

Type of Well: CONVENTIONAL GAS  
WELL

Allottee or Tribe Name:

Lease Number: NMLC0068430

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number:  
NMNM71016X

US Well Number: 3001553223

Operator: XTO PERMIAN OPERATING  
LLC

## Notice of Intent

Sundry ID: 2784176

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/09/2024

Time Sundry Submitted: 02:08

Date proposed operation will begin: 04/30/2024

**Procedure Description:** XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include FTP, LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation (Pool). FROM: TO: FTP: 387' FNL & 179' FEL OF SECTION 21-T24S-R30E 100' FNL & 42' FEL OF SECTION 21-T24S-R30E LTP: 330' FNL & 96' FEL OF SECTION 33-T23S-R30E 2537' FNL & 38' FEL OF SECTION 33-T24S-R30E BHL: 201' FNL & 95' FEL OF SECTION 33-T23S-R30E 2627' FNL & 39' FEL OF SECTION 33-T24S-R30E The proposed total depth is changing from 32937' MD; 11192' TVD (Wolfcamp) to 23870' MD; 11061' TVD (Wolfcamp X/Y). See attached Drilling Plan for updated cement and casing program. A saturated salt brine will be utilized while drilling through the salt formations. Attachments: C-102, Drilling Plan, Directional Plan, MBS

## NOI Attachments

### Procedure Description

PLU\_21\_DTD\_128H\_Sundry\_Documents\_20240726150633.pdf

**US Well Number:** 3001553223

**Operator:** XTO PERMIAN OPERATING  
LLC

### Conditions of Approval

#### Additional

POKER\_LAKE\_UNIT\_21\_DTD\_128H\_COA\_20240904160243.pdf

### Operator

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

**Operator Electronic Signature:** TERRA SEBASTIAN

**Signed on:** JUL 26, 2024 03:06 PM

**Name:** XTO PERMIAN OPERATING LLC

**Title:** Regulatory Advisor

**Street Address:** 6401 HOLIDAY HILL ROAD SUITE 200

**City:** MIDLAND

**State:** TX

**Phone:** (432) 999-3107

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

### Field

**Representative Name:**

**Street Address:**

**City:**

**State:**

**Zip:**

**Phone:**

**Email address:**

### BLM Point of Contact

**BLM POC Name:** CHRISTOPHER WALLS

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234

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

**Disposition:** Approved

**Disposition Date:** 09/04/2024

**Signature:** Chris Walls

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an  
abandoned well. Use Form 3160-3 (APD) for such proposals.*

5. Lease Serial No.	NMLC068430
6. If Indian, Allottee or Tribe Name	

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No. POKER LAKE UNIT/NMNM71016X
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. POKER LAKE UNIT 21 DTD/128H
2. Name of Operator XTO PERMIAN OPERATING LLC		9. API Well No. 3001553223
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 PURPLE SAGE/WOLFCAMP
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 16/T24S/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			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> 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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include FTP, LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation (Pool).

FROM: TO:

FTP: 387' FNL & 179' FEL OF SECTION 21-T24S-R30E 100' FNL & 42' FEL OF SECTION 21-T24S-R30E  
LTP: 330' FNL & 96' FEL OF SECTION 33-T23S-R30E 2537' FNL & 38' FEL OF SECTION 33-T24S-R30E  
BHL: 201' FNL & 95' FEL OF SECTION 33-T23S-R30E 2627' FNL & 39' FEL OF SECTION 33-T24S-R30E

The proposed total depth is changing from 32937 MD; 11192 TVD (Wolfcamp) to 23870 MD; 11061 TVD (Wolfcamp X/Y).

See attached Drilling Plan for updated cement and casing program.

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) TERRA SEBASTIAN / Ph: (432) 999-3107	Title Regulatory Advisor
Signature (Electronic Submission)	Date 07/26/2024

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 09/04/2024
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office CARLSBAD	

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

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

Attachments: C-102, Drilling Plan, Directional Plan, MBS

### Location of Well

0. SHL: SESE / 237 FSL / 97 FEL / TWSP: 24S / RANGE: 30E / SECTION: 16 / LAT: 32.211149 / LONG: -103.877898 ( TVD: 0 feet, MD: 0 feet )

PPP: NENE / 387 FNL / 179 FEL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.209431 / LONG: -103.878166 ( TVD: 11192 feet, MD: 11700 feet )

BHL: NENE / 201 FNL / 95 FEL / TWSP: 23S / RANGE: 30E / SECTION: 33 / LAT: 32.268075 / LONG: -103.877895 ( TVD: 11192 feet, MD: 32937 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	XTO
<b>LEASE NO.:</b>	NMLC068430
<b>LOCATION:</b>	Sec.16 , T.24 S, R 30 E
<b>COUNTY:</b>	Eddy County, New Mexico ▼
<b>WELL NAME &amp; NO.:</b>	PLU 21 DTD 128H
<b>SURFACE HOLE FOOTAGE:</b>	237'/S & 97'/E
<b>BOTTOM HOLE FOOTAGE:</b>	2627'/N & 39'/E

Changes approved through engineering via **Sundry 2784176** on 9-4-2024. Any previous COAs not addressed within the updated COAs still apply.

COA

H <sub>2</sub> S	<input checked="" type="radio"/> No	<input type="radio"/> Yes
<b>Potash / WIPP</b>	<input type="radio"/> None <input checked="" type="radio"/> Secretary <input type="radio"/> R-111-Q <input type="checkbox"/> Open Annulus <span style="color: red;">Choose an option (including blank option.)</span>	<input type="checkbox"/> WIPP
<b>Cave / Karst</b>	<input checked="" type="radio"/> Low	<input type="radio"/> Medium <input type="radio"/> High <input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl <input type="radio"/> Both <input type="radio"/> Diverter
<b>Cementing</b>	<input checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze <input checked="" type="checkbox"/> EchoMeter <input type="checkbox"/> DV Tool
<b>Special Req</b>	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal <input type="checkbox"/> COM <input checked="" type="checkbox"/> Unit
<b>Waste Prev.</b>	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan <input checked="" type="radio"/> APD Submitted prior to 06/10/2024
<b>Additional Language</b>	<input checked="" type="checkbox"/> Flex Hose <input checked="" type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole <input checked="" type="checkbox"/> Break Testing <input type="checkbox"/> Four-String <input checked="" type="checkbox"/> Offline Cementing <input type="checkbox"/> Fluid-Filled

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H<sub>2</sub>S) monitors shall be installed prior to drilling out the surface shoe. If H<sub>2</sub>S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

**APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.**

### B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **903** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with

surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch 1<sup>st</sup> Intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above.
- Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, or potash.**

3. The minimum required fill of cement behind the **7-5/8** inch 2<sup>nd</sup> Intermediate casing is: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon at 6380'**
- b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to tie-back at least **500ft** into previous casing shoe. If cement does not reach surface, the appropriate BLM office shall be notified.

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

Operator has proposed to pump down **Intermediate 1 X Intermediate 2** annulus after primary cementing stage. **Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the Surface casing to tieback requirements listed above after the second stage BH to verify TOC.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

4. The minimum required fill of cement behind the **5-1/2** inch production liner is:
  - Cement should tie-back **100 feet** into the previous casing. Operator shall provide method of verification.

## C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- a. 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.
- b. Manufacturer representative shall install the test plug for the initial BOP test.
- c. 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.
- d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

## D. SPECIAL REQUIREMENT (S)

### Unit Wells

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

### Commercial Well Determination

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

### BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

### **Offline Cementing**

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

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

### **Casing Clearance**

String does not meet 0.422" clearance requirement per 43 CFR 3172. Cement tieback requirement increased 100' for 2nd Intermediate casing tieback. Operator may contact approving engineer to discuss changing casing set depth or grade to meet clearance requirement.

## GENERAL REQUIREMENTS

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

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

### Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;  
[BLM NM CFO DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

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

### A. CASING

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



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

## **B. PRESSURE CONTROL**

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

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

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

- open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - v. The results of the test shall be reported to the appropriate BLM office.
  - vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
  - viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

### **C. DRILLING MUD**

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

### **D. WASTE MATERIAL AND FLUIDS**

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

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

**Approved by Zota Stevens on 9/4/2024**  
575-234-5998 / [zstevens@blm.gov](mailto:zstevens@blm.gov)

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015- 53223</b>	<sup>2</sup> Pool Code <b>98220</b>	<sup>3</sup> Pool Name <b>PURPLE SAGE;WOLFCAMP (GAS)</b>
<sup>4</sup> Property Code <b>333571</b>	<sup>5</sup> Property Name <b>POKER LAKE UNIT 21 DTD</b>	<sup>6</sup> Well Number <b>128H</b>
<sup>7</sup> OGRID No. <b>373075</b>	<sup>8</sup> Operator Name <b>XTO PERMIAN OPERATING, LLC.</b>	<sup>9</sup> Elevation <b>3,398'</b>

<sup>10</sup> Surface Location

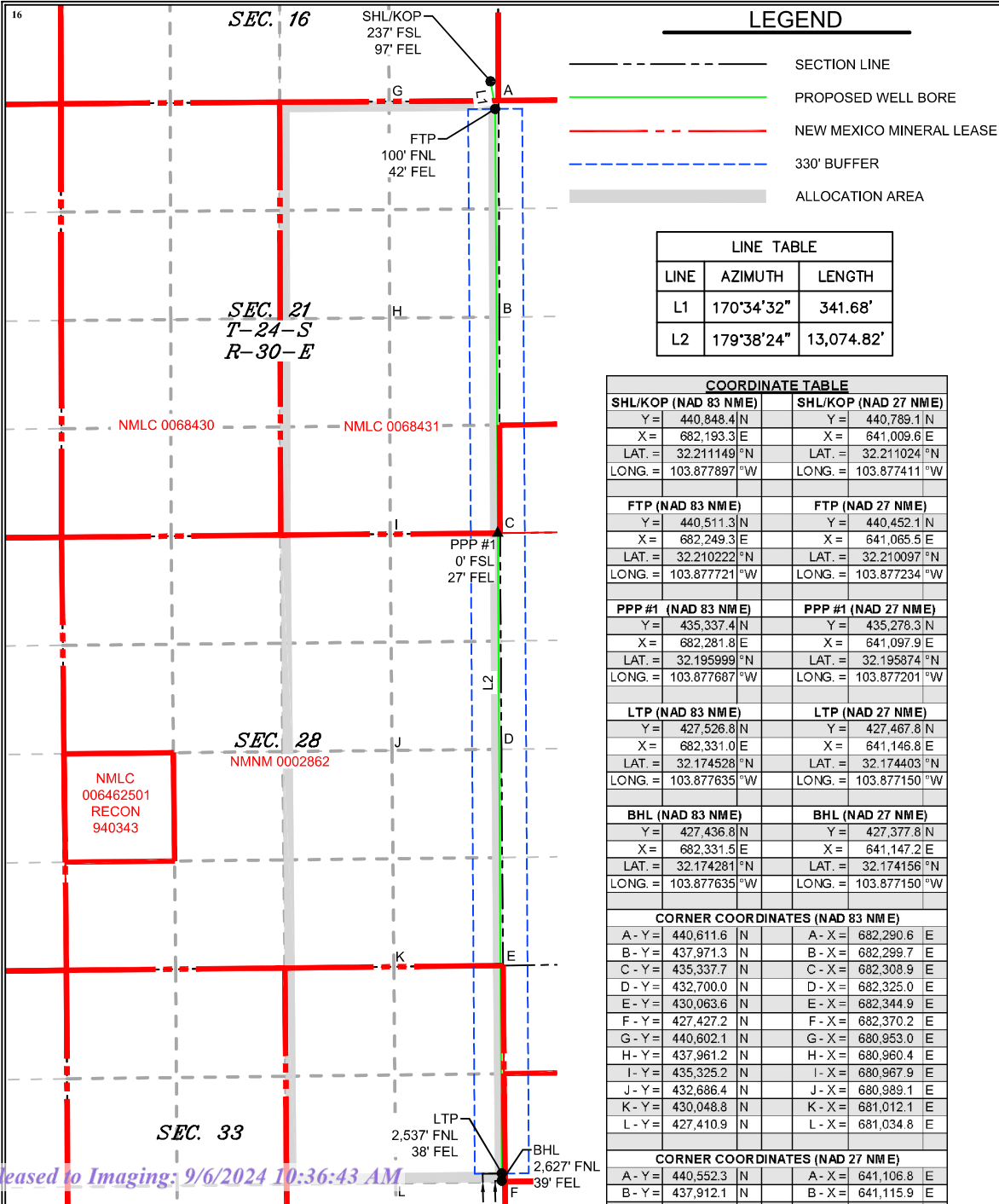
UL or lot no. <b>P</b>	Section <b>16</b>	Township <b>24S</b>	Range <b>30E</b>	Lot Idn	Feet from the <b>237</b>	North/South line <b>SOUTH</b>	Feet from the <b>97</b>	East/West line <b>EAST</b>	County <b>EDDY</b>
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no. <b>H</b>	Section <b>33</b>	Township <b>24S</b>	Range <b>30E</b>	Lot Idn	Feet from the <b>2,627</b>	North/South line <b>NORTH</b>	Feet from the <b>39</b>	East/West line <b>EAST</b>	County <b>EDDY</b>
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<sup>12</sup> Dedicated Acres <b>800.00</b>	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.



<sup>17</sup> OPERATOR CERTIFICATION

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.

Emily Rivera 7/25/2024  
Signature Date

Emily Rivera  
Printed Name

emily.a.rivera@exxonmobil.com  
E-mail Address

<sup>18</sup> SURVEYOR CERTIFICATION

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.

7/11/2024  
Date of Survey

Signature and Seal of Professional Surveyor:



Intent ☒ As Drilled ☐

API # 30-15-		
Operator Name: XTO PERMAIN OPERATING, LLC.	Property Name: POKER LAKE UNIT 21 DTD	Well Number 128H

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

## First Take Point (FTP)

UL A	Section 21	Township 24S	Range 30E	Lot	Feet 100	From N/S NORTH	Feet 42	From E/W EAST	County EDDY
Latitude 32.210222					Longitude -103.877721				NAD 83

## Last Take Point (LTP)

UL H	Section 33	Township 24S	Range 30E	Lot	Feet 2,537	From N/S NORTH	Feet 38	From E/W EAST	County EDDY
Latitude 32.174528					Longitude -103.877635				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018



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

XTO Energy Inc.  
POKER LAKE UNIT 21 DTD 128H  
Projected TD: 23870' MD / 11061' TVD  
SHL: 237' FSL & 97' FEL , Section 16, T24S, R30E  
BHL: 2627' FNL & 39' FEL , Section 33, T23S, 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 (TVD)	Water/Oil/Gas
Rustler	1045'	Water
Top of Salt	1448'	Water
Base of Salt	3641'	Water
Delaware	3835'	Water
Brushy Canyon	6381'	Water/Oil/Gas
Bone Spring	7705'	Water
Avalon	8398'	Water/Oil/Gas
1st Bone Spring	8414'	Water/Oil/Gas
2nd Bone Spring	8999'	Water/Oil/Gas
Wolfcamp	11010'	Water/Oil/Gas
Wolfcamp X	11031'	Water/Oil/Gas
Target/Land Curve	11061'	Water/Oil/Gas

\*\*\* Hydrocarbons @ Brushy Canyon

\*\*\* Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 1423' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3741' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 10145' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23870 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9845 feet) per Potash regulations.

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1423'	13.375	54.5	J-55	BTC	New	3.08	1.82	11.72
12.25	0' – 3741'	9.625	40	J-55	BTC	New	1.64	3.04	4.21
8.75	0' – 3841'	7.625	29.7	RY P-110	Flush Joint	New	2.26	3.04	1.85
8.75	3841' – 10145'	7.625	29.7	HC L-80	Flush Joint	New	1.65	3.35	2.17
6.75	0' – 10045'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.85	2.02
6.75	10045' - 23870'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.68	5.53

· Production casing meets the clearance requirements as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

· 9.625 Collapse analyzed using 50% evacuation based on regional experience.

· 7.625 Collapse analyzed using 50% evacuation based on regional experience.

· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

**Wellhead:**

*Permanent Wellhead – Multibowl System*

A. Starting Head: 20" 10M top flange x 13-3/8" bottom

B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

· Wellhead will be installed by manufacturer's representatives.

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

#### 4. Cement Program

##### **Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1423'**

Optional Lead: 1170 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft<sup>3</sup>/sx, 10.13 gal/sx water)

Tail: 310 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

##### **1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3741'**

Lead: 780 sxs Class C (mixed at 14.8 ppg, 2.06 ft<sup>3</sup>/sx, 10.13 gal/sx water)

Tail: 60 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

##### **2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 10145'**

###### 1st Stage

Optional Lead: 140 sxs Class C (mixed at 10.5 ppg, 2.77 ft<sup>3</sup>/sx, 15.59 gal/sx water)

TOC: 3441

Tail: 400 sxs Class C (mixed at 14.8 ppg, 1.27 ft<sup>3</sup>/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6381

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

###### 2nd Stage - bradenhead contingency

Tail: 140 sxs Class C (mixed at 14.8 ppg, 2.77 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement: 3441

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6381') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface.

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

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

##### **Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 23870'**

Lead: 10 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 9845 feet

Tail: 850 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 10387 feet

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

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

## 5. Pressure Control Equipment

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

XTO will use a Multi-Bowl system which is attached.

All BOP testing will be done by an independent service company. Annular pressure tests will be conducted to at least 50% of the rated working pressure. When nipping up on the 13.375, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week

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

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

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

## 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Additional Comments
0' - 1423'	17.5	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
1423' - 3835'	12.25	Saturated Salt	10.5 - 11	30-32	NC	Fully saturated salt across salado / salt
3835' to 10145'	8.75	BDE / OBM	9- 9.5	30-32	NC	N/A
10145' to 23870'	6.75	OBM	10.5-11	50-60	NC - 20	N/A

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

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

## 7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13,375 casing.

## 8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

## 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated, BHT of 175 to 195 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6614 psi.

## 10. Anticipated Starting Date and Duration of Operations

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

Well Plan Report - Poker Lake Unit 21 DTD South 128H

Measured Depth: 23870.37 ft  
TVD RKB: 11061.00 ft  
Location  
Cartographic Reference System: New Mexico East - NAD 27  
Northing: 440789.10 ft  
Easting: 641009.60 ft  
RKB: 3430.00 ft  
Ground Level: 3398.00 ft  
North Reference: Grid  
Convergence Angle: 0.24 Deg

Plan Sections Poker Lake Unit 21 DTD South 128H

Measured	Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD		Y Offset (ft)	X Offset (ft)	Build		Turn		Dogleg	
				RKB	(ft)			Rate (Deg/100ft)	Rate (Deg/100ft)	Rate (Deg/100ft)	Rate (Deg/100ft)	Rate (Deg/100ft)	Target
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4484.48	18.71	170.58	4470.61	20.78	-125.26	20.78	2.39	0.00	0.00	2.39	0.00	2.39
	4757.70	18.71	170.58	4729.39	35.12	-211.74	35.12	0.00	0.00	0.00	0.00	0.00	0.00
	5542.19	0.00	0.00	5500.00	55.90	-337.00	55.90	-2.39	0.00	0.00	2.39	0.00	2.39
	10386.99	0.00	0.00	10344.80	55.90	-337.00	55.90	0.00	0.00	0.00	0.00	0.00	0.00
	11511.99	90.00	179.66	11061.00	60.10	-1053.18	60.10	8.00	0.00	0.00	8.00	0.00	8.00
	23780.61	90.00	179.66	11061.00	132.02	-13321.60	132.02	0.00	0.00	0.00	0.00	0.00	LTP 11
	23870.37	90.00	179.66	11061.00	132.55	-13411.35	132.55	0.00	0.00	0.00	0.00	0.00	BHL 11

Position Uncertainty Poker Lake Unit 21 DTD South 128H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.310	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.374	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.407	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.444	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.486	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.532	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.582	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.635	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.779	0.000	4.589	0.000	2.692	0.000	0.000	5.119	4.207	128.954	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.140	0.000	4.950	0.000	2.752	0.000	0.000	5.484	4.565	129.034	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.500	0.000	5.311	0.000	2.814	0.000	0.000	5.849	4.924	129.102	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.860	0.000	5.672	0.000	2.879	0.000	0.000	6.213	5.282	129.161	MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	6.219	0.000	6.032	0.000	2.947	0.000	0.000	6.577	5.640	129.212	MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.579	0.000	6.392	0.000	3.017	0.000	0.000	6.939	5.999	129.257	MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.938	0.000	6.752	0.000	3.088	0.000	0.000	7.302	6.357	129.297	MWD+IFR1+MS
1900.000	0.000	0.000	1900.000	7.298	0.000	7.112	0.000	3.162	0.000	0.000	7.664	6.715	129.333	MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.657	0.000	7.471	0.000	3.238	0.000	0.000	8.026	7.074	129.365	MWD+IFR1+MS
2100.000	0.000	0.000	2100.000	8.016	0.000	7.831	0.000	3.315	0.000	0.000	8.387	7.432	129.394	MWD+IFR1+MS
2200.000	0.000	0.000	2200.000	8.375	0.000	8.190	0.000	3.393	0.000	0.000	8.748	7.791	129.420	MWD+IFR1+MS
2300.000	0.000	0.000	2300.000	8.734	0.000	8.550	0.000	3.474	0.000	0.000	9.109	8.149	129.444	MWD+IFR1+MS
2400.000	0.000	0.000	2400.000	9.093	0.000	8.909	0.000	3.556	0.000	0.000	9.470	8.507	129.466	MWD+IFR1+MS
2500.000	0.000	0.000	2500.000	9.452	0.000	9.268	0.000	3.639	0.000	0.000	9.831	8.866	129.486	MWD+IFR1+MS
2600.000	0.000	0.000	2600.000	9.811	0.000	9.627	0.000	3.723	0.000	0.000	10.191	9.224	129.505	MWD+IFR1+MS
2700.000	0.000	0.000	2700.000	10.170	0.000	9.986	0.000	3.809	0.000	0.000	10.552	9.583	129.522	MWD+IFR1+MS
2800.000	0.000	0.000	2800.000	10.529	0.000	10.345	0.000	3.896	0.000	0.000	10.912	9.941	129.538	MWD+IFR1+MS
2900.000	0.000	0.000	2900.000	10.888	0.000	10.705	0.000	3.985	0.000	0.000	11.272	10.299	129.552	MWD+IFR1+MS
3000.000	0.000	0.000	3000.000	11.247	0.000	11.063	0.000	4.075	0.000	0.000	11.632	10.658	129.566	MWD+IFR1+MS



3100.000	0.000	0.000	3100.000	11.606	0.000	11.422	0.000	4.166	0.000	11.992	11.016	129.579	MWD+IFR1+MS
3200.000	0.000	0.000	3200.000	11.965	0.000	11.781	0.000	4.258	0.000	12.352	11.375	129.591	MWD+IFR1+MS
3300.000	0.000	0.000	3300.000	12.323	0.000	12.140	0.000	4.352	0.000	12.712	11.733	129.603	MWD+IFR1+MS
3400.000	0.000	0.000	3400.000	12.682	0.000	12.499	0.000	4.447	0.000	13.071	12.092	129.613	MWD+IFR1+MS
3500.000	0.000	0.000	3500.000	13.041	0.000	12.858	0.000	4.543	0.000	13.431	12.450	129.623	MWD+IFR1+MS
3600.000	0.000	0.000	3600.000	13.400	0.000	13.217	0.000	4.641	0.000	13.790	12.809	129.633	MWD+IFR1+MS
3700.000	0.000	0.000	3700.000	13.758	0.000	13.576	0.000	4.740	0.000	14.150	13.167	129.642	MWD+IFR1+MS
3800.000	2.385	170.582	3799.971	13.966	0.000	14.061	-0.000	4.841	0.000	14.486	13.535	128.123	MWD+IFR1+MS
3900.000	4.771	170.582	3899.769	14.516	0.000	14.380	-0.000	4.944	0.000	14.985	13.935	120.708	MWD+IFR1+MS
4000.000	7.156	170.582	3999.221	15.031	0.000	14.700	-0.000	5.052	0.000	15.499	14.303	115.227	MWD+IFR1+MS
4100.000	9.542	170.582	4098.154	15.511	0.000	15.020	-0.000	5.167	0.000	16.015	14.653	111.313	MWD+IFR1+MS
4200.000	11.927	170.582	4196.397	15.956	0.000	15.341	-0.000	5.292	0.000	16.528	14.990	108.508	MWD+IFR1+MS
4300.000	14.312	170.582	4293.779	16.369	0.000	15.662	-0.000	5.428	0.000	17.032	15.322	106.465	MWD+IFR1+MS
4400.000	16.698	170.582	4390.133	16.751	0.000	15.984	-0.000	5.579	0.000	17.525	15.649	104.954	MWD+IFR1+MS
4484.484	18.713	170.582	4470.612	16.995	0.000	16.254	-0.000	5.703	0.000	17.886	15.921	104.247	MWD+IFR1+MS
4500.000	18.713	170.582	4485.307	17.041	0.000	16.303	-0.000	5.716	0.000	17.932	15.971	104.243	MWD+IFR1+MS
4600.000	18.713	170.582	4580.021	17.342	0.000	16.622	-0.000	5.834	0.000	18.219	16.291	104.450	MWD+IFR1+MS
4700.000	18.713	170.582	4674.734	17.655	0.000	16.954	-0.000	5.958	0.000	18.521	16.618	104.805	MWD+IFR1+MS
4757.705	18.713	170.582	4729.388	17.834	0.000	17.143	-0.000	6.031	0.000	18.691	16.808	104.934	MWD+IFR1+MS
4800.000	17.704	170.582	4769.565	18.041	0.000	17.281	-0.000	6.087	0.000	18.818	16.947	105.001	MWD+IFR1+MS
4900.000	15.319	170.582	4865.435	18.613	0.000	17.616	-0.000	6.245	0.000	19.209	17.285	104.530	MWD+IFR1+MS
5000.000	12.933	170.582	4962.404	19.253	0.000	17.960	-0.000	6.417	0.000	19.697	17.630	103.545	MWD+IFR1+MS
5100.000	10.548	170.582	5060.305	19.855	0.000	18.306	-0.000	6.576	0.000	20.187	17.977	102.674	MWD+IFR1+MS
5200.000	8.163	170.582	5158.967	20.416	0.000	18.652	-0.000	6.723	0.000	20.676	18.325	101.903	MWD+IFR1+MS
5300.000	5.777	170.582	5258.221	20.938	0.000	18.998	-0.000	6.861	0.000	21.163	18.671	101.222	MWD+IFR1+MS
5400.000	3.392	170.582	5357.894	21.419	0.000	19.342	-0.000	6.993	0.000	21.646	19.015	100.621	MWD+IFR1+MS
5500.000	1.006	170.582	5457.813	21.858	0.000	19.684	-0.000	7.120	0.000	22.123	19.357	100.092	MWD+IFR1+MS
5542.189	0.000	0.000	5500.000	22.173	0.000	19.591	0.000	7.173	0.000	22.252	19.501	100.080	MWD+IFR1+MS
5600.000	0.000	0.000	5557.811	22.354	0.000	19.790	0.000	7.245	0.000	22.433	19.701	100.101	MWD+IFR1+MS
5700.000	0.000	0.000	5657.811	22.667	0.000	20.140	0.000	7.371	0.000	22.747	20.050	100.205	MWD+IFR1+MS
5800.000	0.000	0.000	5757.811	22.985	0.000	20.494	0.000	7.500	0.000	23.066	20.402	100.372	MWD+IFR1+MS
5900.000	0.000	0.000	5857.811	23.303	0.000	20.848	0.000	7.630	0.000	23.386	20.754	100.537	MWD+IFR1+MS
6000.000	0.000	0.000	5957.811	23.623	0.000	21.202	0.000	7.764	0.000	23.708	21.107	100.701	MWD+IFR1+MS

6100.000	0.000	0.000	6057.811	23.943	0.000	21.556	0.000	7.899	0.000	0.000	24.030	21.459	100.865	MWD+IFR1+MS
6200.000	0.000	0.000	6157.811	24.265	0.000	21.910	0.000	8.037	0.000	0.000	24.354	21.812	101.027	MWD+IFR1+MS
6300.000	0.000	0.000	6257.811	24.588	0.000	22.264	0.000	8.177	0.000	0.000	24.678	22.164	101.188	MWD+IFR1+MS
6400.000	0.000	0.000	6357.811	24.912	0.000	22.619	0.000	8.320	0.000	0.000	25.003	22.517	101.348	MWD+IFR1+MS
6500.000	0.000	0.000	6457.811	25.237	0.000	22.973	0.000	8.465	0.000	0.000	25.330	22.870	101.507	MWD+IFR1+MS
6600.000	0.000	0.000	6557.811	25.562	0.000	23.328	0.000	8.613	0.000	0.000	25.657	23.224	101.664	MWD+IFR1+MS
6700.000	0.000	0.000	6657.811	25.889	0.000	23.683	0.000	8.763	0.000	0.000	25.985	23.577	101.821	MWD+IFR1+MS
6800.000	0.000	0.000	6757.811	26.216	0.000	24.038	0.000	8.916	0.000	0.000	26.314	23.930	101.977	MWD+IFR1+MS
6900.000	0.000	0.000	6857.811	26.544	0.000	24.393	0.000	9.072	0.000	0.000	26.644	24.284	102.131	MWD+IFR1+MS
7000.000	0.000	0.000	6957.811	26.873	0.000	24.748	0.000	9.230	0.000	0.000	26.974	24.637	102.285	MWD+IFR1+MS
7100.000	0.000	0.000	7057.811	27.203	0.000	25.103	0.000	9.390	0.000	0.000	27.306	24.991	102.437	MWD+IFR1+MS
7200.000	0.000	0.000	7157.811	27.533	0.000	25.459	0.000	9.554	0.000	0.000	27.638	25.345	102.589	MWD+IFR1+MS
7300.000	0.000	0.000	7257.811	27.864	0.000	25.814	0.000	9.720	0.000	0.000	27.970	25.699	102.739	MWD+IFR1+MS
7400.000	0.000	0.000	7357.811	28.196	0.000	26.169	0.000	9.888	0.000	0.000	28.304	26.053	102.888	MWD+IFR1+MS
7500.000	0.000	0.000	7457.811	28.528	0.000	26.525	0.000	10.060	0.000	0.000	28.638	26.407	103.036	MWD+IFR1+MS
7600.000	0.000	0.000	7557.811	28.861	0.000	26.881	0.000	10.234	0.000	0.000	28.972	26.761	103.183	MWD+IFR1+MS
7700.000	0.000	0.000	7657.811	29.195	0.000	27.236	0.000	10.411	0.000	0.000	29.307	27.115	103.329	MWD+IFR1+MS
7800.000	0.000	0.000	7757.811	29.529	0.000	27.592	0.000	10.591	0.000	0.000	29.643	27.470	103.474	MWD+IFR1+MS
7900.000	0.000	0.000	7857.811	29.864	0.000	27.948	0.000	10.773	0.000	0.000	29.979	27.824	103.618	MWD+IFR1+MS
8000.000	0.000	0.000	7957.811	30.199	0.000	28.304	0.000	10.958	0.000	0.000	30.316	28.179	103.761	MWD+IFR1+MS
8100.000	0.000	0.000	8057.811	30.535	0.000	28.660	0.000	11.146	0.000	0.000	30.653	28.533	103.903	MWD+IFR1+MS
8200.000	0.000	0.000	8157.811	30.871	0.000	29.016	0.000	11.337	0.000	0.000	30.991	28.888	104.044	MWD+IFR1+MS
8300.000	0.000	0.000	8257.811	31.208	0.000	29.372	0.000	11.531	0.000	0.000	31.329	29.243	104.183	MWD+IFR1+MS
8400.000	0.000	0.000	8357.811	31.545	0.000	29.728	0.000	11.727	0.000	0.000	31.668	29.598	104.322	MWD+IFR1+MS
8500.000	0.000	0.000	8457.811	31.883	0.000	30.085	0.000	11.927	0.000	0.000	32.007	29.952	104.460	MWD+IFR1+MS
8600.000	0.000	0.000	8557.811	32.221	0.000	30.441	0.000	12.129	0.000	0.000	32.347	30.307	104.597	MWD+IFR1+MS
8700.000	0.000	0.000	8657.811	32.560	0.000	30.797	0.000	12.335	0.000	0.000	32.687	30.662	104.732	MWD+IFR1+MS
8800.000	0.000	0.000	8757.811	32.899	0.000	31.154	0.000	12.543	0.000	0.000	33.028	31.017	104.867	MWD+IFR1+MS
8900.000	0.000	0.000	8857.811	33.239	0.000	31.510	0.000	12.754	0.000	0.000	33.369	31.372	105.001	MWD+IFR1+MS
9000.000	0.000	0.000	8957.811	33.579	0.000	31.866	0.000	12.968	0.000	0.000	33.710	31.727	105.134	MWD+IFR1+MS
9100.000	0.000	0.000	9057.811	33.919	0.000	32.223	0.000	13.185	0.000	0.000	34.052	32.083	105.265	MWD+IFR1+MS
9200.000	0.000	0.000	9157.811	34.259	0.000	32.580	0.000	13.405	0.000	0.000	34.394	32.438	105.396	MWD+IFR1+MS
9300.000	0.000	0.000	9257.811	34.600	0.000	32.936	0.000	13.627	0.000	0.000	34.736	32.793	105.526	MWD+IFR1+MS

9400.000	0.000	0.000	9357.811	34.942	0.000	33.293	0.000	13.853	0.000	0.000	35.079	33.148	105.655	MWD+IFR1+MS
9500.000	0.000	0.000	9457.811	35.283	0.000	33.649	0.000	14.082	0.000	0.000	35.422	33.504	105.782	MWD+IFR1+MS
9600.000	0.000	0.000	9557.811	35.625	0.000	34.006	0.000	14.314	0.000	0.000	35.765	33.859	105.909	MWD+IFR1+MS
9700.000	0.000	0.000	9657.811	35.968	0.000	34.363	0.000	14.549	0.000	0.000	36.109	34.215	106.035	MWD+IFR1+MS
9800.000	0.000	0.000	9757.811	36.310	0.000	34.720	0.000	14.786	0.000	0.000	36.453	34.570	106.160	MWD+IFR1+MS
9900.000	0.000	0.000	9857.811	36.653	0.000	35.077	0.000	15.027	0.000	0.000	36.797	34.926	106.284	MWD+IFR1+MS
10000.000	0.000	0.000	9957.811	36.997	0.000	35.433	0.000	15.271	0.000	0.000	37.142	35.281	106.407	MWD+IFR1+MS
10100.000	0.000	0.000	10057.811	37.340	0.000	35.790	0.000	15.518	0.000	0.000	37.486	35.637	106.529	MWD+IFR1+MS
10200.000	0.000	0.000	10157.811	37.684	0.000	36.147	0.000	15.768	0.000	0.000	37.831	35.993	106.651	MWD+IFR1+MS
10300.000	0.000	0.000	10257.811	38.028	0.000	36.504	0.000	16.020	0.000	0.000	38.177	36.348	106.771	MWD+IFR1+MS
10386.989	0.000	0.000	10344.800	38.326	0.000	36.814	0.000	16.243	0.000	0.000	38.476	36.657	106.848	MWD+IFR1+MS
10400.000	1.041	179.664	10357.810	38.382	0.000	36.864	-0.000	16.276	0.000	0.000	38.518	36.702	106.848	MWD+IFR1+MS
10500.000	9.041	179.664	10457.343	38.854	0.000	37.196	-0.000	16.550	0.000	0.000	39.169	37.050	104.657	MWD+IFR1+MS
10600.000	17.041	179.664	10554.684	39.461	0.000	37.529	-0.000	16.933	0.000	0.000	40.488	37.408	100.897	MWD+IFR1+MS
10700.000	25.041	179.664	10647.941	39.456	0.000	37.856	-0.000	17.495	0.000	0.000	41.687	37.743	99.183	MWD+IFR1+MS
10800.000	33.041	179.664	10735.297	38.884	0.000	38.172	-0.000	18.284	0.000	0.000	42.732	38.061	98.304	MWD+IFR1+MS
10900.000	41.041	179.664	10815.053	37.818	0.000	38.474	-0.000	19.316	0.000	0.000	43.602	38.361	97.857	MWD+IFR1+MS
11000.000	49.041	179.664	10885.656	36.354	0.000	38.759	-0.000	20.579	0.000	0.000	44.291	38.642	97.675	MWD+IFR1+MS
11100.000	57.041	179.664	10945.732	34.625	0.000	39.024	-0.000	22.036	0.000	0.000	44.802	38.901	97.675	MWD+IFR1+MS
11200.000	65.041	179.664	10994.111	32.798	0.000	39.268	-0.000	23.634	0.000	0.000	45.150	39.138	97.807	MWD+IFR1+MS
11300.000	73.041	179.664	11029.852	31.082	0.000	39.486	-0.000	25.318	0.000	0.000	45.358	39.350	98.031	MWD+IFR1+MS
11400.000	81.041	179.664	11052.259	29.718	0.000	39.679	-0.000	27.027	0.000	0.000	45.460	39.535	98.304	MWD+IFR1+MS
11500.000	89.041	179.664	11060.897	28.946	0.000	39.842	-0.000	28.706	0.000	0.000	45.493	39.693	98.570	MWD+IFR1+MS
11511.989	90.000	179.664	11060.997	28.729	0.000	39.858	-0.000	28.729	0.000	0.000	45.495	39.709	98.595	MWD+IFR1+MS
11600.000	90.000	179.664	11060.997	28.868	0.000	39.987	-0.000	28.868	0.000	0.000	45.506	39.834	98.803	MWD+IFR1+MS
11700.000	90.000	179.664	11060.997	29.040	0.000	40.150	-0.000	29.040	0.000	0.000	45.518	39.992	99.075	MWD+IFR1+MS
11800.000	90.000	179.664	11060.997	29.233	0.000	40.327	-0.000	29.233	0.000	0.000	45.532	40.164	99.384	MWD+IFR1+MS
11900.000	90.000	179.664	11060.997	29.446	0.000	40.518	-0.000	29.446	0.000	0.000	45.547	40.349	99.735	MWD+IFR1+MS
12000.000	90.000	179.664	11060.997	29.678	0.000	40.723	-0.000	29.678	0.000	0.000	45.564	40.547	100.134	MWD+IFR1+MS
12100.000	90.000	179.664	11060.997	29.929	0.000	40.941	-0.000	29.929	0.000	0.000	45.582	40.757	100.590	MWD+IFR1+MS
12200.000	90.000	179.664	11060.997	30.198	0.000	41.172	-0.000	30.198	0.000	0.000	45.601	40.980	101.112	MWD+IFR1+MS
12300.000	90.000	179.664	11060.997	30.484	0.000	41.415	-0.000	30.484	0.000	0.000	45.623	41.213	101.713	MWD+IFR1+MS
12400.000	90.000	179.664	11060.997	30.789	0.000	41.672	-0.000	30.789	0.000	0.000	45.647	41.458	102.407	MWD+IFR1+MS

12500.000	90.000	179.664	11060.997	31.110	0.000	41.941	-0.000	31.110	0.000	45.673	41.714	103.215	MWD+IFR1+MS
12600.000	90.000	179.664	11060.997	31.447	0.000	42.222	-0.000	31.447	0.000	45.702	41.979	104.164	MWD+IFR1+MS
12700.000	90.000	179.664	11060.997	31.800	0.000	42.515	-0.000	31.800	0.000	45.735	42.253	105.285	MWD+IFR1+MS
12800.000	90.000	179.664	11060.997	32.168	0.000	42.819	-0.000	32.168	0.000	45.772	42.534	106.624	MWD+IFR1+MS
12900.000	90.000	179.664	11060.997	32.551	0.000	43.135	-0.000	32.551	0.000	45.815	42.822	108.238	MWD+IFR1+MS
13000.000	90.000	179.664	11060.997	32.949	0.000	43.463	-0.000	32.949	0.000	45.866	43.115	110.203	MWD+IFR1+MS
13100.000	90.000	179.664	11060.997	33.360	0.000	43.801	-0.000	33.360	0.000	45.926	43.409	112.616	MWD+IFR1+MS
13200.000	90.000	179.664	11060.997	33.784	0.000	44.150	-0.000	33.784	0.000	45.999	43.701	115.596	MWD+IFR1+MS
13300.000	90.000	179.664	11060.997	34.221	0.000	44.509	-0.000	34.221	0.000	46.090	43.986	119.267	MWD+IFR1+MS
13400.000	90.000	179.664	11060.997	34.671	0.000	44.879	-0.000	34.671	0.000	46.206	44.259	123.728	MWD+IFR1+MS
13500.000	90.000	179.664	11060.997	35.132	0.000	45.258	-0.000	35.132	0.000	46.352	44.510	128.965	MWD+IFR1+MS
13600.000	90.000	179.664	11060.997	35.604	0.000	45.647	-0.000	35.604	0.000	46.538	44.733	134.763	MWD+IFR1+MS
13700.000	90.000	179.664	11060.997	36.087	0.000	46.046	-0.000	36.087	0.000	46.766	44.922	-39.305	MWD+IFR1+MS
13800.000	90.000	179.664	11060.997	36.581	0.000	46.453	-0.000	36.581	0.000	47.039	45.077	-33.726	MWD+IFR1+MS
13900.000	90.000	179.664	11060.997	37.085	0.000	46.870	-0.000	37.085	0.000	47.351	45.203	-28.837	MWD+IFR1+MS
14000.000	90.000	179.664	11060.997	37.598	0.000	47.296	-0.000	37.598	0.000	47.695	45.305	-24.747	MWD+IFR1+MS
14100.000	90.000	179.664	11060.997	38.121	0.000	47.730	-0.000	38.121	0.000	48.067	45.389	-21.408	MWD+IFR1+MS
14200.000	90.000	179.664	11060.997	38.653	0.000	48.172	-0.000	38.653	0.000	48.461	45.459	-18.700	MWD+IFR1+MS
14300.000	90.000	179.664	11060.997	39.193	0.000	48.622	-0.000	39.193	0.000	48.874	45.520	-16.500	MWD+IFR1+MS
14400.000	90.000	179.664	11060.997	39.741	0.000	49.080	-0.000	39.741	0.000	49.301	45.574	-14.697	MWD+IFR1+MS
14500.000	90.000	179.664	11060.997	40.297	0.000	49.546	-0.000	40.297	0.000	49.742	45.623	-13.205	MWD+IFR1+MS
14600.000	90.000	179.664	11060.997	40.860	0.000	50.019	-0.000	40.860	0.000	50.194	45.668	-11.957	MWD+IFR1+MS
14700.000	90.000	179.664	11060.997	41.431	0.000	50.499	-0.000	41.431	0.000	50.657	45.711	-10.902	MWD+IFR1+MS
14800.000	90.000	179.664	11060.997	42.009	0.000	50.986	-0.000	42.009	0.000	51.130	45.751	-10.002	MWD+IFR1+MS
14900.000	90.000	179.664	11060.997	42.593	0.000	51.480	-0.000	42.593	0.000	51.611	45.790	-9.226	MWD+IFR1+MS
15000.000	90.000	179.664	11060.997	43.184	0.000	51.981	-0.000	43.184	0.000	52.101	45.827	-8.552	MWD+IFR1+MS
15100.000	90.000	179.664	11060.997	43.781	0.000	52.488	-0.000	43.781	0.000	52.599	45.864	-7.963	MWD+IFR1+MS
15200.000	90.000	179.664	11060.997	44.383	0.000	53.001	-0.000	44.383	0.000	53.104	45.900	-7.443	MWD+IFR1+MS
15300.000	90.000	179.664	11060.997	44.991	0.000	53.520	-0.000	44.991	0.000	53.615	45.936	-6.981	MWD+IFR1+MS
15400.000	90.000	179.664	11060.997	45.605	0.000	54.045	-0.000	45.605	0.000	54.134	45.971	-6.570	MWD+IFR1+MS
15500.000	90.000	179.664	11060.997	46.224	0.000	54.576	-0.000	46.224	0.000	54.659	46.007	-6.200	MWD+IFR1+MS
15600.000	90.000	179.664	11060.997	46.847	0.000	55.112	-0.000	46.847	0.000	55.190	46.042	-5.867	MWD+IFR1+MS
15700.000	90.000	179.664	11060.997	47.476	0.000	55.653	-0.000	47.476	0.000	55.727	46.078	-5.566	MWD+IFR1+MS

15800.000	90.000	179.664	11060.997	48.109	0.000	56.200	-0.000	48.109	0.000	0.000	56.269	46.113	-5.292	MWD+IFR1+MS
15900.000	90.000	179.664	11060.997	48.747	0.000	56.752	-0.000	48.747	0.000	0.000	56.817	46.149	-5.042	MWD+IFR1+MS
16000.000	90.000	179.664	11060.997	49.388	0.000	57.309	-0.000	49.388	0.000	0.000	57.371	46.185	-4.813	MWD+IFR1+MS
16100.000	90.000	179.664	11060.997	50.034	0.000	57.871	-0.000	50.034	0.000	0.000	57.929	46.221	-4.602	MWD+IFR1+MS
16200.000	90.000	179.664	11060.997	50.684	0.000	58.437	-0.000	50.684	0.000	0.000	58.492	46.257	-4.409	MWD+IFR1+MS
16300.000	90.000	179.664	11060.997	51.338	0.000	59.007	-0.000	51.338	0.000	0.000	59.060	46.294	-4.229	MWD+IFR1+MS
16400.000	90.000	179.664	11060.997	51.995	0.000	59.583	-0.000	51.995	0.000	0.000	59.632	46.331	-4.063	MWD+IFR1+MS
16500.000	90.000	179.664	11060.997	52.655	0.000	60.162	-0.000	52.655	0.000	0.000	60.209	46.368	-3.909	MWD+IFR1+MS
16600.000	90.000	179.664	11060.997	53.319	0.000	60.745	-0.000	53.319	0.000	0.000	60.791	46.406	-3.766	MWD+IFR1+MS
16700.000	90.000	179.664	11060.997	53.987	0.000	61.333	-0.000	53.987	0.000	0.000	61.376	46.444	-3.632	MWD+IFR1+MS
16800.000	90.000	179.664	11060.997	54.657	0.000	61.924	-0.000	54.657	0.000	0.000	61.966	46.482	-3.507	MWD+IFR1+MS
16900.000	90.000	179.664	11060.997	55.331	0.000	62.519	-0.000	55.331	0.000	0.000	62.559	46.521	-3.389	MWD+IFR1+MS
17000.000	90.000	179.664	11060.997	56.007	0.000	63.118	-0.000	56.007	0.000	0.000	63.156	46.560	-3.280	MWD+IFR1+MS
17100.000	90.000	179.664	11060.997	56.686	0.000	63.720	-0.000	56.686	0.000	0.000	63.757	46.600	-3.176	MWD+IFR1+MS
17200.000	90.000	179.664	11060.997	57.368	0.000	64.326	-0.000	57.368	0.000	0.000	64.361	46.640	-3.079	MWD+IFR1+MS
17300.000	90.000	179.664	11060.997	58.052	0.000	64.935	-0.000	58.052	0.000	0.000	64.969	46.681	-2.987	MWD+IFR1+MS
17400.000	90.000	179.664	11060.997	58.739	0.000	65.548	-0.000	58.739	0.000	0.000	65.580	46.722	-2.901	MWD+IFR1+MS
17500.000	90.000	179.664	11060.997	59.428	0.000	66.164	-0.000	59.428	0.000	0.000	66.195	46.763	-2.819	MWD+IFR1+MS
17600.000	90.000	179.664	11060.997	60.120	0.000	66.782	-0.000	60.120	0.000	0.000	66.812	46.805	-2.741	MWD+IFR1+MS
17700.000	90.000	179.664	11060.997	60.814	0.000	67.404	-0.000	60.814	0.000	0.000	67.433	46.848	-2.668	MWD+IFR1+MS
17800.000	90.000	179.664	11060.997	61.510	0.000	68.029	-0.000	61.510	0.000	0.000	68.057	46.891	-2.598	MWD+IFR1+MS
17900.000	90.000	179.664	11060.997	62.208	0.000	68.656	-0.000	62.208	0.000	0.000	68.683	46.934	-2.532	MWD+IFR1+MS
18000.000	90.000	179.664	11060.997	62.909	0.000	69.287	-0.000	62.909	0.000	0.000	69.313	46.978	-2.469	MWD+IFR1+MS
18100.000	90.000	179.664	11060.997	63.611	0.000	69.920	-0.000	63.611	0.000	0.000	69.945	47.022	-2.409	MWD+IFR1+MS
18200.000	90.000	179.664	11060.997	64.315	0.000	70.556	-0.000	64.315	0.000	0.000	70.580	47.067	-2.352	MWD+IFR1+MS
18300.000	90.000	179.664	11060.997	65.021	0.000	71.194	-0.000	65.021	0.000	0.000	71.217	47.112	-2.298	MWD+IFR1+MS
18400.000	90.000	179.664	11060.997	65.729	0.000	71.835	-0.000	65.729	0.000	0.000	71.857	47.157	-2.246	MWD+IFR1+MS
18500.000	90.000	179.664	11060.997	66.438	0.000	72.478	-0.000	66.438	0.000	0.000	72.500	47.204	-2.196	MWD+IFR1+MS
18600.000	90.000	179.664	11060.997	67.150	0.000	73.123	-0.000	67.150	0.000	0.000	73.145	47.250	-2.148	MWD+IFR1+MS
18700.000	90.000	179.664	11060.997	67.862	0.000	73.771	-0.000	67.862	0.000	0.000	73.792	47.297	-2.103	MWD+IFR1+MS
18800.000	90.000	179.664	11060.997	68.577	0.000	74.421	-0.000	68.577	0.000	0.000	74.441	47.345	-2.059	MWD+IFR1+MS
18900.000	90.000	179.664	11060.997	69.293	0.000	75.073	-0.000	69.293	0.000	0.000	75.093	47.393	-2.018	MWD+IFR1+MS
19000.000	90.000	179.664	11060.997	70.010	0.000	75.728	-0.000	70.010	0.000	0.000	75.747	47.441	-1.978	MWD+IFR1+MS



Well Plan Report

3/20/24, 10:50 AM

19100.000	90.000	179.664	11060.997	70.729	0.000	76.384	-0.000	70.729	0.000	0.000	76.402	47.490	-1.939	MWD+IFR1+MS
19200.000	90.000	179.664	11060.997	71.449	0.000	77.042	-0.000	71.449	0.000	0.000	77.060	47.540	-1.902	MWD+IFR1+MS
19300.000	90.000	179.664	11060.997	72.171	0.000	77.703	-0.000	72.171	0.000	0.000	77.720	47.590	-1.867	MWD+IFR1+MS
19400.000	90.000	179.664	11060.997	72.894	0.000	78.365	-0.000	72.894	0.000	0.000	78.382	47.640	-1.833	MWD+IFR1+MS
19500.000	90.000	179.664	11060.997	73.618	0.000	79.029	-0.000	73.618	0.000	0.000	79.046	47.691	-1.800	MWD+IFR1+MS
19600.000	90.000	179.664	11060.997	74.343	0.000	79.695	-0.000	74.343	0.000	0.000	79.711	47.742	-1.768	MWD+IFR1+MS
19700.000	90.000	179.664	11060.997	75.070	0.000	80.363	-0.000	75.070	0.000	0.000	80.379	47.794	-1.737	MWD+IFR1+MS
19800.000	90.000	179.664	11060.997	75.797	0.000	81.033	-0.000	75.797	0.000	0.000	81.048	47.846	-1.708	MWD+IFR1+MS
19900.000	90.000	179.664	11060.997	76.526	0.000	81.704	-0.000	76.526	0.000	0.000	81.719	47.899	-1.680	MWD+IFR1+MS
20000.000	90.000	179.664	11060.997	77.256	0.000	82.377	-0.000	77.256	0.000	0.000	82.391	47.952	-1.652	MWD+IFR1+MS
20100.000	90.000	179.664	11060.997	77.987	0.000	83.051	-0.000	77.987	0.000	0.000	83.065	48.006	-1.626	MWD+IFR1+MS
20200.000	90.000	179.664	11060.997	78.719	0.000	83.727	-0.000	78.719	0.000	0.000	83.741	48.060	-1.600	MWD+IFR1+MS
20300.000	90.000	179.664	11060.997	79.452	0.000	84.405	-0.000	79.452	0.000	0.000	84.418	48.115	-1.576	MWD+IFR1+MS
20400.000	90.000	179.664	11060.997	80.186	0.000	85.084	-0.000	80.186	0.000	0.000	85.097	48.170	-1.552	MWD+IFR1+MS
20500.000	90.000	179.664	11060.997	80.921	0.000	85.764	-0.000	80.921	0.000	0.000	85.777	48.225	-1.529	MWD+IFR1+MS
20600.000	90.000	179.664	11060.997	81.657	0.000	86.446	-0.000	81.657	0.000	0.000	86.458	48.281	-1.506	MWD+IFR1+MS
20700.000	90.000	179.664	11060.997	82.394	0.000	87.129	-0.000	82.394	0.000	0.000	87.141	48.338	-1.484	MWD+IFR1+MS
20800.000	90.000	179.664	11060.997	83.132	0.000	87.814	-0.000	83.132	0.000	0.000	87.826	48.395	-1.463	MWD+IFR1+MS
20900.000	90.000	179.664	11060.997	83.870	0.000	88.500	-0.000	83.870	0.000	0.000	88.512	48.452	-1.443	MWD+IFR1+MS
21000.000	90.000	179.664	11060.997	84.610	0.000	89.187	-0.000	84.610	0.000	0.000	89.199	48.510	-1.423	MWD+IFR1+MS
21100.000	90.000	179.664	11060.997	85.350	0.000	89.876	-0.000	85.350	0.000	0.000	89.887	48.568	-1.404	MWD+IFR1+MS
21200.000	90.000	179.664	11060.997	86.091	0.000	90.566	-0.000	86.091	0.000	0.000	90.576	48.627	-1.386	MWD+IFR1+MS
21300.000	90.000	179.664	11060.997	86.832	0.000	91.257	-0.000	86.832	0.000	0.000	91.267	48.686	-1.368	MWD+IFR1+MS
21400.000	90.000	179.664	11060.997	87.575	0.000	91.949	-0.000	87.575	0.000	0.000	91.959	48.746	-1.350	MWD+IFR1+MS
21500.000	90.000	179.664	11060.997	88.318	0.000	92.642	-0.000	88.318	0.000	0.000	92.652	48.806	-1.333	MWD+IFR1+MS
21600.000	90.000	179.664	11060.997	89.062	0.000	93.337	-0.000	89.062	0.000	0.000	93.347	48.867	-1.317	MWD+IFR1+MS
21700.000	90.000	179.664	11060.997	89.807	0.000	94.032	-0.000	89.807	0.000	0.000	94.042	48.928	-1.301	MWD+IFR1+MS
21800.000	90.000	179.664	11060.997	90.552	0.000	94.729	-0.000	90.552	0.000	0.000	94.738	48.989	-1.285	MWD+IFR1+MS
21900.000	90.000	179.664	11060.997	91.298	0.000	95.427	-0.000	91.298	0.000	0.000	95.436	49.051	-1.270	MWD+IFR1+MS
22000.000	90.000	179.664	11060.997	92.045	0.000	96.125	-0.000	92.045	0.000	0.000	96.134	49.114	-1.255	MWD+IFR1+MS
22100.000	90.000	179.664	11060.997	92.792	0.000	96.825	-0.000	92.792	0.000	0.000	96.834	49.177	-1.241	MWD+IFR1+MS
22200.000	90.000	179.664	11060.997	93.540	0.000	97.526	-0.000	93.540	0.000	0.000	97.535	49.240	-1.227	MWD+IFR1+MS
22300.000	90.000	179.664	11060.997	94.288	0.000	98.227	-0.000	94.288	0.000	0.000	98.236	49.304	-1.213	MWD+IFR1+MS



22400.000	90.000	179.664	11060.997	95.037	0.000	98.930	-0.000	95.037	0.000	0.000	98.939	49.368	-1.200	MWD+IFR1+MS
22500.000	90.000	179.664	11060.997	95.787	0.000	99.634	-0.000	95.787	0.000	0.000	99.642	49.432	-1.187	MWD+IFR1+MS
22600.000	90.000	179.664	11060.997	96.537	0.000	100.338	-0.000	96.537	0.000	0.000	100.346	49.497	-1.175	MWD+IFR1+MS
22700.000	90.000	179.664	11060.997	97.288	0.000	101.044	-0.000	97.288	0.000	0.000	101.052	49.563	-1.162	MWD+IFR1+MS
22800.000	90.000	179.664	11060.997	98.039	0.000	101.750	-0.000	98.039	0.000	0.000	101.758	49.629	-1.150	MWD+IFR1+MS
22900.000	90.000	179.664	11060.997	98.791	0.000	102.457	-0.000	98.791	0.000	0.000	102.465	49.695	-1.139	MWD+IFR1+MS
23000.000	90.000	179.664	11060.997	99.543	0.000	103.165	-0.000	99.543	0.000	0.000	103.172	49.762	-1.127	MWD+IFR1+MS
23100.000	90.000	179.664	11060.997	100.296	0.000	103.874	-0.000	100.296	0.000	0.000	103.881	49.829	-1.116	MWD+IFR1+MS
23200.000	90.000	179.664	11060.997	101.049	0.000	104.583	-0.000	101.049	0.000	0.000	104.590	49.897	-1.105	MWD+IFR1+MS
23300.000	90.000	179.664	11060.997	101.803	0.000	105.293	-0.000	101.803	0.000	0.000	105.301	49.965	-1.095	MWD+IFR1+MS
23400.000	90.000	179.664	11060.997	102.557	0.000	106.005	-0.000	102.557	0.000	0.000	106.012	50.033	-1.084	MWD+IFR1+MS
23500.000	90.000	179.664	11060.997	103.312	0.000	106.716	-0.000	103.312	0.000	0.000	106.723	50.102	-1.074	MWD+IFR1+MS
23600.000	90.000	179.664	11060.997	104.067	0.000	107.429	-0.000	104.067	0.000	0.000	107.436	50.171	-1.064	MWD+IFR1+MS
23700.000	90.000	179.664	11060.997	104.823	0.000	108.142	-0.000	104.823	0.000	0.000	108.149	50.241	-1.055	MWD+IFR1+MS
23780.610	90.000	179.664	11060.997	105.431	0.000	108.717	-0.000	105.431	0.000	0.000	108.724	50.298	-1.047	MWD+IFR1+MS
23800.000	90.000	179.664	11060.997	105.578	0.000	108.855	-0.000	105.578	0.000	0.000	108.862	50.311	-1.045	MWD+IFR1+MS
23870.366	90.000	179.664	11060.997	106.109	0.000	109.357	-0.000	106.109	0.000	0.000	109.363	50.361	-1.039	MWD+IFR1+MS

Poker Lake Unit 21 DTD South 128H

Plan Targets

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 11	11202.44	440452.10	641065.50	7631.00	RECTANGLE
SHL 5	9736.15	440755.18	640922.42	5902.00	RECTANGLE
LTP 11	23780.51	427467.80	641146.80	7631.00	RECTANGLE
BHL 11	23875.42	427377.80	641147.20	7631.00	RECTANGLE



DRAWING NO. SDT-3301

(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO  
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head  
And Drilling & Skid Configurations

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U. S. Steel Tubular Products  
5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®



MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ®		—
Minimum Yield Strength	110,000	—	psi	—
Maximum Yield Strength	125,000	—	psi	—
Minimum Tensile Strength	125,000	—	psi	—
DIMENSIONS	Pipe	USS-FREEDOM HTQ®		—
Outside Diameter	5.500	6.300	in.	—
Wall Thickness	0.361	--	in.	—
Inside Diameter	4.778	4.778	in.	—
Standard Drift	4.653	4.653	in.	—
Alternate Drift	--	--	in.	—
Nominal Linear Weight, T&C	20.00	--	lb/ft	—
Plain End Weight	19.83	--	lb/ft	—
SECTION AREA	Pipe	USS-FREEDOM HTQ®		—
Critical Area	5.828	5.828	sq. in.	—
Joint Efficiency	—	100.0	%	—
PERFORMANCE	Pipe	USS-FREEDOM HTQ®		—
Minimum Collapse Pressure	11,100	11,100	psi	—
Minimum Internal Yield Pressure	12,640	12,640	psi	—
Minimum Pipe Body Yield Strength	641,000	--	lb	—
Joint Strength	--	641,000	lb	—
Compression Rating	--	641,000	lb	—
Reference Length [4]	--	21,370	ft	—
Maximum Uniaxial Bend Rating [2]	--	91.7	deg/100 ft	—
MAKE-UP DATA	Pipe	USS-FREEDOM HTQ®		—
Make-Up Loss	--	4.13	in.	—
Minimum Make-Up Torque [3]	--	15,000	ft-lb	—
Maximum Make-Up Torque [3]	--	21,000	ft-lb	—
Maximum Operating Torque[3]	--	29,500	ft-lb	—

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

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www.usstubular.com



## U. S. Steel Tubular Products

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

				
MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000	—	psi	—
Maximum Yield Strength	125,000	—	psi	—
Minimum Tensile Strength	125,000	—	psi	—
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		—
Outside Diameter	5.500	5.900	in.	—
Wall Thickness	0.361	--	in.	—
Inside Diameter	4.778	4.778	in.	—
Standard Drift	4.653	4.653	in.	—
Alternate Drift	—	--	in.	—
Nominal Linear Weight, T&C	20.00	--	lb/ft	—
Plain End Weight	19.83	--	lb/ft	—
SECTION AREA	Pipe	USS-TALON HTQ™ RD		—
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		—
Minimum Collapse Pressure	11,100	11,100	psi	--
Minimum Internal Yield Pressure	12,640	12,640	psi	--
Minimum Pipe Body Yield Strength	641,000	--	lb	--
Joint Strength	--	641,000	lb	--
Compression Rating	--	641,000	lb	--
Reference Length	--	21,370	ft	[5]
Maximum Uniaxial Bend Rating	--	91.7	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		—
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	17,000	ft-lb	[4]
Maximum Make-Up Torque	--	20,000	ft-lb	[4]
Maximum Operating Torque	--	39,500	ft-lb	[4]

UNCONTROLLED

## Notes

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- Uniaxial bend rating shown is structural only.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- Coupling must meet minimum mechanical properties of the pipe.

## Legal Notice

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### 10,000 PSI Annular BOP Variance Request

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

#### 1. Component and Preventer Compatibility Tables

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

8-1/2" Production Hole Section 10M psi Requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	6.750"-8.000"	Annular	5M	-	-
Production Casing	5-1/2"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

## 2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per 43.CFR.3172 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

### General Procedure While Drilling

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



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

#### General Procedure While Tripping

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

#### General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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



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

**BLACK GOLD®**

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*NEW CHOKE HOSE*  
*INSTALLED 02-10-2024*

## CERTIFICATE OF CONFORMANCE

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

**CUSTOMER:** NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA  
**CUSTOMER P.O.#:** 15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)  
**CUSTOMER P/N:** IMR RETEST SN 74621 ASSET #66-1531

**PART DESCRIPTION:** RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES

**SALES ORDER #:** 529480  
**QUANTITY:** 1  
**SERIAL #:** 74621 H3-012524-1

**SIGNATURE:***F. Cismos***TITLE:****QUALITY ASSURANCE****DATE:**

1/25/2024



H3-15/16

1/25/2024 11:48:06 AM

# TEST REPORT

**CUSTOMER**

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

**TEST OBJECT**

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

**TEST INFORMATION**

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K

Part number:

Description:

Fitting 2: 3.0 x 4-1/16 10K

Part number:

Description:

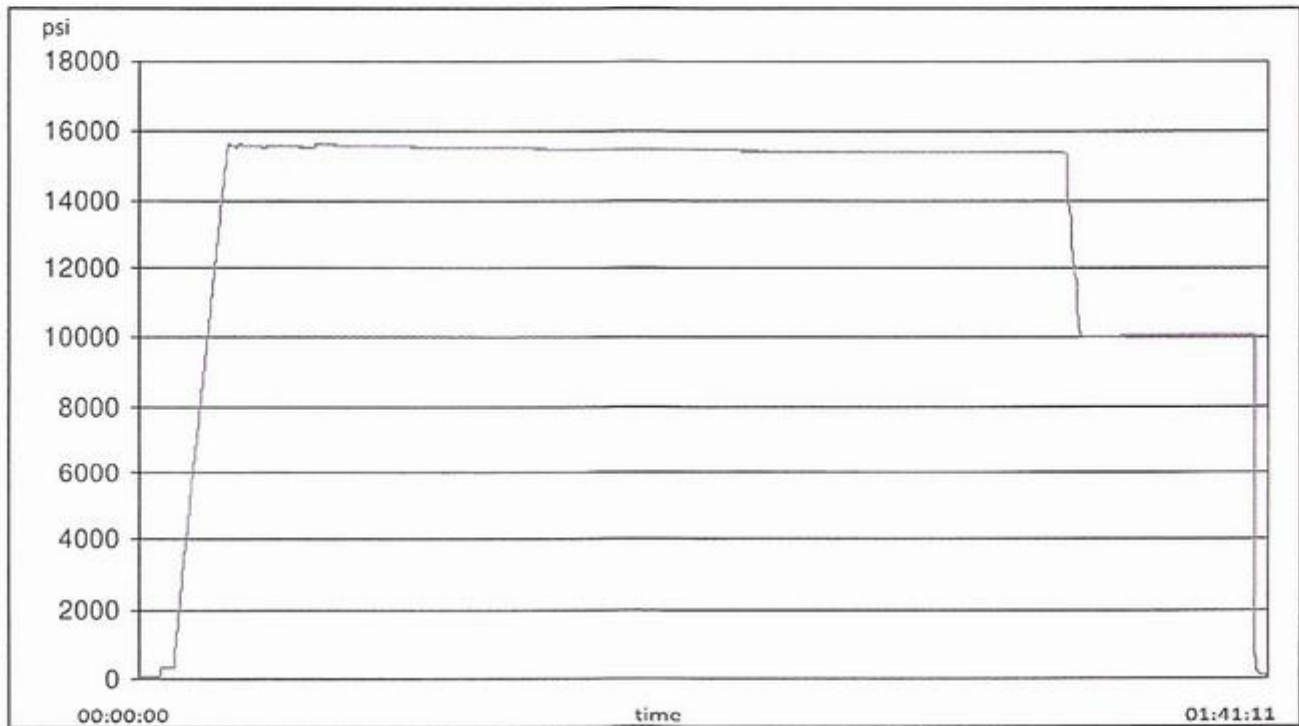
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/16

1/25/2024 11:48:06 AM

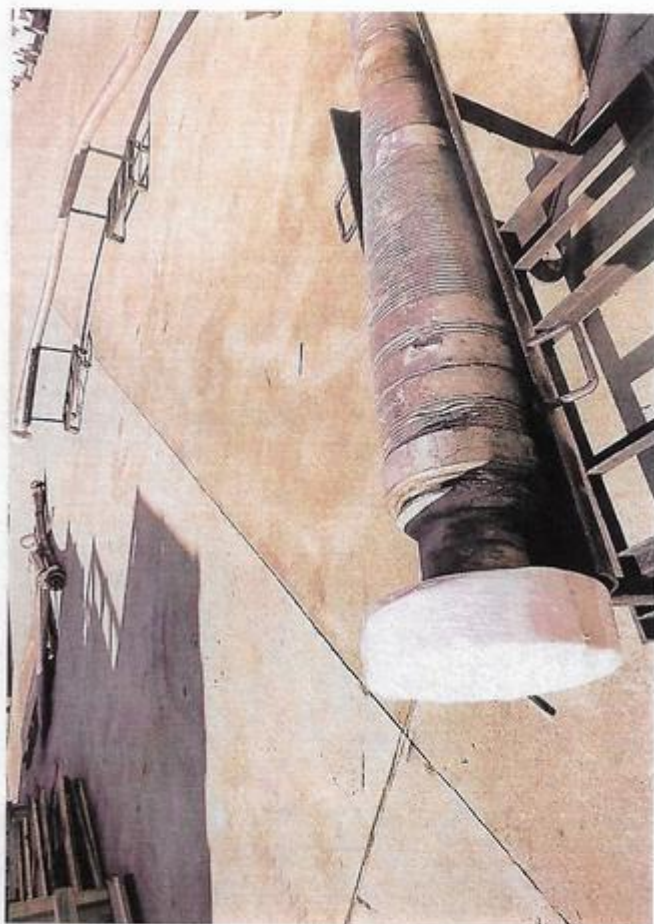
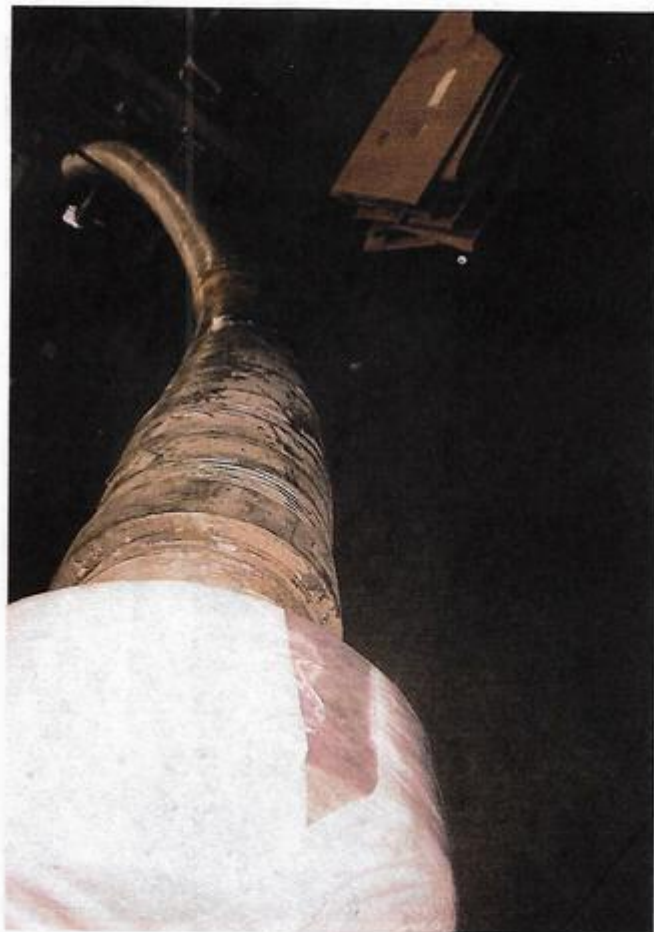
TEST REPORT

GAUGE TRACEABILITY

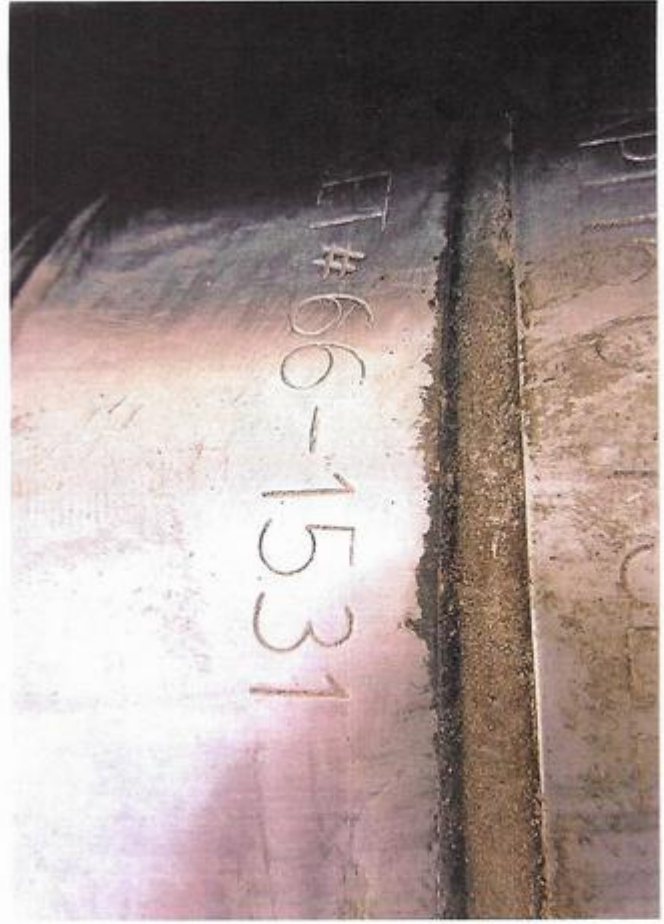
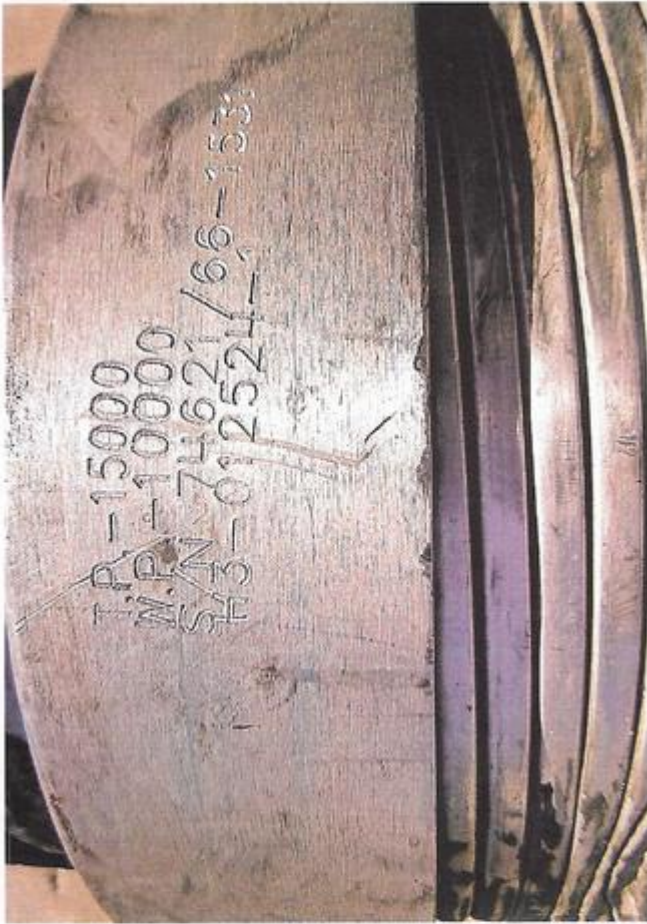
Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

Comment









**QC APPROVED** BY POSSIBILITY™

**Gates**

I.D.: 3" LENGTH: 45'

GRADE: 166 <sup>10K</sup> END FITTING: 1 1/4" 10K Flange E/F

W#: H3-012524-1

CUST NAME: Nalco DOC#: 528450

NOTES: 10.15582803 SN: 74621 ASSET 66-1531



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

CONDITIONS  
  
Action 381001

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 381001
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	9/6/2024
ward.rikala	Operator must comply with all R-111-Q requirements.	9/6/2024