	H - X =	639,951.0	E
I - Y =	398,087.5	N	I - X =	639,958.8	E
J - Y =	395,421.3	N	J - X =	639,949.7	E
K - Y =	392,759.9	N	K - X =	639,940.2	E
J - Y =	390,101.6	N	L - X =	639,952.9	E

FSC INC
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DATE:	3-28-2025	PROJECT NO:	2023040209
DRAWN BY:	LM	SCALE:	1" = 2,000'
CHECKED BY:	CH	SHEET:	2 OF 2
FIELD CREW:	IR	REVISION:	

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

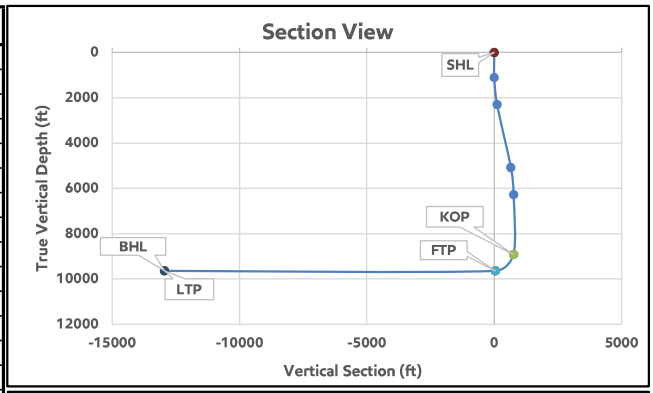
ExxonMobil
Poker Lake Unit 21 BD - 507H
Projected TD: 23536' MD / 9634' TVD
SHL: 136' FNL & 2637' FEL , Section 28, T25S, R30E
BHL: 2590' FNL & 965' FEL , Section 4, T26S, R30E
Eddy County, NM

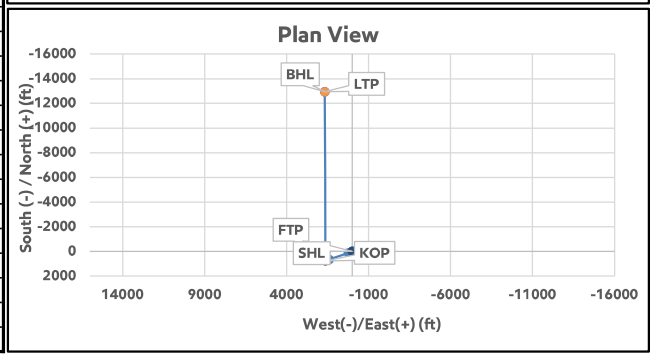
1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth	Water/Oil/Gas
Rustler	1077'	Water
Salado	1389'	Water
Base of Salt	3600'	Water
Delaware	3808'	Water
Cherry Canyon	4754'	Water/Oil/Gas
Brushy Canyon	6273'	Water/Oil/Gas
Basal Brushy Canyon	7329'	Water/Oil/Gas
Bone Spring Lm.	7612'	Water/Oil/Gas
Avalon	7745'	Water/Oil/Gas
Lower Avalon	8174'	Water/Oil/Gas
1st Bone Spring Lime	8339'	Water/Oil/Gas
1st Bone Spring Sand	8556'	Water/Oil/Gas
2nd Bone Spring Shale	8803'	Water/Oil/Gas
2nd Bone Spring Lime	9044'	Water/Oil/Gas
2nd Bone Spring Sand	9404'	Water/Oil/Gas
2nd Bone Spring T/B Carb	9548'	Water/Oil/Gas
2nd Bone Spring Sand Lower Landing	9634'	Water/Oil/Gas
3rd Bone Spring Lime	9712'	Water/Oil/Gas





	Inclination (°)	Azimuth (°)	True Vertical Depth (ft)	Y Offset (ft)	X Offset (ft)
SHL	0	0	0	0	0
KOP	0	0	8918	762	1636
LP	90	180	9634	46	1638
FTP	90	180	9634	46	1638
LTP	90	180	9634	-12941	1673
BHL	90	180	9634	-12941	1673

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 13-3/8" inch casing at 1364' and circulating cement back to surface.

3. Primary Casing Design

Primary Design:

Hole Size	MD	Casing TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1364'	1356'	13-3/8"	54.5	J55	BTC	New	6.56	1.92	5.20
12.25	0' – 9075'	8453'	9-5/8"	40	L80-IC	BTC	New	2.79	1.06	2.37
8.75" / 8.5"	0' – 8875'	8518'	5-1/2"	20	P110-CY	TPN	New	1.18	3.01	2.64
8.75" / 8.5"	8875' – 23536'	9634'	5-1/2"	20	P110-IC	Tenaris Wedge 441	New	1.18	2.95	2.69

Section 3 Summary:

The planned kick off point is located at: 9275' MD / 8918' TVD.

Wellhead:

A multi-bowl wellhead system will be utilized.The well design chosen is: 3-String Big 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	701	12.4	2.11	0	1,364	100%	
Surface 1	Tail	313	14.8	1.33	1064	1,364	100%	
Intermediate 1	Lead							
Intermediate 1	Tail	817	14.8	1.45	6273	9,075	35%	
Production 1	Lead							
Production 1	Tail	3412	13.2	1.44	8575	23,536	30%	

Remedial Cementing

Casing	Slurry Type	No. Sacks	Density (ppg)	Yield (ft3/sack)	Cemented Interval	Excess (%)	Slurry Description
Intermediate 1	Bradenhead Squeeze	2033	14.8	1.45	0 - 6273'	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) Break Test Variance
A break testing variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead for the intermediate hole sections which is in compliance with API Standard 53. The maximum anticipated surface pressure at the deepest intermediate casing point is less than 4800psi.

5B) 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.

5C) 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' – 1364'	17.5''	FW/Native	8.3 - 8.7	35-40	NC	Fresh Water or Native Water
1364' – 9075'	12.25''	BDE/OBM or FW/Brine	9.5 - 10	30-32	NC	Fluid type will be based upon on well conditions. A fully saturated system will be used across the salt interval.
9075' – 8875'	8.75'' / 8.5''''	OBM	9 - 9.6	50-60	NC - 20	OBM or Cut Brine depending on Well Conditions
8875' – 23536'	8.75'' / 8.5''''	OBM	9 - 9.6	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 13-3/8" 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:

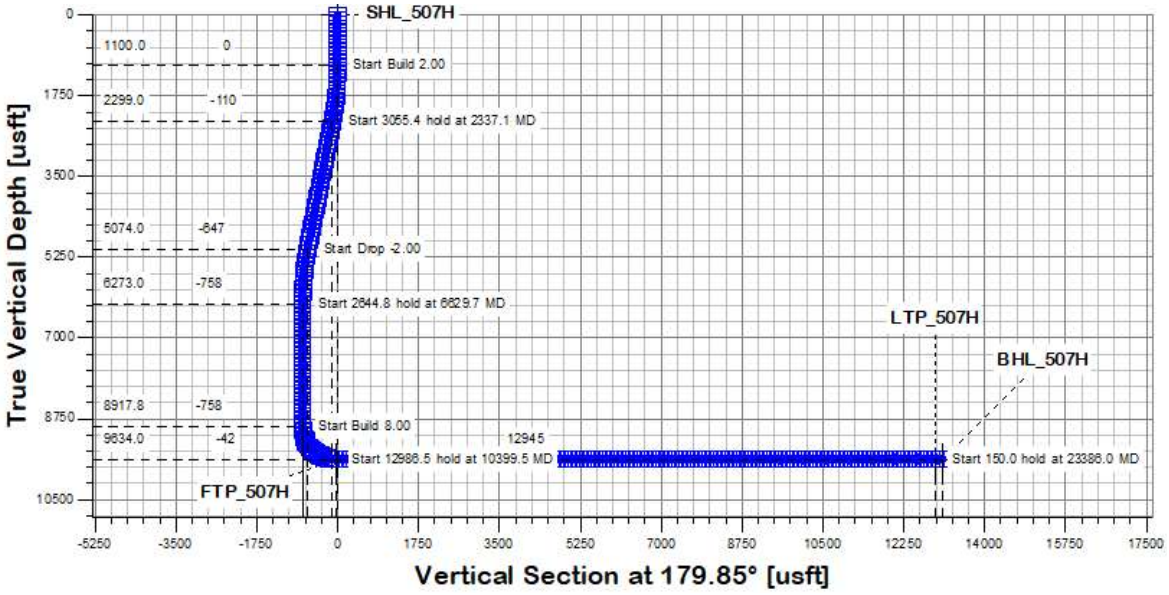
The estimated bottom hole temperature of 162F to 182F. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation is possible throughout the well.

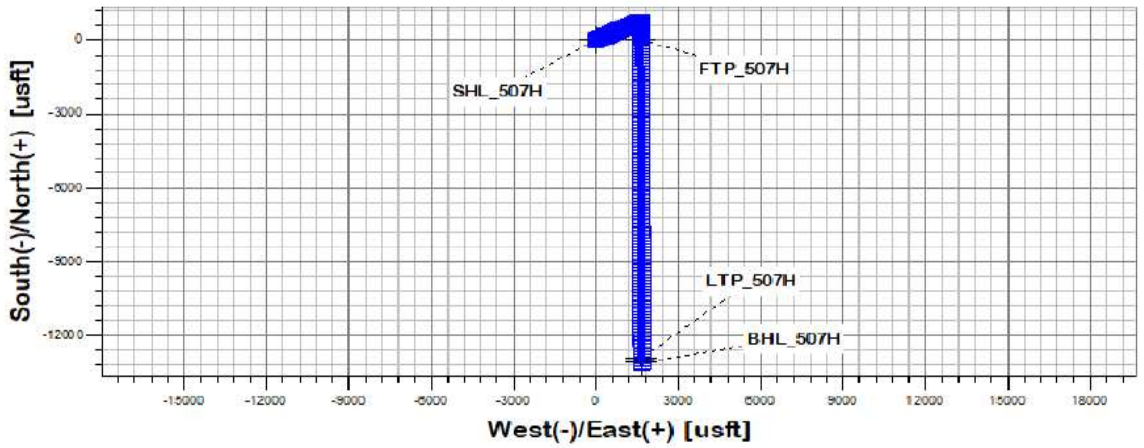
10. Anticipated Starting Date and Duration of Operations

Section 10 Summary:

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

Baker Lake Unit 21 BD 507H





Formation	TVDSS (feet)	TVD (feet)
Rustler	2186	1,077'
Salado	1874	1,389'
Base of Salt	-337'	3600
Delaware	-545'	3,808'
Cherry Canyon	-1491	4,754'
Brushy Canyon	-3,010'	6,273'
Basal Brushy Canyon	-4,066'	7329
Bone Spring Lm.	-4,349'	7,612'
Avalon	-4,482"'	7,745'
Lower Avalon	-4,911'	8,174'
1st Bone Spring Lime	-5,076'	8339
1st Bone Spring Sand	-5,293'	8556
2nd Bone Spring Shale	-5,540'	8,803'
2nd Bone Spring Lime	-5,781'	9,044'
2nd Bone Spring Sand	-6,141'	9404
2nd Bone Spring T/B Carb	-6285	9,548'
2nd Bone Spring Sand (Lwr)	-6,371'	9,634'
2nd BS Sand Lower Landing	-6,371'	9634
3rd Bone Spring Lime	-6,449'	9,712'
Harkey	-6,793'	10,056'

Long Lead_Well Planning

PLU 21 BD
Poker Lake Unit 21 BD 507H
Poker Lake Unit 21 BD 507H

OH

Plan: Plan 1

Standard Planning Report

20 February, 2025

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project PLU 21 BD

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Poker Lake Unit 21 BD 507H

Site Position:		**Northing:**	403,263.50 usft	**Latitude:**	32° 6' 28.426 N
From:	Map	**Easting:**	638,642.60 usft	**Longitude:**	103° 53' 8.046 W
Position Uncertainty:	3.0 usft	**Slot Radius:**	13-3/16 "		

Well Poker Lake Unit 21 BD 507H

Well Position	**+N/-S**	0.0 usft	**Northing:**	403,263.50 usft	**Latitude:**	32° 6' 28.426 N
	+E/-W	0.0 usft	**Easting:**	638,642.60 usft	**Longitude:**	103° 53' 8.046 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,231.0 usft
Grid Convergence:		0.24 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	2/19/2025	6.25	59.63	47,011.89333333

Design Plan 1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	179.85

Plan Survey Tool Program **Date** 2/19/2025

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	23,536.0	Plan 1 (OH)	XOM_R2OWSG MWD+IFR1+	
				OWSG MWD + IFR1 + Multi-St	

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,337.1	24.74	65.03	2,299.0	111.0	238.4	2.00	2.00	0.00	65.03	
5,392.6	24.74	65.03	5,074.0	651.0	1,397.7	0.00	0.00	0.00	0.00	
6,629.7	0.00	0.00	6,273.0	762.0	1,636.1	2.00	-2.00	0.00	180.00	
9,274.5	0.00	0.00	8,917.8	762.0	1,636.1	0.00	0.00	0.00	0.00	
10,399.5	90.00	179.85	9,634.0	45.8	1,638.0	8.00	8.00	0.00	179.85	FTP_507H
23,386.0	90.00	179.85	9,634.0	-12,940.7	1,672.9	0.00	0.00	0.00	0.00	LTP_507H
23,536.0	90.00	179.85	9,634.0	-13,090.7	1,673.3	0.00	0.00	0.00	0.00	BHL_507H

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL_507H									
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,077.0	0.00	0.00	1,077.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	2.00	65.03	1,200.0	0.7	1.6	-0.7	2.00	2.00	0.00
1,300.0	4.00	65.03	1,299.8	2.9	6.3	-2.9	2.00	2.00	0.00
1,389.5	5.79	65.03	1,389.0	6.2	13.2	-6.1	2.00	2.00	0.00
Salado									
1,400.0	6.00	65.03	1,399.5	6.6	14.2	-6.6	2.00	2.00	0.00
1,500.0	8.00	65.03	1,498.7	11.8	25.3	-11.7	2.00	2.00	0.00
1,600.0	10.00	65.03	1,597.5	18.4	39.5	-18.3	2.00	2.00	0.00
1,700.0	12.00	65.03	1,695.6	26.4	56.7	-26.3	2.00	2.00	0.00
1,800.0	14.00	65.03	1,793.1	35.9	77.1	-35.7	2.00	2.00	0.00
1,900.0	16.00	65.03	1,889.6	46.9	100.6	-46.6	2.00	2.00	0.00
2,000.0	18.00	65.03	1,985.3	59.2	127.1	-58.9	2.00	2.00	0.00
2,100.0	20.00	65.03	2,079.8	72.9	156.6	-72.5	2.00	2.00	0.00
2,200.0	22.00	65.03	2,173.2	88.1	189.1	-87.6	2.00	2.00	0.00
2,300.0	24.00	65.03	2,265.2	104.6	224.5	-104.0	2.00	2.00	0.00
2,337.1	24.74	65.03	2,299.0	111.0	238.4	-110.4	2.00	2.00	0.00
2,400.0	24.74	65.03	2,356.1	122.1	262.3	-121.5	0.00	0.00	0.00
2,500.0	24.74	65.03	2,447.0	139.8	300.2	-139.0	0.00	0.00	0.00
2,600.0	24.74	65.03	2,537.8	157.5	338.1	-156.6	0.00	0.00	0.00
2,700.0	24.74	65.03	2,628.6	175.2	376.1	-174.2	0.00	0.00	0.00
2,800.0	24.74	65.03	2,719.4	192.8	414.0	-191.7	0.00	0.00	0.00
2,900.0	24.74	65.03	2,810.2	210.5	452.0	-209.3	0.00	0.00	0.00
3,000.0	24.74	65.03	2,901.1	228.2	489.9	-226.9	0.00	0.00	0.00
3,100.0	24.74	65.03	2,991.9	245.8	527.8	-244.5	0.00	0.00	0.00
3,200.0	24.74	65.03	3,082.7	263.5	565.8	-262.0	0.00	0.00	0.00
3,300.0	24.74	65.03	3,173.5	281.2	603.7	-279.6	0.00	0.00	0.00
3,400.0	24.74	65.03	3,264.3	298.9	641.7	-297.2	0.00	0.00	0.00
3,500.0	24.74	65.03	3,355.2	316.5	679.6	-314.7	0.00	0.00	0.00
3,600.0	24.74	65.03	3,446.0	334.2	717.6	-332.3	0.00	0.00	0.00
3,700.0	24.74	65.03	3,536.8	351.9	755.5	-349.9	0.00	0.00	0.00
3,769.6	24.74	65.03	3,600.0	364.2	781.9	-362.1	0.00	0.00	0.00
Base of Salt									
3,800.0	24.74	65.03	3,627.6	369.5	793.4	-367.5	0.00	0.00	0.00
3,900.0	24.74	65.03	3,718.4	387.2	831.4	-385.0	0.00	0.00	0.00
3,998.6	24.74	65.03	3,808.0	404.6	868.8	-402.4	0.00	0.00	0.00
Delaware									
4,000.0	24.74	65.03	3,809.2	404.9	869.3	-402.6	0.00	0.00	0.00
4,100.0	24.74	65.03	3,900.1	422.6	907.3	-420.2	0.00	0.00	0.00
4,200.0	24.74	65.03	3,990.9	440.2	945.2	-437.7	0.00	0.00	0.00
4,300.0	24.74	65.03	4,081.7	457.9	983.1	-455.3	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,400.0	24.74	65.03	4,172.5	475.6	1,021.1	-472.9	0.00	0.00	0.00
4,500.0	24.74	65.03	4,263.3	493.2	1,059.0	-490.5	0.00	0.00	0.00
4,600.0	24.74	65.03	4,354.2	510.9	1,097.0	-508.0	0.00	0.00	0.00
4,700.0	24.74	65.03	4,445.0	528.6	1,134.9	-525.6	0.00	0.00	0.00
4,800.0	24.74	65.03	4,535.8	546.2	1,172.8	-543.2	0.00	0.00	0.00
4,900.0	24.74	65.03	4,626.6	563.9	1,210.8	-560.7	0.00	0.00	0.00
5,000.0	24.74	65.03	4,717.4	581.6	1,248.7	-578.3	0.00	0.00	0.00
5,040.2	24.74	65.03	4,754.0	588.7	1,264.0	-585.4	0.00	0.00	0.00
Cherry Canyon									
5,100.0	24.74	65.03	4,808.3	599.3	1,286.7	-595.9	0.00	0.00	0.00
5,200.0	24.74	65.03	4,899.1	616.9	1,324.6	-613.5	0.00	0.00	0.00
5,300.0	24.74	65.03	4,989.9	634.6	1,362.6	-631.0	0.00	0.00	0.00
5,392.6	24.74	65.03	5,074.0	651.0	1,397.7	-647.3	0.00	0.00	0.00
5,400.0	24.59	65.03	5,080.7	652.3	1,400.5	-648.6	2.00	-2.00	0.00
5,500.0	22.59	65.03	5,172.4	669.2	1,436.8	-665.4	2.00	-2.00	0.00
5,600.0	20.59	65.03	5,265.3	684.7	1,470.1	-680.9	2.00	-2.00	0.00
5,700.0	18.59	65.03	5,359.5	698.9	1,500.5	-694.9	2.00	-2.00	0.00
5,800.0	16.59	65.03	5,454.9	711.6	1,527.9	-707.6	2.00	-2.00	0.00
5,900.0	14.59	65.03	5,551.2	723.0	1,552.3	-718.9	2.00	-2.00	0.00
6,000.0	12.59	65.03	5,648.4	732.9	1,573.6	-728.8	2.00	-2.00	0.00
6,100.0	10.59	65.03	5,746.3	741.4	1,591.8	-737.2	2.00	-2.00	0.00
6,200.0	8.59	65.03	5,844.9	748.4	1,606.9	-744.2	2.00	-2.00	0.00
6,300.0	6.59	65.03	5,944.0	754.0	1,618.9	-749.8	2.00	-2.00	0.00
6,400.0	4.59	65.03	6,043.6	758.1	1,627.7	-753.8	2.00	-2.00	0.00
6,500.0	2.59	65.03	6,143.4	760.8	1,633.4	-756.5	2.00	-2.00	0.00
6,600.0	0.59	65.03	6,243.3	761.9	1,635.9	-757.6	2.00	-2.00	0.00
6,629.7	0.00	0.00	6,273.0	762.0	1,636.1	-757.7	2.00	-2.00	0.00
Brushy Canyon									
6,700.0	0.00	0.00	6,343.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
6,800.0	0.00	0.00	6,443.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
6,900.0	0.00	0.00	6,543.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,000.0	0.00	0.00	6,643.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,100.0	0.00	0.00	6,743.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,200.0	0.00	0.00	6,843.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,300.0	0.00	0.00	6,943.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,400.0	0.00	0.00	7,043.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,500.0	0.00	0.00	7,143.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,600.0	0.00	0.00	7,243.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,685.7	0.00	0.00	7,329.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
Basal Brushy Canyon									
7,700.0	0.00	0.00	7,343.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,800.0	0.00	0.00	7,443.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,900.0	0.00	0.00	7,543.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
7,968.7	0.00	0.00	7,612.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
Bone Spring Lm.									
8,000.0	0.00	0.00	7,643.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,100.0	0.00	0.00	7,743.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,101.7	0.00	0.00	7,745.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
Avalon									
8,200.0	0.00	0.00	7,843.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,300.0	0.00	0.00	7,943.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,400.0	0.00	0.00	8,043.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,500.0	0.00	0.00	8,143.3	762.0	1,636.1	-757.7	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,530.7	0.00	0.00	8,174.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
Lower Avalon									
8,600.0	0.00	0.00	8,243.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,695.7	0.00	0.00	8,339.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
1st Bone Spring Lime									
8,700.0	0.00	0.00	8,343.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,800.0	0.00	0.00	8,443.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,900.0	0.00	0.00	8,543.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
8,912.7	0.00	0.00	8,556.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
1st Bone Spring Sand									
9,000.0	0.00	0.00	8,643.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
9,100.0	0.00	0.00	8,743.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
9,159.7	0.00	0.00	8,803.0	762.0	1,636.1	-757.7	0.00	0.00	0.00
2nd Bone Spring Shale									
9,200.0	0.00	0.00	8,843.3	762.0	1,636.1	-757.7	0.00	0.00	0.00
9,274.5	0.00	0.00	8,917.8	762.0	1,636.1	-757.7	0.00	0.00	0.00
9,300.0	2.04	179.85	8,943.3	761.5	1,636.1	-757.3	8.00	8.00	0.00
9,400.0	10.04	179.85	9,042.7	751.0	1,636.1	-746.7	8.00	8.00	0.00
9,401.3	10.15	179.85	9,044.0	750.8	1,636.1	-746.5	8.00	8.00	0.00
2nd Bone Spring Lime									
9,500.0	18.04	179.85	9,139.6	726.8	1,636.2	-722.5	8.00	8.00	0.00
9,600.0	26.04	179.85	9,232.2	689.3	1,636.3	-685.0	8.00	8.00	0.00
9,700.0	34.04	179.85	9,318.7	639.3	1,636.4	-635.0	8.00	8.00	0.00
9,800.0	42.04	179.85	9,397.4	577.7	1,636.6	-573.4	8.00	8.00	0.00
9,808.9	42.75	179.85	9,404.0	571.7	1,636.6	-567.4	8.00	8.00	0.00
2nd Bone Spring Sand									
9,900.0	50.04	179.85	9,466.8	505.8	1,636.8	-501.5	8.00	8.00	0.00
10,000.0	58.04	179.85	9,525.4	424.9	1,637.0	-420.6	8.00	8.00	0.00
10,044.9	61.63	179.85	9,548.0	386.1	1,637.1	-381.8	8.00	8.00	0.00
2nd Bone Spring T/B Carb									
10,100.0	66.04	179.85	9,572.3	336.6	1,637.2	-332.3	8.00	8.00	0.00
10,200.0	74.04	179.85	9,606.4	242.7	1,637.5	-238.4	8.00	8.00	0.00
10,300.0	82.04	179.85	9,627.1	145.0	1,637.7	-140.7	8.00	8.00	0.00
10,399.5	90.00	179.85	9,634.0	45.8	1,638.0	-41.5	8.00	8.00	0.00
2nd Bone Spring Sand (Lwr) - 2nd BS Sand Lower Landing - FTP_507H									
10,400.0	90.00	179.85	9,634.0	45.3	1,638.0	-41.0	0.00	0.00	0.00
10,500.0	90.00	179.85	9,634.0	-54.7	1,638.3	59.0	0.00	0.00	0.00
10,600.0	90.00	179.85	9,634.0	-154.7	1,638.5	159.0	0.00	0.00	0.00
10,700.0	90.00	179.85	9,634.0	-254.7	1,638.8	259.0	0.00	0.00	0.00
10,800.0	90.00	179.85	9,634.0	-354.7	1,639.1	359.0	0.00	0.00	0.00
10,900.0	90.00	179.85	9,634.0	-454.7	1,639.3	459.0	0.00	0.00	0.00
11,000.0	90.00	179.85	9,634.0	-554.7	1,639.6	559.0	0.00	0.00	0.00
11,100.0	90.00	179.85	9,634.0	-654.7	1,639.9	659.0	0.00	0.00	0.00
11,200.0	90.00	179.85	9,634.0	-754.7	1,640.2	759.0	0.00	0.00	0.00
11,300.0	90.00	179.85	9,634.0	-854.7	1,640.4	859.0	0.00	0.00	0.00
11,400.0	90.00	179.85	9,634.0	-954.7	1,640.7	959.0	0.00	0.00	0.00
11,500.0	90.00	179.85	9,634.0	-1,054.7	1,641.0	1,059.0	0.00	0.00	0.00
11,600.0	90.00	179.85	9,634.0	-1,154.7	1,641.2	1,159.0	0.00	0.00	0.00
11,700.0	90.00	179.85	9,634.0	-1,254.7	1,641.5	1,259.0	0.00	0.00	0.00
11,800.0	90.00	179.85	9,634.0	-1,354.7	1,641.8	1,359.0	0.00	0.00	0.00
11,900.0	90.00	179.85	9,634.0	-1,454.7	1,642.0	1,459.0	0.00	0.00	0.00
12,000.0	90.00	179.85	9,634.0	-1,554.7	1,642.3	1,559.0	0.00	0.00	0.00
12,100.0	90.00	179.85	9,634.0	-1,654.7	1,642.6	1,659.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,200.0	90.00	179.85	9,634.0	-1,754.7	1,642.8	1,759.0	0.00	0.00	0.00
12,300.0	90.00	179.85	9,634.0	-1,854.7	1,643.1	1,859.0	0.00	0.00	0.00
12,400.0	90.00	179.85	9,634.0	-1,954.7	1,643.4	1,959.0	0.00	0.00	0.00
12,500.0	90.00	179.85	9,634.0	-2,054.7	1,643.6	2,059.0	0.00	0.00	0.00
12,600.0	90.00	179.85	9,634.0	-2,154.7	1,643.9	2,159.0	0.00	0.00	0.00
12,700.0	90.00	179.85	9,634.0	-2,254.7	1,644.2	2,259.0	0.00	0.00	0.00
12,800.0	90.00	179.85	9,634.0	-2,354.7	1,644.5	2,359.0	0.00	0.00	0.00
12,900.0	90.00	179.85	9,634.0	-2,454.7	1,644.7	2,459.0	0.00	0.00	0.00
13,000.0	90.00	179.85	9,634.0	-2,554.7	1,645.0	2,559.0	0.00	0.00	0.00
13,100.0	90.00	179.85	9,634.0	-2,654.7	1,645.3	2,659.0	0.00	0.00	0.00
13,200.0	90.00	179.85	9,634.0	-2,754.7	1,645.5	2,759.0	0.00	0.00	0.00
13,300.0	90.00	179.85	9,634.0	-2,854.7	1,645.8	2,859.0	0.00	0.00	0.00
13,400.0	90.00	179.85	9,634.0	-2,954.7	1,646.1	2,959.0	0.00	0.00	0.00
13,500.0	90.00	179.85	9,634.0	-3,054.7	1,646.3	3,059.0	0.00	0.00	0.00
13,600.0	90.00	179.85	9,634.0	-3,154.7	1,646.6	3,159.0	0.00	0.00	0.00
13,700.0	90.00	179.85	9,634.0	-3,254.7	1,646.9	3,259.0	0.00	0.00	0.00
13,800.0	90.00	179.85	9,634.0	-3,354.7	1,647.1	3,359.0	0.00	0.00	0.00
13,900.0	90.00	179.85	9,634.0	-3,454.7	1,647.4	3,459.0	0.00	0.00	0.00
14,000.0	90.00	179.85	9,634.0	-3,554.7	1,647.7	3,559.0	0.00	0.00	0.00
14,100.0	90.00	179.85	9,634.0	-3,654.7	1,647.9	3,659.0	0.00	0.00	0.00
14,200.0	90.00	179.85	9,634.0	-3,754.7	1,648.2	3,759.0	0.00	0.00	0.00
14,300.0	90.00	179.85	9,634.0	-3,854.7	1,648.5	3,859.0	0.00	0.00	0.00
14,400.0	90.00	179.85	9,634.0	-3,954.7	1,648.8	3,959.0	0.00	0.00	0.00
14,500.0	90.00	179.85	9,634.0	-4,054.7	1,649.0	4,059.0	0.00	0.00	0.00
14,600.0	90.00	179.85	9,634.0	-4,154.7	1,649.3	4,159.0	0.00	0.00	0.00
14,700.0	90.00	179.85	9,634.0	-4,254.7	1,649.6	4,259.0	0.00	0.00	0.00
14,800.0	90.00	179.85	9,634.0	-4,354.7	1,649.8	4,359.0	0.00	0.00	0.00
14,900.0	90.00	179.85	9,634.0	-4,454.7	1,650.1	4,459.0	0.00	0.00	0.00
15,000.0	90.00	179.85	9,634.0	-4,554.7	1,650.4	4,559.0	0.00	0.00	0.00
15,100.0	90.00	179.85	9,634.0	-4,654.7	1,650.6	4,659.0	0.00	0.00	0.00
15,200.0	90.00	179.85	9,634.0	-4,754.7	1,650.9	4,759.0	0.00	0.00	0.00
15,300.0	90.00	179.85	9,634.0	-4,854.7	1,651.2	4,859.0	0.00	0.00	0.00
15,400.0	90.00	179.85	9,634.0	-4,954.7	1,651.4	4,959.0	0.00	0.00	0.00
15,500.0	90.00	179.85	9,634.0	-5,054.7	1,651.7	5,059.0	0.00	0.00	0.00
15,600.0	90.00	179.85	9,634.0	-5,154.7	1,652.0	5,159.0	0.00	0.00	0.00
15,700.0	90.00	179.85	9,634.0	-5,254.7	1,652.2	5,259.0	0.00	0.00	0.00
15,800.0	90.00	179.85	9,634.0	-5,354.7	1,652.5	5,359.0	0.00	0.00	0.00
15,900.0	90.00	179.85	9,634.0	-5,454.7	1,652.8	5,459.0	0.00	0.00	0.00
16,000.0	90.00	179.85	9,634.0	-5,554.7	1,653.1	5,559.0	0.00	0.00	0.00
16,100.0	90.00	179.85	9,634.0	-5,654.7	1,653.3	5,659.0	0.00	0.00	0.00
16,200.0	90.00	179.85	9,634.0	-5,754.7	1,653.6	5,759.0	0.00	0.00	0.00
16,300.0	90.00	179.85	9,634.0	-5,854.7	1,653.9	5,859.0	0.00	0.00	0.00
16,400.0	90.00	179.85	9,634.0	-5,954.7	1,654.1	5,959.0	0.00	0.00	0.00
16,500.0	90.00	179.85	9,634.0	-6,054.7	1,654.4	6,059.0	0.00	0.00	0.00
16,600.0	90.00	179.85	9,634.0	-6,154.7	1,654.7	6,159.0	0.00	0.00	0.00
16,700.0	90.00	179.85	9,634.0	-6,254.7	1,654.9	6,259.0	0.00	0.00	0.00
16,800.0	90.00	179.85	9,634.0	-6,354.7	1,655.2	6,359.0	0.00	0.00	0.00
16,900.0	90.00	179.85	9,634.0	-6,454.7	1,655.5	6,459.0	0.00	0.00	0.00
17,000.0	90.00	179.85	9,634.0	-6,554.7	1,655.7	6,559.0	0.00	0.00	0.00
17,100.0	90.00	179.85	9,634.0	-6,654.7	1,656.0	6,659.0	0.00	0.00	0.00
17,200.0	90.00	179.85	9,634.0	-6,754.7	1,656.3	6,759.0	0.00	0.00	0.00
17,300.0	90.00	179.85	9,634.0	-6,854.7	1,656.5	6,859.0	0.00	0.00	0.00
17,400.0	90.00	179.85	9,634.0	-6,954.7	1,656.8	6,959.0	0.00	0.00	0.00
17,500.0	90.00	179.85	9,634.0	-7,054.7	1,657.1	7,059.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,600.0	90.00	179.85	9,634.0	-7,154.7	1,657.4	7,159.0	0.00	0.00	0.00
17,700.0	90.00	179.85	9,634.0	-7,254.7	1,657.6	7,259.0	0.00	0.00	0.00
17,800.0	90.00	179.85	9,634.0	-7,354.7	1,657.9	7,359.0	0.00	0.00	0.00
17,900.0	90.00	179.85	9,634.0	-7,454.7	1,658.2	7,459.0	0.00	0.00	0.00
18,000.0	90.00	179.85	9,634.0	-7,554.7	1,658.4	7,559.0	0.00	0.00	0.00
18,100.0	90.00	179.85	9,634.0	-7,654.7	1,658.7	7,659.0	0.00	0.00	0.00
18,200.0	90.00	179.85	9,634.0	-7,754.7	1,659.0	7,759.0	0.00	0.00	0.00
18,300.0	90.00	179.85	9,634.0	-7,854.7	1,659.2	7,859.0	0.00	0.00	0.00
18,400.0	90.00	179.85	9,634.0	-7,954.7	1,659.5	7,959.0	0.00	0.00	0.00
18,500.0	90.00	179.85	9,634.0	-8,054.7	1,659.8	8,059.0	0.00	0.00	0.00
18,600.0	90.00	179.85	9,634.0	-8,154.7	1,660.0	8,159.0	0.00	0.00	0.00
18,700.0	90.00	179.85	9,634.0	-8,254.7	1,660.3	8,259.0	0.00	0.00	0.00
18,800.0	90.00	179.85	9,634.0	-8,354.7	1,660.6	8,359.0	0.00	0.00	0.00
18,900.0	90.00	179.85	9,634.0	-8,454.7	1,660.8	8,459.0	0.00	0.00	0.00
19,000.0	90.00	179.85	9,634.0	-8,554.7	1,661.1	8,559.0	0.00	0.00	0.00
19,100.0	90.00	179.85	9,634.0	-8,654.7	1,661.4	8,659.0	0.00	0.00	0.00
19,200.0	90.00	179.85	9,634.0	-8,754.7	1,661.7	8,759.0	0.00	0.00	0.00
19,300.0	90.00	179.85	9,634.0	-8,854.7	1,661.9	8,859.0	0.00	0.00	0.00
19,400.0	90.00	179.85	9,634.0	-8,954.7	1,662.2	8,959.0	0.00	0.00	0.00
19,500.0	90.00	179.85	9,634.0	-9,054.7	1,662.5	9,059.0	0.00	0.00	0.00
19,600.0	90.00	179.85	9,634.0	-9,154.7	1,662.7	9,159.0	0.00	0.00	0.00
19,700.0	90.00	179.85	9,634.0	-9,254.7	1,663.0	9,259.0	0.00	0.00	0.00
19,800.0	90.00	179.85	9,634.0	-9,354.7	1,663.3	9,359.0	0.00	0.00	0.00
19,900.0	90.00	179.85	9,634.0	-9,454.7	1,663.5	9,459.0	0.00	0.00	0.00
20,000.0	90.00	179.85	9,634.0	-9,554.7	1,663.8	9,559.0	0.00	0.00	0.00
20,100.0	90.00	179.85	9,634.0	-9,654.7	1,664.1	9,659.0	0.00	0.00	0.00
20,200.0	90.00	179.85	9,634.0	-9,754.7	1,664.3	9,759.0	0.00	0.00	0.00
20,300.0	90.00	179.85	9,634.0	-9,854.7	1,664.6	9,859.0	0.00	0.00	0.00
20,400.0	90.00	179.85	9,634.0	-9,954.7	1,664.9	9,959.0	0.00	0.00	0.00
20,500.0	90.00	179.85	9,634.0	-10,054.7	1,665.1	10,059.0	0.00	0.00	0.00
20,600.0	90.00	179.85	9,634.0	-10,154.7	1,665.4	10,159.0	0.00	0.00	0.00
20,700.0	90.00	179.85	9,634.0	-10,254.7	1,665.7	10,259.0	0.00	0.00	0.00
20,800.0	90.00	179.85	9,634.0	-10,354.7	1,666.0	10,359.0	0.00	0.00	0.00
20,900.0	90.00	179.85	9,634.0	-10,454.7	1,666.2	10,459.0	0.00	0.00	0.00
21,000.0	90.00	179.85	9,634.0	-10,554.7	1,666.5	10,559.0	0.00	0.00	0.00
21,100.0	90.00	179.85	9,634.0	-10,654.7	1,666.8	10,659.0	0.00	0.00	0.00
21,200.0	90.00	179.85	9,634.0	-10,754.7	1,667.0	10,759.0	0.00	0.00	0.00
21,300.0	90.00	179.85	9,634.0	-10,854.7	1,667.3	10,859.0	0.00	0.00	0.00
21,400.0	90.00	179.85	9,634.0	-10,954.7	1,667.6	10,959.0	0.00	0.00	0.00
21,500.0	90.00	179.85	9,634.0	-11,054.7	1,667.8	11,059.0	0.00	0.00	0.00
21,600.0	90.00	179.85	9,634.0	-11,154.7	1,668.1	11,159.0	0.00	0.00	0.00
21,700.0	90.00	179.85	9,634.0	-11,254.7	1,668.4	11,259.0	0.00	0.00	0.00
21,800.0	90.00	179.85	9,634.0	-11,354.7	1,668.6	11,359.0	0.00	0.00	0.00
21,900.0	90.00	179.85	9,634.0	-11,454.7	1,668.9	11,459.0	0.00	0.00	0.00
22,000.0	90.00	179.85	9,634.0	-11,554.7	1,669.2	11,559.0	0.00	0.00	0.00
22,100.0	90.00	179.85	9,634.0	-11,654.7	1,669.4	11,659.0	0.00	0.00	0.00
22,200.0	90.00	179.85	9,634.0	-11,754.7	1,669.7	11,759.0	0.00	0.00	0.00
22,300.0	90.00	179.85	9,634.0	-11,854.7	1,670.0	11,859.0	0.00	0.00	0.00
22,400.0	90.00	179.85	9,634.0	-11,954.7	1,670.3	11,959.0	0.00	0.00	0.00
22,500.0	90.00	179.85	9,634.0	-12,054.7	1,670.5	12,059.0	0.00	0.00	0.00
22,600.0	90.00	179.85	9,634.0	-12,154.7	1,670.8	12,159.0	0.00	0.00	0.00
22,700.0	90.00	179.85	9,634.0	-12,254.7	1,671.1	12,259.0	0.00	0.00	0.00
22,800.0	90.00	179.85	9,634.0	-12,354.7	1,671.3	12,359.0	0.00	0.00	0.00
22,900.0	90.00	179.85	9,634.0	-12,454.7	1,671.6	12,459.0	0.00	0.00	0.00

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
23,000.0	90.00	179.85	9,634.0	-12,554.7	1,671.9	12,559.0	0.00	0.00	0.00
23,100.0	90.00	179.85	9,634.0	-12,654.7	1,672.1	12,659.0	0.00	0.00	0.00
23,200.0	90.00	179.85	9,634.0	-12,754.7	1,672.4	12,759.0	0.00	0.00	0.00
23,300.0	90.00	179.85	9,634.0	-12,854.7	1,672.7	12,859.0	0.00	0.00	0.00
23,386.0	90.00	179.85	9,634.0	-12,940.7	1,672.9	12,945.0	0.00	0.00	0.00
LTP_507H									
23,400.0	90.00	179.85	9,634.0	-12,954.7	1,672.9	12,959.0	0.00	0.00	0.00
23,500.0	90.00	179.85	9,634.0	-13,054.7	1,673.2	13,059.0	0.00	0.00	0.00
23,536.0	90.00	179.85	9,634.0	-13,090.7	1,673.3	13,095.0	0.00	0.00	0.00
BHL_507H									

Design Targets

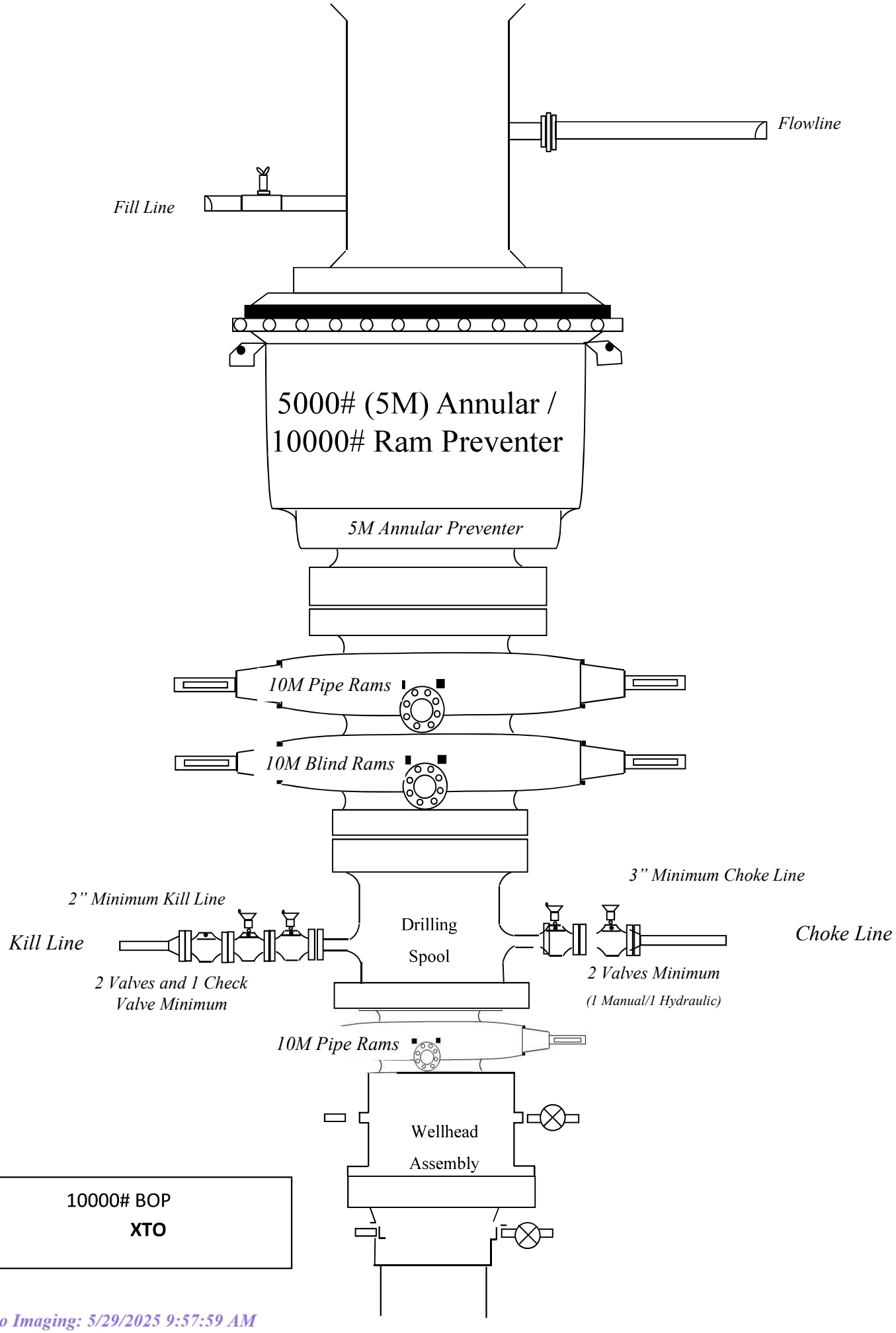
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL_507H - plan hits target center - Point	0.00	0.00	0.0	0.0	0.0	403,263.50	638,642.60	32° 6' 28.426 N	103° 53' 8.046 W
LTP_507H - plan hits target center - Point	0.00	0.00	9,634.0	-12,940.7	1,672.9	390,322.80	640,315.50	32° 4' 20.292 N	103° 52' 49.228 W
FTP_507H - plan hits target center - Point	0.00	0.00	9,634.0	45.8	1,638.0	403,309.30	640,280.60	32° 6' 28.811 N	103° 52' 49.000 W
BHL_507H - plan misses target center by 0.7usft at 23536.0usft MD (9634.0 TVD, -13090.7 N, 1673.3 E) - Point	0.00	0.00	9,634.0	-13,090.7	1,674.0	390,172.80	640,316.60	32° 4' 18.807 N	103° 52' 49.223 W

Planning Report

Database:	EDM 5000.17 Single User Db	**Local Co-ordinate Reference:**	Well Poker Lake Unit 21 BD 507H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB (+32) @ 3263.0usft
Project:	PLU 21 BD	**MD Reference:**	RKB (+32) @ 3263.0usft
Site:	Poker Lake Unit 21 BD 507H	**North Reference:**	Grid
Well:	Poker Lake Unit 21 BD 507H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Formations

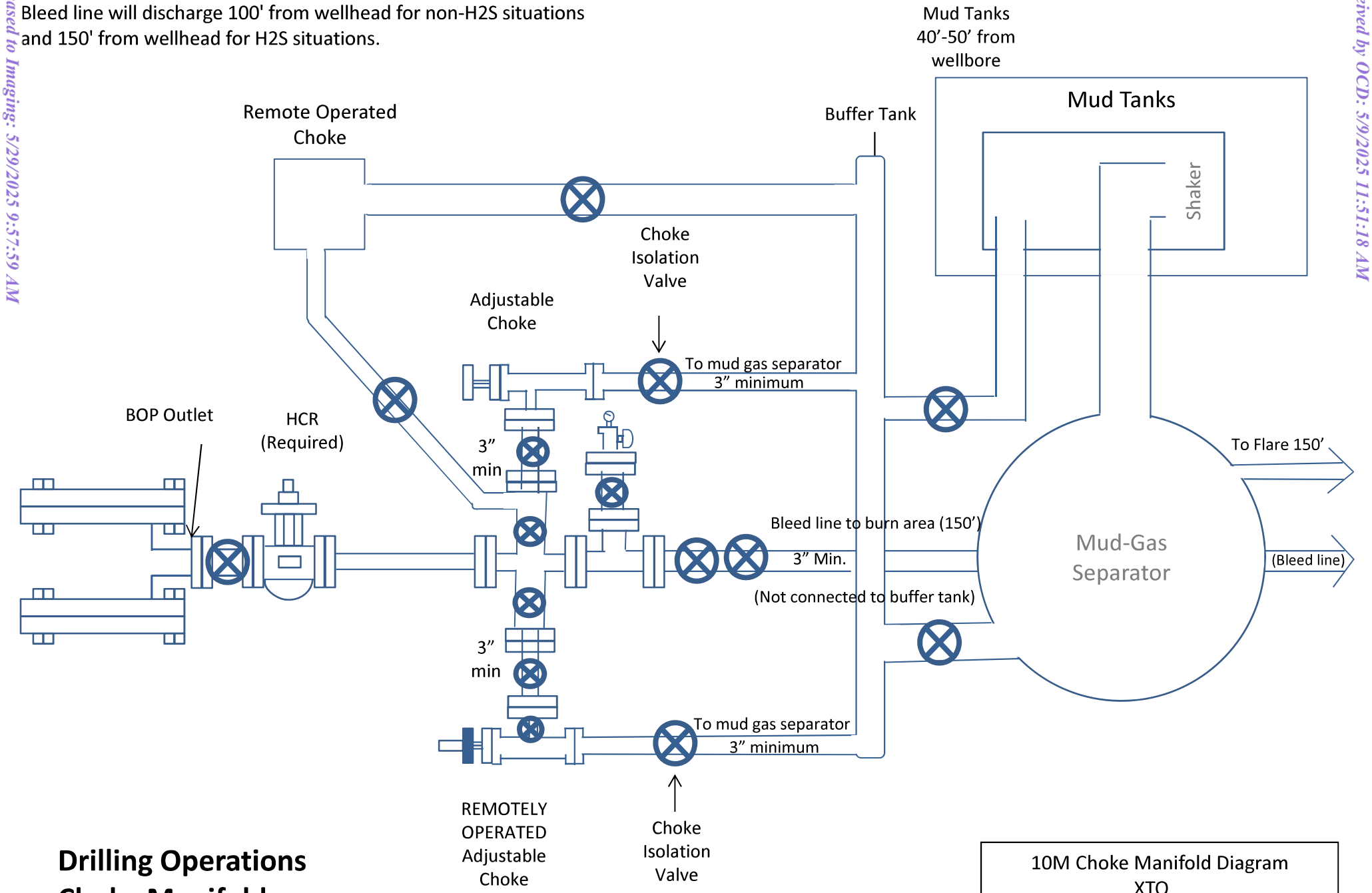
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,077.0	1,077.0	Rustler			
1,389.5	1,389.0	Salado			
3,769.6	3,600.0	Base of Salt			
3,998.6	3,808.0	Delaware			
5,040.2	4,754.0	Cherry Canyon			
6,629.7	6,273.0	Brushy Canyon			
7,685.7	7,329.0	Basal Brushy Canyon			
7,968.7	7,612.0	Bone Spring Lm.			
8,101.7	7,745.0	Avalon			
8,530.7	8,174.0	Lower Avalon			
8,695.7	8,339.0	1st Bone Spring Lime			
8,912.7	8,556.0	1st Bone Spring Sand			
9,159.7	8,803.0	2nd Bone Spring Shale			
9,401.3	9,044.0	2nd Bone Spring Lime			
9,808.9	9,404.0	2nd Bone Spring Sand			
10,044.9	9,548.0	2nd Bone Spring T/B Carb			
10,399.5	9,634.0	2nd Bone Spring Sand (Lwr)			
10,399.5	9,634.0	2nd BS Sand Lower Landing			



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

API BTC

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: **-**

Outside Diameter	9.625 in.	**Wall Thickness**	0.395 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	9.625 in.	**Drift**	8.679 in.	**SMYS**	80,000 psi
Wall Thickness	0.395 in.	**Plain End Weight**	38.97 lb/ft	**Min UTS**	95,000 psi
Nominal Weight	40 lb/ft	**OD Tolerance**	API	**Body Yield Strength**	916 x1000 lb
Nominal ID	8.835 in.			**Min. Internal Yield Pressure**	5750 psi
				Collapse Pressure	3870 psi
				Max. Allowed Bending	38 °/100 ft

Connection Data

Geometry		Performance	
Thread per In	5	**Joint Strength**	947 x1000 lb
Connection OD	10.625 in.	**Coupling Face Load**	837 x1000 lb
Hand Tight Stand Off	1 in.	**Internal Pressure Capacity**	5750 psi

Notes

For products according to API Standards 5CT & 5B; Performance calculated considering API Technical Report 5C3 (Sections 9 & 10) equations.
For geometrical and steel grades combinations not considered in the API Standards 5CT and/or 5B; Performance calculations indirectly derived from API Technical Report 5C3 (Sections 9 & 10) equations.
Couplings OD are shown according to current API 5CT 10th Edition.

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				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**	11,100 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	6.300 in.	**Tension Efficiency**	100 %	**Minimum**	13,860 ft-lb
Coupling Length	8.408 in.	**Joint Yield Strength**	641 x1000 lb	**Optimum**	15,400 ft-lb
Connection ID	4.778 in.	**Internal Pressure Capacity**	12,640 psi	**Maximum**	16,940 ft-lb
Make-up Loss	4.204 in.	**Compression Efficiency**	100 %		
Threads per inch	5	**Compression Strength**	641 x1000 lb	**Operation Limit Torques**	
Connection OD Option	Regular	**Max. Allowable Bending**	92 °/100 ft	**Operating Torque**	26,350 ft-lb
		External Pressure Capacity	11,100 psi	**Yield Torque**	29,300 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

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

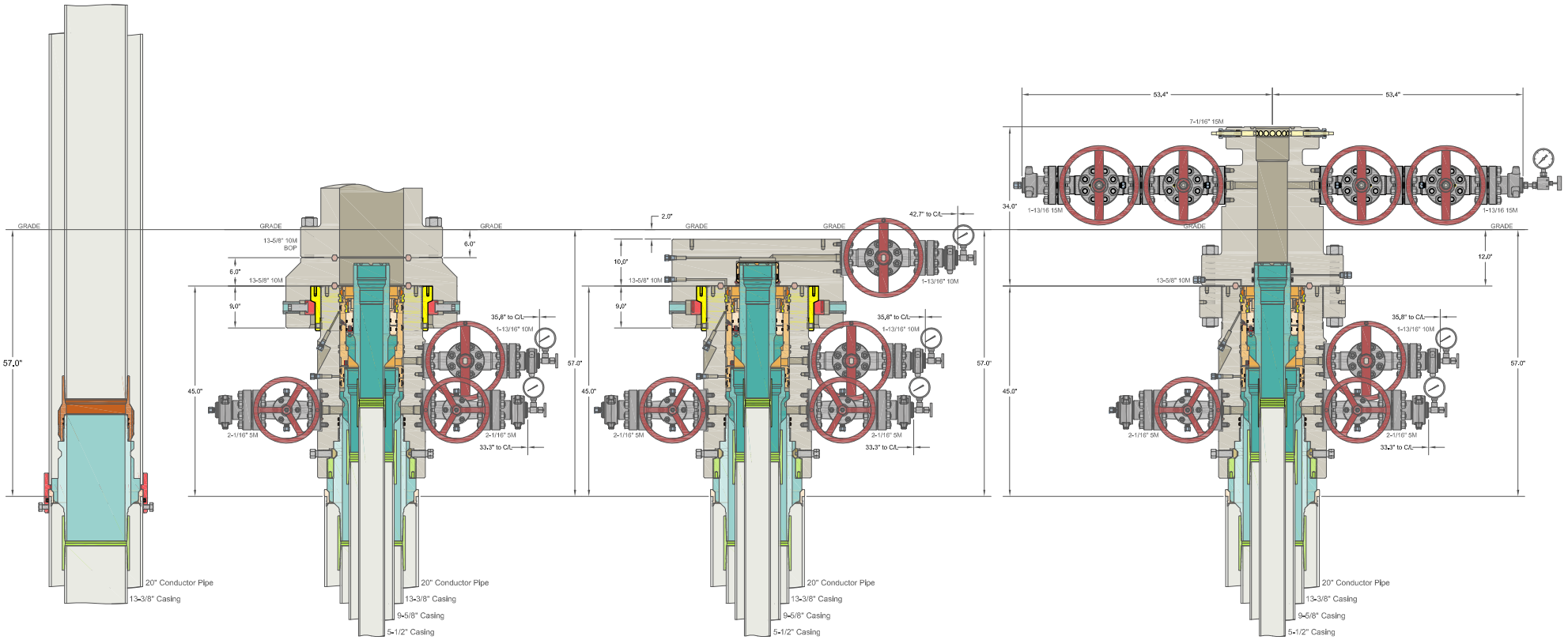
Connection Data

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



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

(20") x 13-3/8" x 9-5/8" x 5-1/2" MBU-3T-CFL-R-DBLO-SF Wellhead
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head
And Drilling & Skid Configurations

DRAWN	VJK	31MAR22
APPRV		
DRAWING NO.	SDT-2856	

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.

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

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

Background

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

Supporting Documentation

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

Figure 1: Winch System attached to BOP Stack

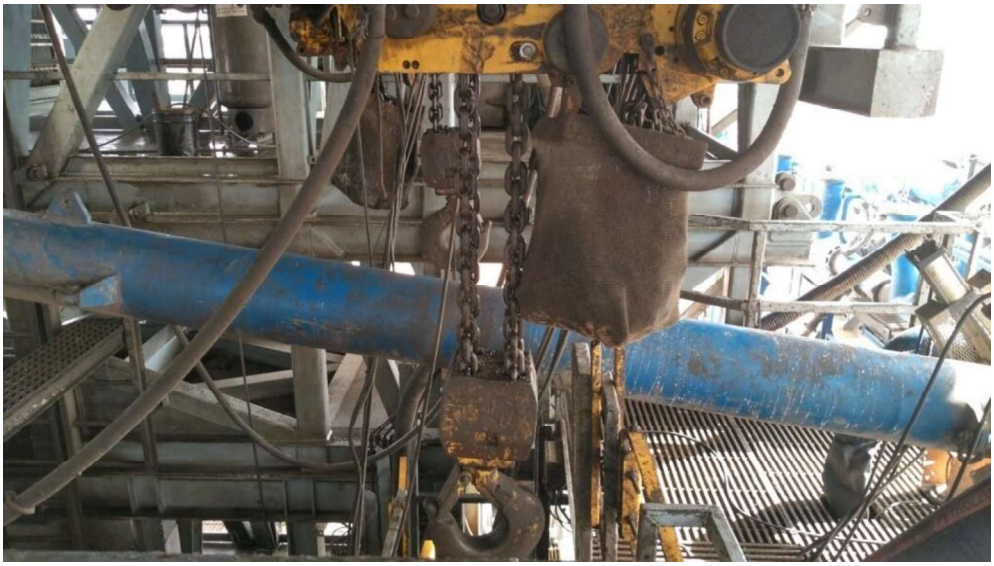


Figure 2: BOP Winch System

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

62 API STANDARD 53

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

Component to be Pressure Tested	Pressure Test—Low Pressure[ac] psig (MPa)	Pressure Test—High Pressure[ac]	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer[b]	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers[bd]	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

[a] Pressure test evaluation periods shall be a minimum of five minutes.
No visible leaks.
The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

[b] Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

[c] For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

[d] For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

[e] Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

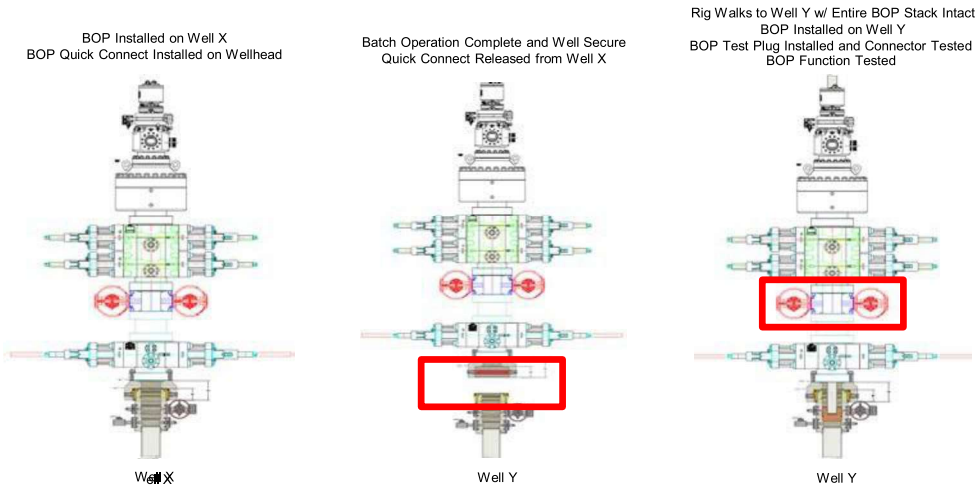
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

Procedures

1. XTO Energy will use this document for our break testing plan for New Mexico Delaware basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
    a. A full BOP test will be conducted on the first well on the pad.
    b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
        i. Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
        ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
    c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
    d. A full BOP test will be required prior to drilling any production hole.
3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
    a. Between the HCV valve and choke line connection
    b. Between the BOP quick connect and the wellhead
4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
6. The connections mentioned in 3a and 3b will then be reconnected.
7. Install test plug into the wellhead using test joint or drill pipe.
8. A shell test is performed against the upper pipe rams testing the two breaks.
9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



Summary

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

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

1. After a full BOP test is conducted on the first well on the pad.

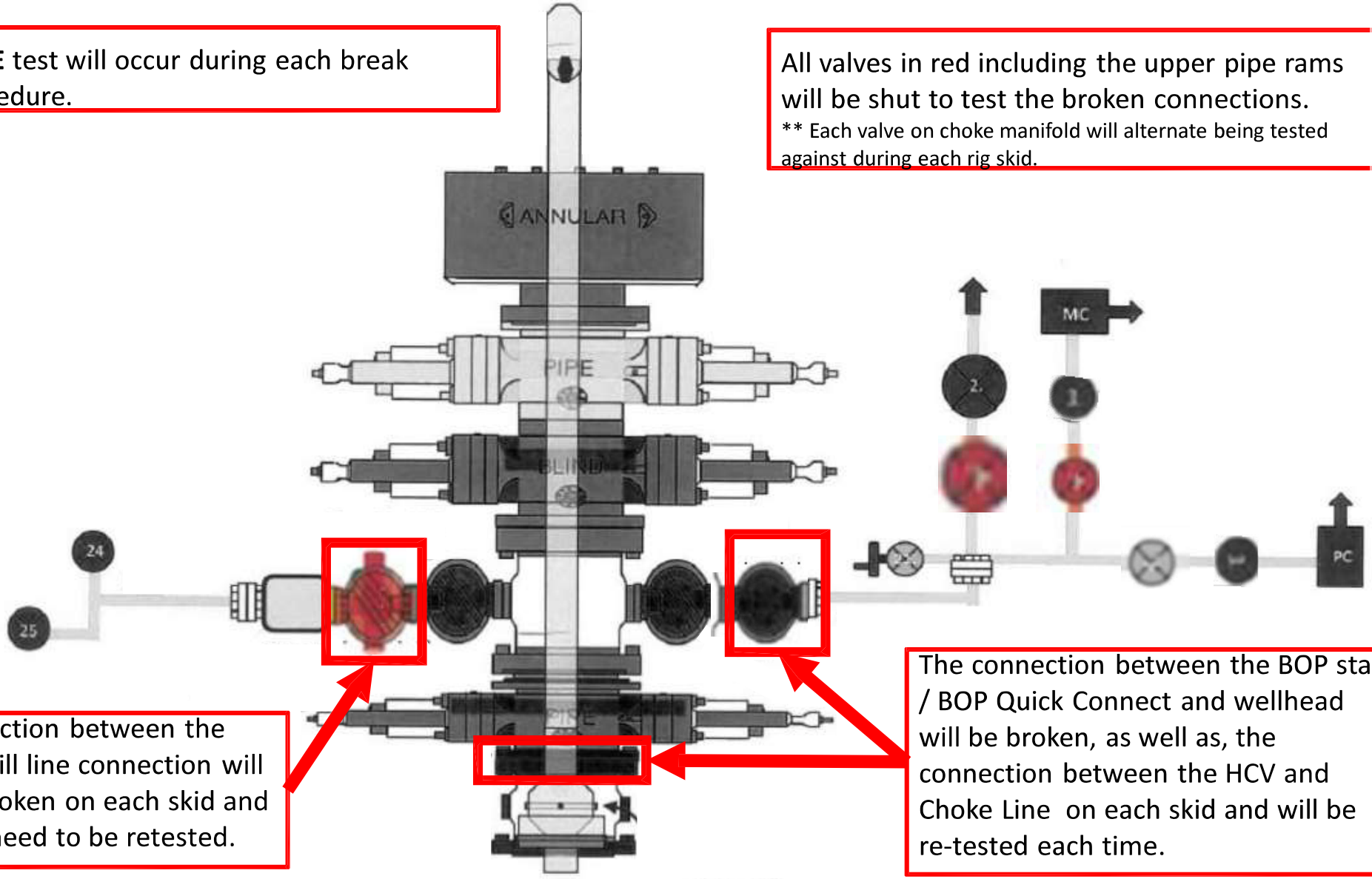
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

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

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

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

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



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

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

BLACK GOLD®

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

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

NEW CHOKE HOSE INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

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

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

SIGNATURE: F. OSPINOS

TITLE: QUALITY ASSURANCE

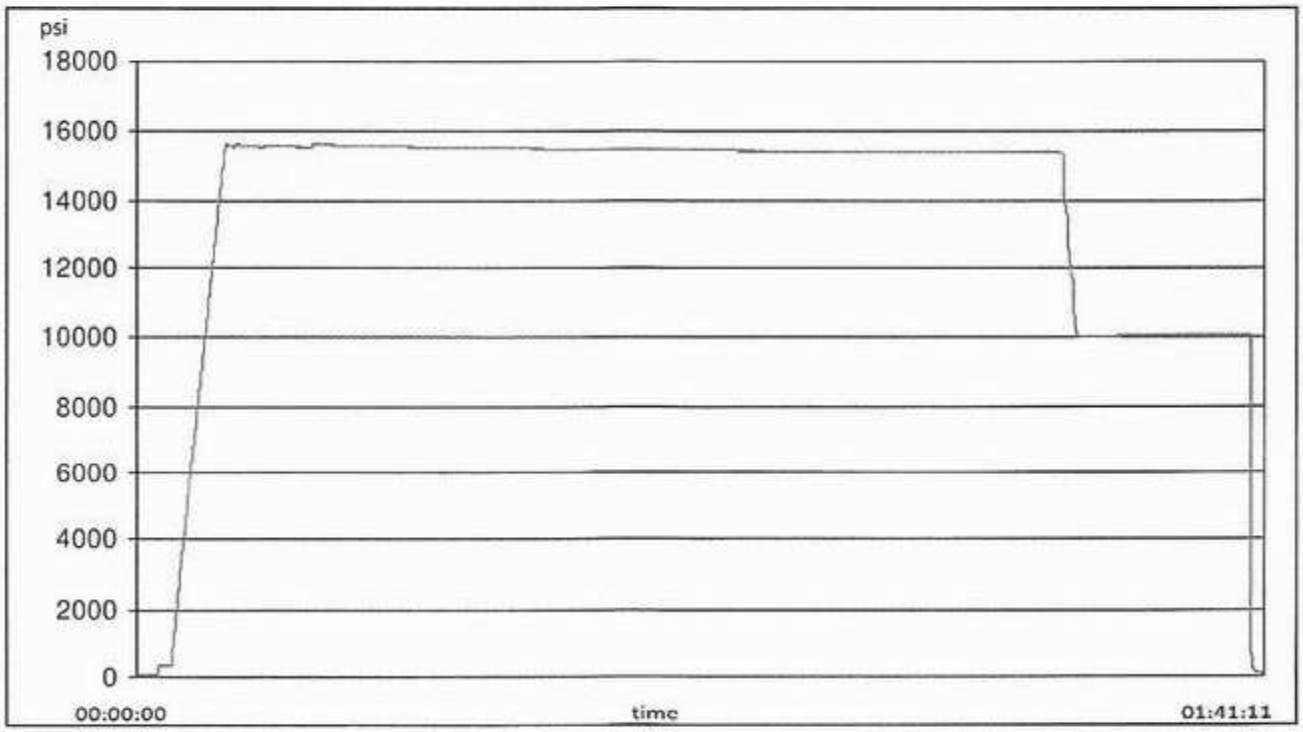
DATE: 1/25/2024

H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

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



H3-15/16

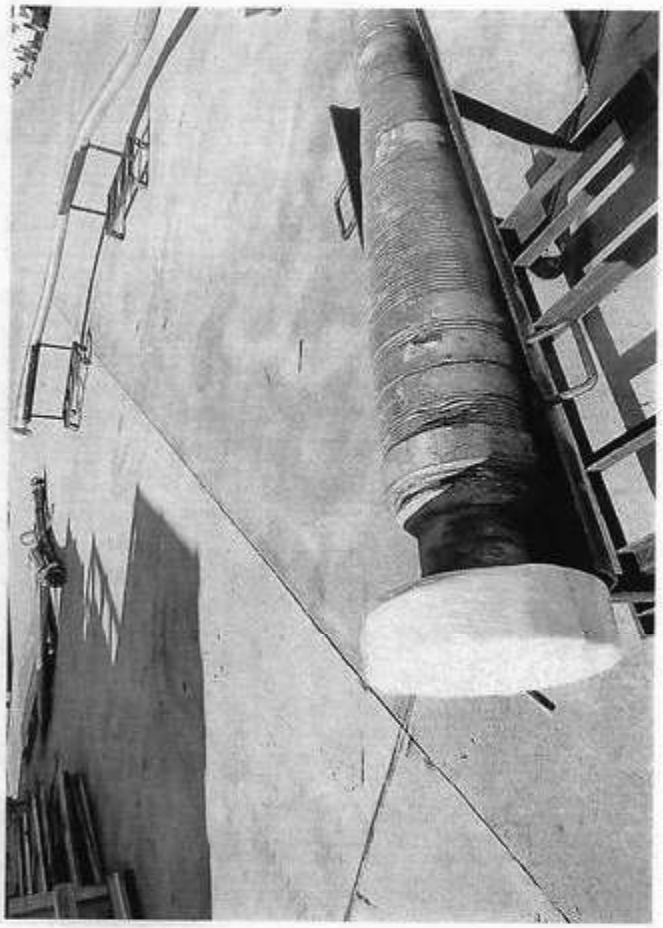
1/25/2024 11:48:06 AM

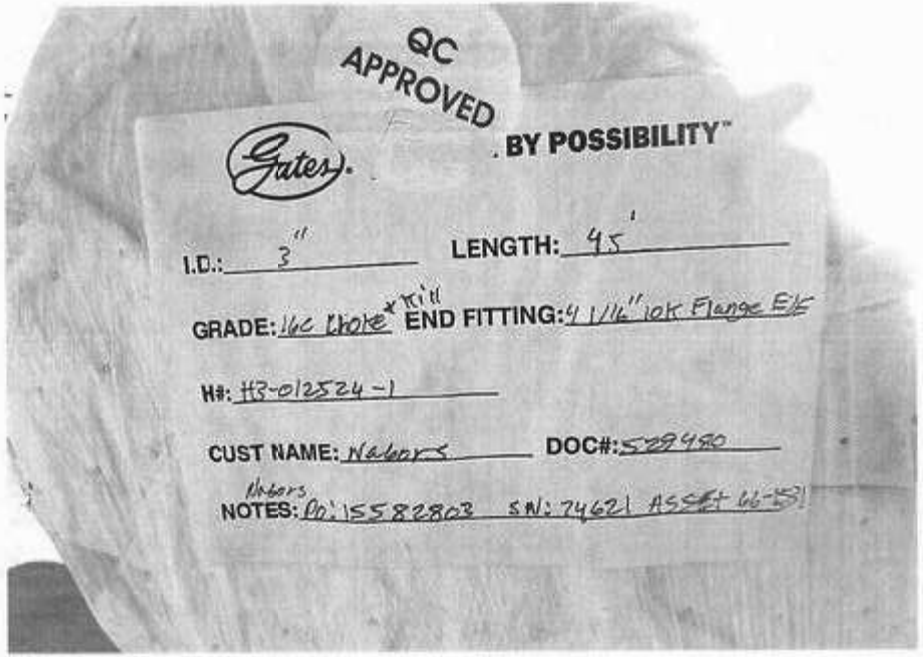
TEST REPORT

GAUGE TRACEABILITY

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

Comment





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.

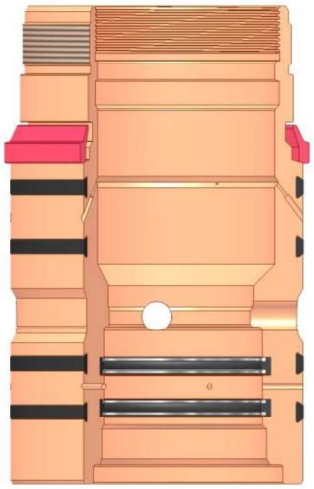
1. Cement Program

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

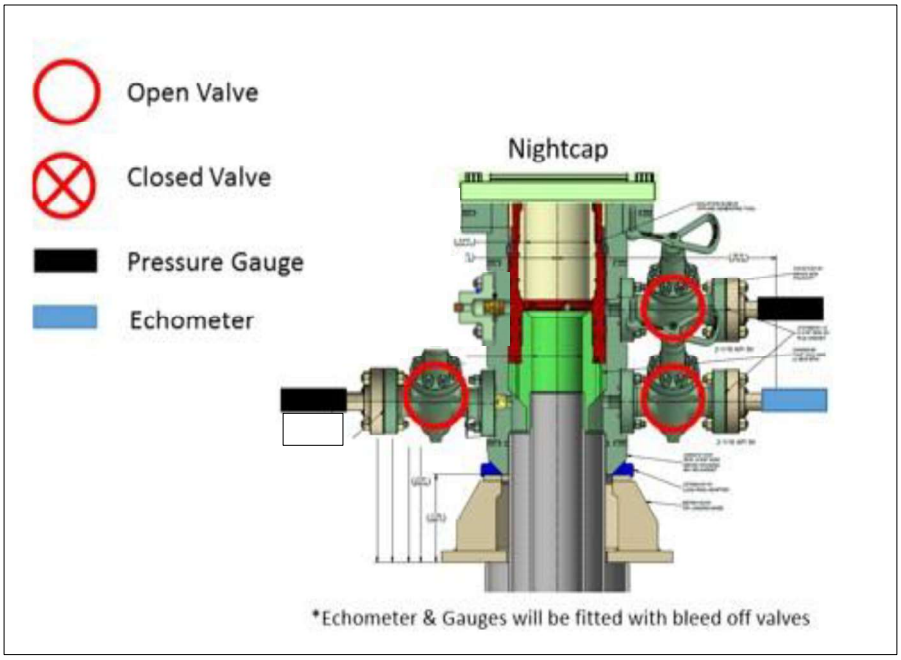
2. Offline Cementing Procedure

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.



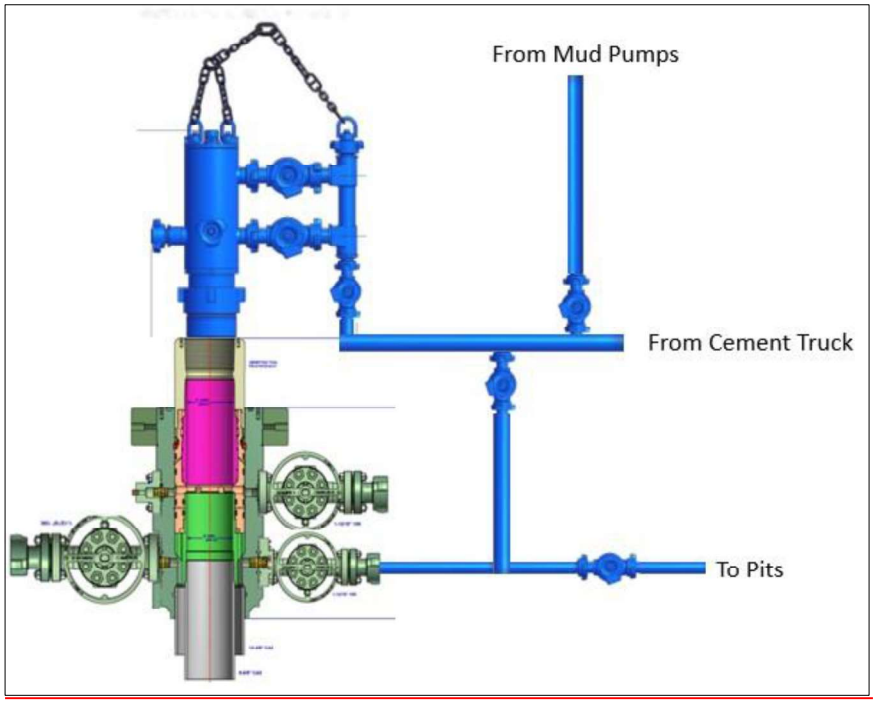
Annular packoff with both external and internal seals



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

Operator:	OGRID:
XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	373075
	Action Number: 460579
	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