

**Type of Well:** CONVENTIONAL GAS  
WELL

**Allottee or Tribe Name:** Page 1 of 44

**Lease Number:** NMLC0068430

**Unit or CA Name:** POKER LAKE UNIT

**Unit or CA Number:**  
NMNM71016X

**US Well Number:** 3001553263

**Operator:** XTO PERMIAN OPERATING  
LLC

## Notice of Intent

**Sundry ID:** 2784114

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 04/09/2024

**Time Sundry Submitted:** 12:59

**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: 386' FNL & 1863' FWL OF SECTION 21-T24S-R30E 100' FNL & 2181' FWL OF SECTION 21-T24S-R30E LTP: 328' FNL & 1870' FWL OF SECTION 33-T23S-R30E 2540' FNL & 2181' FWL OF SECTION 33-T24S-R30E BHL: 200' FNL & 1869' FWL OF SECTION 33-T23S-R30E 2630' FNL & 2181' FWL OF SECTION 33-T24S-R30E The proposed total depth is changing from 32994' MD; 11303' TVD (Wolfcamp) to 23965' MD; 11149' TVD (Wolfcamp A). A saturated salt brine will be utilized while drilling through the salt formations. See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance, Well Control Plan, BOP diagram with 3 rams rated 10M each, & 5M choke manifold.

## NOI Attachments

### Procedure Description

PLU\_21\_DTD\_183H\_Sundry\_Attachments\_20240816130518.pdf

**US Well Number:** 3001553263

**Operator:** XTO PERMIAN OPERATING  
LLC

### Conditions of Approval

#### Additional

Poker\_Lake\_Unit\_21\_DTD\_183H\_COA\_20240912134558.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:** AUG 16, 2024 01:05 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:** 09/13/2024

**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 type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. POKER LAKE UNIT 21 DTD/183H
2. Name of Operator XTO PERMIAN OPERATING LLC		9. API Well No. 3001553263
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 21/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 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"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
<input type="checkbox"/> Final Abandonment Notice	<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 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 performed 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 determined 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: 386' FNL & 1863' FWL OF SECTION 21-T24S-R30E 100' FNL & 2181' FWL OF SECTION 21-T24S-R30E  
LTP: 328' FNL & 1870' FWL OF SECTION 33-T23S-R30E 2540' FNL & 2181' FWL OF SECTION 33-T24S-R30E  
BHL: 200' FNL & 1869' FWL OF SECTION 33-T23S-R30E 2630' FNL & 2181' FWL OF SECTION 33-T24S-R30E

The proposed total depth is changing from 32994 MD; 11303 TVD (Wolfcamp) to 23965 MD; 11149 TVD (Wolfcamp A).

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

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	Regulatory Advisor	
	Title	
(Electronic Submission)	Date	08/16/2024

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Petroleum Engineer	09/13/2024
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.	Title	
	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

See attached Drilling Plan for updated cement and casing program.

Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance, Well Control Plan, BOP diagram with 3 rams rated 10M each, & 5M choke manifold.

### Location of Well

0. SHL: NENW / 396 FNL / 1756 FWL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.209381 / LONG: -103.889207 ( TVD: 0 feet, MD: 0 feet )

PPP: NENW / 386 FNL / 1863 FWL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.209408 / LONG: -103.888861 ( TVD: 11303 feet, MD: 11649 feet )

BHL: NENW / 200 FNL / 1869 FWL / TWSP: 23S / RANGE: 30E / SECTION: 33 / LAT: 32.268082 / LONG: -103.888836 ( TVD: 11303 feet, MD: 32994 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b> XTO <b>LEASE NO.:</b> NMLC068430 <b>LOCATION:</b> Sec. 21, T.24 S, R 30 E <b>COUNTY:</b> <span style="border: 1px solid black; padding: 2px;">Eddy County, New Mexico ▼</span>
<b>WELL NAME &amp; NO.:</b> Poker Lake Unit 21 DTD 183H <b>SURFACE HOLE FOOTAGE:</b> 396'/N & 1756'/W <b>BOTTOM HOLE FOOTAGE:</b> 2630'/N & 2181'/W

*Changes approved through engineering via **Sundry 2784114** on 9-12-2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

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

### A. HYDROGEN SULFIDE

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.

### B. CASING

1. The 13-3/8 inch surface casing shall be set at approximately **900** 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 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 6251'**
- b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

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

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

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

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

## C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

## D. SPECIAL REQUIREMENT (S)

### Unit Wells

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

### Commercial Well Determination

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

### BOPE Break Testing Variance

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

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

### **Offline Cementing**

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

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

### **Casing Clearance**

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

## GENERAL REQUIREMENTS

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

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

### Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;  
[BLM NM CFO DrillingNotifications@BLM.GOV](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

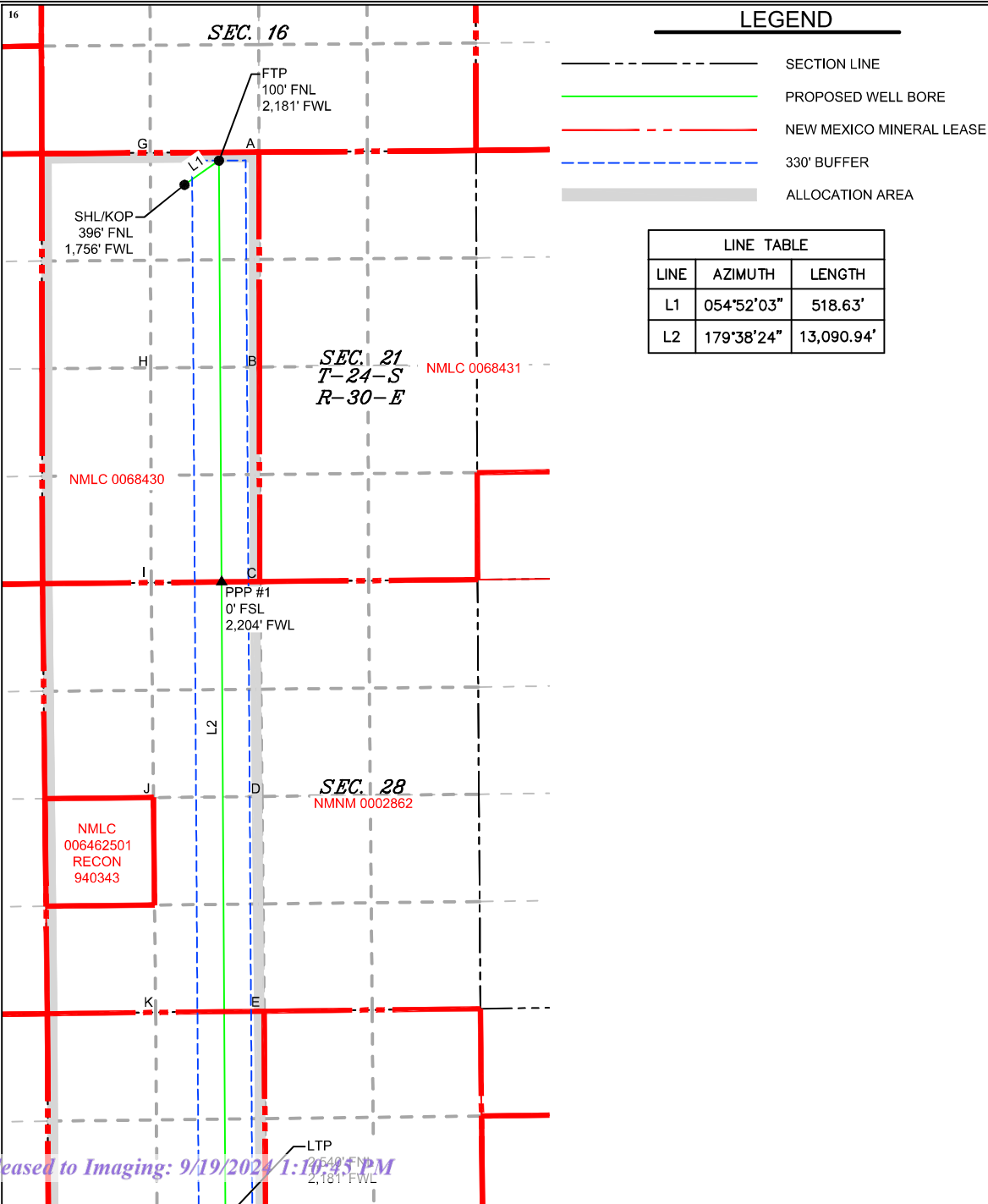
disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**Approved by Zota Stevens on 9/12/2024**  
575-234-5998 / [zstevens@blm.gov](mailto:zstevens@blm.gov)

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015- 5326</b>		<sup>2</sup> Pool Code <b>9822</b>		<sup>3</sup> Pool Name <b>PURPLE SAGE;WOLFCAMP</b>					
<sup>4</sup> Property Code <b>33357</b>		<sup>5</sup> Property Name <b>POKER LAKE UNIT 21 DTD SOUTH</b>						<sup>6</sup> Well Number <b>183H</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>3,328'</b>	
<sup>10</sup> Surface Location									
UL or lot no. <b>C</b>	Section <b>21</b>	Township <b>24S</b>	Range <b>30E</b>	Lot Idn	Feet from the <b>396</b>	North/South line <b>NORTH</b>	Feet from the <b>1,756</b>	East/West line <b>WEST</b>	County <b>EDDY</b>
<sup>11</sup> Bottom Hole Location If Different From Surface									
UL or lot no. <b>F</b>	Section <b>33</b>	Township <b>24S</b>	Range <b>30E</b>	Lot Idn	Feet from the <b>2,630</b>	North/South line <b>NORTH</b>	Feet from the <b>2,181</b>	East/West line <b>WEST</b>	County <b>EDDY</b>
<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.			

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 7/15/2024  
Signature Date

Emily Rive  
Printed Name

emily.a.rivera@exxonmob  
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.

7/9/2024  
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP  
NEW MEXICO  
23786  
PROF. SURVEYOR

Intent ☒ As Drilled ☐

API # 30-15-		
Operator Name: XTO PERMAIN OPERATING, LLC.	Property Name: POKER LAKE UNIT 21 DTD	Well Number 183H

## 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 C	Section 21	Township 24S	Range 30E	Lot	Feet 100	From N/S NORTH	Feet 2,181	From E/W WEST	County EDDY
Latitude 32.210197					Longitude -103.887832				NAD 83

## Last Take Point (LTP)

UL F	Section 33	Township 24S	Range 30E	Lot	Feet 2,540	From N/S NORTH	Feet 2,181	From E/W WEST	County EDDY
Latitude 32.174459					Longitude -103.887741				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 SOUTH 183H  
Projected TD: 23965' MD / 11149' TVD  
SHL: 396' FNL & 1756' FWL , Section 21, T24S, R30E  
BHL: 2630' FNL & 2181' FWL , 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	915'	Water
Top of Salt	1318'	Water
Base of Salt	3511'	Water
Delaware	3705'	Water
Brushy Canyon	6251'	Water/Oil/Gas
Bone Spring	7575'	Water
Avalon	8268'	Water/Oil/Gas
1st Bone Spring	8284'	Water/Oil/Gas
2nd Bone Spring	8869'	Water/Oil/Gas
3rd Bone Spring	9695'	Water/Oil/Gas
Wolfcamp	10880'	Water/Oil/Gas
Wolfcamp X	10901'	Water/Oil/Gas
Wolfcamp Y	10982'	Water/Oil/Gas
Wolfcamp A	11029'	Water/Oil/Gas
<b>Target/Land Curve</b>	<b>11149'</b>	Water/Oil/Gas

\*\*\* Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 1015' (303' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 10266' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23965 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9966 feet).

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1015'	9.625	40	J-55	BTC	New	1.62	6.20	15.52
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.24	2.92	1.83
8.75	4000' – 10266'	7.625	29.7	HC L-80	Flush Joint	New	1.63	2.33	2.18
6.75	0' – 10166'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.83	2.01
6.75	10166' - 23965'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.66	2.01

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

• 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 9-5/8" bottom

B. Tubing Head: 11" 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: 9.625, 40 New BTC, J-55 casing to be set at +/- 1015'**

Lead: 230 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft<sup>3</sup>/sx, 10.13 gal/sx water)

Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 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 +/- 10266'**

###### 1st Stage

Optional Lead: 340 sxs Class C (mixed at 10.5 ppg, 2.77 ft<sup>3</sup>/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 370 sxs Class C (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6251

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

###### 2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft<sup>3</sup>/sx, 9.61 gal/sx water)

Tail: 700 sxs Class C (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement: 0

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

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6251') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

##### **Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 23965'**

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 9966 feet

Tail: 970 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 10466 feet

Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

## 5. Pressure Control Equipment

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

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 9.625, 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.

## 6. Proposed Mud Circulation System

INTERVAL	Hole Size
0' - 1015'	12.25
1015' - 10266'	8.75
10266' - 23965'	6.75

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 9-5/8" surface casing with brine solution. Cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

## 7. Auxiliary Well Control and Monitoring Equipment

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

## 8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

## 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 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 6667 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 183H

Measured Depth: 23965.31 ft  
TVD RKB: 11149.00 ft  
Location  
Cartographic Reference System: New Mexico East - NAD 27  
Northing: 440131.40 ft  
Easting: 637514.40 ft  
RKB: 3360.00 ft  
Ground Level: 3328.00 ft  
North Reference: Grid  
Convergence Angle: 0.24 Deg

Plan Sections Poker Lake Unit 21 DTD South 183H

Measured		TVD		Y Offset		X Offset		Build		Turn		Dogleg	
Depth	(ft)	Inclination	(Deg)	Azimuth	(Deg)	RKB	(ft)	Rate	(Deg/100ft)	Rate	(Deg/100ft)	Rate	(Deg/100ft)
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
1100.00		0.00	0.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1476.61		7.53	54.87	1475.53	14.23	20.22	403.98	2.00	0.00	0.00	0.00	2.00	0.00
5056.45		7.53	54.87	5024.47	284.27	424.20	424.20	0.00	0.00	0.00	0.00	0.00	0.00
5433.06		0.00	0.00	5400.00	298.50	424.20	424.20	-2.00	0.00	0.00	0.00	2.00	0.00
10465.86		0.00	0.00	10432.80	298.50	424.20	424.20	0.00	0.00	0.00	0.00	0.00	0.00
11590.86		90.00	179.64	11149.00	-417.68	428.69	505.66	8.00	0.00	0.00	0.00	8.00	0.00
23875.26		90.00	179.64	11149.00	-12701.84	506.22	506.22	0.00	0.00	0.00	0.00	0.00	LTP 24
23965.31		90.00	179.64	11149.00	-12791.89	506.22	506.22	0.00	0.00	0.00	0.00	0.00	BHL 24

Position Uncertainty Poker Lake Unit 21 DTD South 183H

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	Error	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(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	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	0.751	0.000	0.220	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	1.259	0.000	0.627	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	1.698	0.000	0.986	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	2.108	0.000	1.344	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	2.503	0.000	1.701	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.406	0.000	2.888	0.000	2.059	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.443	0.000	3.267	0.000	2.417	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.485	0.000	3.642	0.000	2.775	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.531	0.000	4.014	0.000	3.133	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.580	0.000	4.384	0.000	3.491	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.634	0.000	4.752	0.000	3.849	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	54.867	1199.980	5.227	0.000	4.282	0.000	2.690	0.000	5.261	0.000	4.243	4.243	134.187	MWD+IFR1+MS
1300.000	4.000	54.867	1299.838	5.977	0.000	4.669	0.000	2.750	0.000	5.988	0.000	4.668	4.668	-36.879	MWD+IFR1+MS
1400.000	6.000	54.867	1399.452	6.656	0.000	5.052	0.000	2.815	0.000	6.680	0.000	5.048	5.048	-32.449	MWD+IFR1+MS
1476.612	7.532	54.867	1475.528	7.020	0.000	5.333	0.000	2.865	0.000	7.062	0.000	5.323	5.323	-31.203	MWD+IFR1+MS
1500.000	7.532	54.867	1498.714	7.085	0.000	5.414	0.000	2.878	0.000	7.127	0.000	5.405	5.405	-31.220	MWD+IFR1+MS
1600.000	7.532	54.867	1597.851	7.360	0.000	5.774	0.000	2.948	0.000	7.400	0.000	5.765	5.765	-31.065	MWD+IFR1+MS
1700.000	7.532	54.867	1696.989	7.657	0.000	6.153	0.000	3.020	0.000	7.697	0.000	6.141	6.141	-30.332	MWD+IFR1+MS
1800.000	7.532	54.867	1796.126	7.961	0.000	6.530	0.000	3.096	0.000	8.000	0.000	6.515	6.515	-29.606	MWD+IFR1+MS
1900.000	7.532	54.867	1895.263	8.270	0.000	6.906	0.000	3.173	0.000	8.309	0.000	6.888	6.888	-28.889	MWD+IFR1+MS
2000.000	7.532	54.867	1994.400	8.583	0.000	7.282	0.000	3.253	0.000	8.623	0.000	7.260	7.260	-28.182	MWD+IFR1+MS
2100.000	7.532	54.867	2093.537	8.902	0.000	7.656	0.000	3.335	0.000	8.942	0.000	7.631	7.631	-27.485	MWD+IFR1+MS
2200.000	7.532	54.867	2192.674	9.224	0.000	8.029	0.000	3.420	0.000	9.264	0.000	8.001	8.001	-26.800	MWD+IFR1+MS
2300.000	7.532	54.867	2291.811	9.549	0.000	8.402	0.000	3.506	0.000	9.590	0.000	8.370	8.370	-26.127	MWD+IFR1+MS
2400.000	7.532	54.867	2390.948	9.878	0.000	8.774	0.000	3.594	0.000	9.919	0.000	8.739	8.739	-25.467	MWD+IFR1+MS
2500.000	7.532	54.867	2490.086	10.210	0.000	9.146	0.000	3.683	0.000	10.251	0.000	9.107	9.107	-24.821	MWD+IFR1+MS
2600.000	7.532	54.867	2589.223	10.544	0.000	9.518	0.000	3.775	0.000	10.585	0.000	9.475	9.475	-24.188	MWD+IFR1+MS
2700.000	7.532	54.867	2688.360	10.880	0.000	9.889	0.000	3.867	0.000	10.922	0.000	9.843	9.843	-23.569	MWD+IFR1+MS
2800.000	7.532	54.867	2787.497	11.219	0.000	10.259	0.000	3.962	0.000	11.261	0.000	10.210	10.210	-22.965	MWD+IFR1+MS
2900.000	7.532	54.867	2886.634	11.560	0.000	10.629	0.000	4.058	0.000	11.602	0.000	10.577	10.577	-22.376	MWD+IFR1+MS

3000.000	7.532	54.867	2985.771	11.902	0.000	10.999	0.000	4.155	0.000	11.944	10.944	-21.801	MWD+IFR1+MS
3100.000	7.532	54.867	3084.908	12.246	0.000	11.369	0.000	4.254	0.000	12.289	11.311	-21.242	MWD+IFR1+MS
3200.000	7.532	54.867	3184.045	12.592	0.000	11.739	0.000	4.354	0.000	12.634	11.677	-20.697	MWD+IFR1+MS
3300.000	7.532	54.867	3283.183	12.938	0.000	12.108	0.000	4.456	0.000	12.981	12.043	-20.168	MWD+IFR1+MS
3400.000	7.532	54.867	3382.320	13.287	0.000	12.477	0.000	4.559	0.000	13.329	12.410	-19.654	MWD+IFR1+MS
3500.000	7.532	54.867	3481.457	13.636	0.000	12.846	0.000	4.664	0.000	13.678	12.776	-19.155	MWD+IFR1+MS
3600.000	7.532	54.867	3580.594	13.986	0.000	13.215	0.000	4.770	0.000	14.028	13.142	-18.670	MWD+IFR1+MS
3700.000	7.532	54.867	3679.731	14.338	0.000	13.584	0.000	4.878	0.000	14.380	13.508	-18.201	MWD+IFR1+MS
3800.000	7.532	54.867	3778.868	14.690	0.000	13.952	0.000	4.987	0.000	14.732	13.874	-17.745	MWD+IFR1+MS
3900.000	7.532	54.867	3878.005	15.043	0.000	14.321	0.000	5.097	0.000	15.084	14.239	-17.304	MWD+IFR1+MS
4000.000	7.532	54.867	3977.142	15.397	0.000	14.689	0.000	5.209	0.000	15.438	14.605	-16.878	MWD+IFR1+MS
4100.000	7.532	54.867	4076.280	15.752	0.000	15.057	0.000	5.322	0.000	15.792	14.971	-16.465	MWD+IFR1+MS
4200.000	7.532	54.867	4175.417	16.108	0.000	15.425	0.000	5.437	0.000	16.147	15.337	-16.065	MWD+IFR1+MS
4300.000	7.532	54.867	4274.554	16.464	0.000	15.793	0.000	5.554	0.000	16.502	15.703	-15.679	MWD+IFR1+MS
4400.000	7.532	54.867	4373.691	16.820	0.000	16.161	0.000	5.672	0.000	16.858	16.069	-15.306	MWD+IFR1+MS
4500.000	7.532	54.867	4472.828	17.178	0.000	16.529	0.000	5.792	0.000	17.215	16.434	-14.946	MWD+IFR1+MS
4600.000	7.532	54.867	4571.965	17.536	0.000	16.897	0.000	5.913	0.000	17.572	16.800	-14.598	MWD+IFR1+MS
4700.000	7.532	54.867	4671.102	17.894	0.000	17.265	0.000	6.036	0.000	17.929	17.166	-14.262	MWD+IFR1+MS
4800.000	7.532	54.867	4770.239	18.253	0.000	17.632	0.000	6.161	0.000	18.287	17.532	-13.938	MWD+IFR1+MS
4900.000	7.532	54.867	4869.377	18.612	0.000	18.000	0.000	6.288	0.000	18.645	17.898	-13.626	MWD+IFR1+MS
5000.000	7.532	54.867	4968.514	18.972	0.000	18.367	0.000	6.416	0.000	19.003	18.264	-13.325	MWD+IFR1+MS
5056.445	7.532	54.867	5024.472	19.172	0.000	18.571	0.000	6.489	0.000	19.200	18.469	-13.361	MWD+IFR1+MS
5100.000	6.661	54.867	5067.693	19.333	0.000	18.727	0.000	6.546	0.000	19.352	18.627	-13.455	MWD+IFR1+MS
5200.000	4.661	54.867	5167.200	19.752	0.000	19.087	0.000	6.678	0.000	19.767	18.987	-14.352	MWD+IFR1+MS
5300.000	2.661	54.867	5266.991	20.208	0.000	19.447	0.000	6.809	0.000	20.245	19.344	-15.520	MWD+IFR1+MS
5400.000	0.661	54.867	5366.944	20.632	0.000	19.803	0.000	6.936	0.000	20.716	19.695	-16.357	MWD+IFR1+MS
5433.057	0.000	0.000	5400.000	19.894	0.000	20.749	0.000	6.978	0.000	20.829	19.810	-16.477	MWD+IFR1+MS
5500.000	0.000	0.000	5466.943	20.128	0.000	20.966	0.000	7.061	0.000	21.047	20.044	-16.655	MWD+IFR1+MS
5600.000	0.000	0.000	5566.943	20.479	0.000	21.297	0.000	7.188	0.000	21.379	20.393	-17.012	MWD+IFR1+MS
5700.000	0.000	0.000	5666.943	20.832	0.000	21.630	0.000	7.317	0.000	21.717	20.743	-17.494	MWD+IFR1+MS
5800.000	0.000	0.000	5766.943	21.186	0.000	21.965	0.000	7.449	0.000	22.055	21.093	-17.973	MWD+IFR1+MS
5900.000	0.000	0.000	5866.943	21.540	0.000	22.300	0.000	7.583	0.000	22.394	21.443	-18.447	MWD+IFR1+MS
6000.000	0.000	0.000	5966.943	21.894	0.000	22.636	0.000	7.719	0.000	22.733	21.793	-18.917	MWD+IFR1+MS

6100.000	0.000	0.000	6066.943	22.248	0.000	22.973	0.000	7.857	0.000	23.074	22.143	-19.384	MWD+IFR1+MS
6200.000	0.000	0.000	6166.943	22.602	0.000	23.311	0.000	7.998	0.000	23.415	22.494	-19.845	MWD+IFR1+MS
6300.000	0.000	0.000	6266.943	22.956	0.000	23.649	0.000	8.141	0.000	23.757	22.845	-20.303	MWD+IFR1+MS
6400.000	0.000	0.000	6366.943	23.311	0.000	23.987	0.000	8.287	0.000	24.099	23.195	-20.755	MWD+IFR1+MS
6500.000	0.000	0.000	6466.943	23.665	0.000	24.326	0.000	8.435	0.000	24.442	23.546	-21.202	MWD+IFR1+MS
6600.000	0.000	0.000	6566.943	24.020	0.000	24.666	0.000	8.585	0.000	24.785	23.897	-21.645	MWD+IFR1+MS
6700.000	0.000	0.000	6666.943	24.375	0.000	25.006	0.000	8.738	0.000	25.129	24.249	-22.082	MWD+IFR1+MS
6800.000	0.000	0.000	6766.943	24.730	0.000	25.347	0.000	8.894	0.000	25.473	24.600	-22.514	MWD+IFR1+MS
6900.000	0.000	0.000	6866.943	25.085	0.000	25.688	0.000	9.052	0.000	25.818	24.951	-22.941	MWD+IFR1+MS
7000.000	0.000	0.000	6966.943	25.440	0.000	26.030	0.000	9.213	0.000	26.163	25.303	-23.362	MWD+IFR1+MS
7100.000	0.000	0.000	7066.943	25.795	0.000	26.372	0.000	9.376	0.000	26.509	25.654	-23.777	MWD+IFR1+MS
7200.000	0.000	0.000	7166.943	26.150	0.000	26.715	0.000	9.542	0.000	26.855	26.006	-24.187	MWD+IFR1+MS
7300.000	0.000	0.000	7266.943	26.506	0.000	27.058	0.000	9.711	0.000	27.202	26.358	-24.592	MWD+IFR1+MS
7400.000	0.000	0.000	7366.943	26.861	0.000	27.401	0.000	9.883	0.000	27.549	26.710	-24.991	MWD+IFR1+MS
7500.000	0.000	0.000	7466.943	27.217	0.000	27.745	0.000	10.057	0.000	27.896	27.061	-25.383	MWD+IFR1+MS
7600.000	0.000	0.000	7566.943	27.572	0.000	28.089	0.000	10.233	0.000	28.244	27.414	-25.771	MWD+IFR1+MS
7700.000	0.000	0.000	7666.943	27.928	0.000	28.433	0.000	10.413	0.000	28.592	27.766	-26.152	MWD+IFR1+MS
7800.000	0.000	0.000	7766.943	28.284	0.000	28.778	0.000	10.595	0.000	28.940	28.118	-26.528	MWD+IFR1+MS
7900.000	0.000	0.000	7866.943	28.640	0.000	29.123	0.000	10.780	0.000	29.289	28.470	-26.898	MWD+IFR1+MS
8000.000	0.000	0.000	7966.943	28.996	0.000	29.469	0.000	10.968	0.000	29.638	28.823	-27.262	MWD+IFR1+MS
8100.000	0.000	0.000	8066.943	29.352	0.000	29.815	0.000	11.159	0.000	29.987	29.175	-27.620	MWD+IFR1+MS
8200.000	0.000	0.000	8166.943	29.708	0.000	30.161	0.000	11.352	0.000	30.337	29.528	-27.973	MWD+IFR1+MS
8300.000	0.000	0.000	8266.943	30.064	0.000	30.507	0.000	11.548	0.000	30.687	29.880	-28.320	MWD+IFR1+MS
8400.000	0.000	0.000	8366.943	30.420	0.000	30.854	0.000	11.748	0.000	31.037	30.233	-28.661	MWD+IFR1+MS
8500.000	0.000	0.000	8466.943	30.776	0.000	31.201	0.000	11.950	0.000	31.387	30.586	-28.997	MWD+IFR1+MS
8600.000	0.000	0.000	8566.943	31.132	0.000	31.548	0.000	12.154	0.000	31.738	30.939	-29.328	MWD+IFR1+MS
8700.000	0.000	0.000	8666.943	31.489	0.000	31.895	0.000	12.362	0.000	32.088	31.292	-29.652	MWD+IFR1+MS
8800.000	0.000	0.000	8766.943	31.845	0.000	32.243	0.000	12.573	0.000	32.439	31.645	-29.972	MWD+IFR1+MS
8900.000	0.000	0.000	8866.943	32.201	0.000	32.591	0.000	12.786	0.000	32.791	31.998	-30.286	MWD+IFR1+MS
9000.000	0.000	0.000	8966.943	32.558	0.000	32.939	0.000	13.003	0.000	33.142	32.351	-30.594	MWD+IFR1+MS
9100.000	0.000	0.000	9066.943	32.914	0.000	33.287	0.000	13.222	0.000	33.494	32.704	-30.897	MWD+IFR1+MS
9200.000	0.000	0.000	9166.943	33.271	0.000	33.636	0.000	13.444	0.000	33.845	33.057	-31.196	MWD+IFR1+MS
9300.000	0.000	0.000	9266.943	33.627	0.000	33.985	0.000	13.670	0.000	34.197	33.411	-31.489	MWD+IFR1+MS

9400.000	0.000	0.000	9366.943	33.984	0.000	34.333	0.000	13.898	0.000	0.000	34.549	33.764	-31.777	MWD+IFR1+MS
9500.000	0.000	0.000	9466.943	34.340	0.000	34.683	0.000	14.129	0.000	0.000	34.902	34.118	-32.060	MWD+IFR1+MS
9600.000	0.000	0.000	9566.943	34.697	0.000	35.032	0.000	14.363	0.000	0.000	35.254	34.471	-32.338	MWD+IFR1+MS
9700.000	0.000	0.000	9666.943	35.054	0.000	35.381	0.000	14.600	0.000	0.000	35.607	34.825	-32.611	MWD+IFR1+MS
9800.000	0.000	0.000	9766.943	35.411	0.000	35.731	0.000	14.840	0.000	0.000	35.960	35.179	-32.879	MWD+IFR1+MS
9900.000	0.000	0.000	9866.943	35.767	0.000	36.081	0.000	15.083	0.000	0.000	36.312	35.532	-33.143	MWD+IFR1+MS
10000.000	0.000	0.000	9966.943	36.124	0.000	36.431	0.000	15.329	0.000	0.000	36.666	35.886	-33.402	MWD+IFR1+MS
10100.000	0.000	0.000	10066.943	36.481	0.000	36.781	0.000	15.578	0.000	0.000	37.019	36.240	-33.657	MWD+IFR1+MS
10200.000	0.000	0.000	10166.943	36.838	0.000	37.132	0.000	15.830	0.000	0.000	37.372	36.594	-33.907	MWD+IFR1+MS
10300.000	0.000	0.000	10266.943	37.195	0.000	37.482	0.000	16.085	0.000	0.000	37.725	36.948	-34.153	MWD+IFR1+MS
10400.000	0.000	0.000	10366.943	37.552	0.000	37.833	0.000	16.343	0.000	0.000	38.079	37.302	-34.395	MWD+IFR1+MS
10465.857	0.000	0.000	10432.800	37.785	0.000	38.062	0.000	16.515	0.000	0.000	38.309	37.535	-34.506	MWD+IFR1+MS
10500.000	2.731	179.641	10466.930	37.817	0.000	38.179	-0.000	16.604	0.000	0.000	38.421	37.653	-34.621	MWD+IFR1+MS
10600.000	10.731	179.641	10566.160	38.010	0.000	38.490	-0.000	16.887	0.000	0.000	38.993	38.197	126.868	MWD+IFR1+MS
10700.000	18.731	179.641	10662.794	38.237	0.000	38.790	-0.000	17.293	0.000	0.000	40.157	38.645	107.529	MWD+IFR1+MS
10800.000	26.731	179.641	10754.952	37.906	0.000	39.072	-0.000	17.883	0.000	0.000	41.285	38.958	102.267	MWD+IFR1+MS
10900.000	34.731	179.641	10840.839	37.081	0.000	39.334	-0.000	18.700	0.000	0.000	42.259	39.228	100.204	MWD+IFR1+MS
11000.000	42.731	179.641	10918.785	35.853	0.000	39.572	-0.000	19.757	0.000	0.000	43.055	39.467	99.279	MWD+IFR1+MS
11100.000	50.731	179.641	10987.271	34.343	0.000	39.786	-0.000	21.036	0.000	0.000	43.668	39.677	98.911	MWD+IFR1+MS
11200.000	58.731	179.641	11044.965	32.707	0.000	39.973	-0.000	22.502	0.000	0.000	44.107	39.858	98.881	MWD+IFR1+MS
11300.000	66.731	179.641	11090.744	31.137	0.000	40.134	-0.000	24.100	0.000	0.000	44.393	40.010	99.082	MWD+IFR1+MS
11400.000	74.731	179.641	11123.717	29.852	0.000	40.267	-0.000	25.775	0.000	0.000	44.552	40.132	99.444	MWD+IFR1+MS
11500.000	82.731	179.641	11143.242	29.079	0.000	40.371	-0.000	27.468	0.000	0.000	44.622	40.224	99.893	MWD+IFR1+MS
11590.857	90.000	179.641	11148.997	28.742	0.000	40.438	-0.000	28.742	0.000	0.000	44.644	40.282	100.288	MWD+IFR1+MS
11600.000	90.000	179.641	11148.997	28.757	0.000	40.443	-0.000	28.757	0.000	0.000	44.645	40.286	100.323	MWD+IFR1+MS
11700.000	90.000	179.641	11148.997	28.906	0.000	40.510	-0.000	28.906	0.000	0.000	44.660	40.342	100.748	MWD+IFR1+MS
11800.000	90.000	179.641	11148.997	29.080	0.000	40.595	-0.000	29.080	0.000	0.000	44.677	40.414	101.223	MWD+IFR1+MS
11900.000	90.000	179.641	11148.997	29.273	0.000	40.693	-0.000	29.273	0.000	0.000	44.696	40.500	101.747	MWD+IFR1+MS
12000.000	90.000	179.641	11148.997	29.486	0.000	40.806	-0.000	29.486	0.000	0.000	44.716	40.598	102.324	MWD+IFR1+MS
12100.000	90.000	179.641	11148.997	29.719	0.000	40.933	-0.000	29.719	0.000	0.000	44.738	40.709	102.964	MWD+IFR1+MS
12200.000	90.000	179.641	11148.997	29.970	0.000	41.074	-0.000	29.970	0.000	0.000	44.763	40.832	103.675	MWD+IFR1+MS
12300.000	90.000	179.641	11148.997	30.239	0.000	41.228	-0.000	30.239	0.000	0.000	44.790	40.967	104.467	MWD+IFR1+MS
12400.000	90.000	179.641	11148.997	30.526	0.000	41.396	-0.000	30.526	0.000	0.000	44.821	41.113	105.353	MWD+IFR1+MS

12500.000	90.000	179.641	11148.997	30.831	0.000	41.577	-0.000	30.831	0.000	44.854	41.269	106.349	MWD+IFR1+MS
12600.000	90.000	179.641	11148.997	31.152	0.000	41.772	-0.000	31.152	0.000	44.892	41.436	107.471	MWD+IFR1+MS
12700.000	90.000	179.641	11148.997	31.490	0.000	41.980	-0.000	31.490	0.000	44.934	41.612	108.742	MWD+IFR1+MS
12800.000	90.000	179.641	11148.997	31.843	0.000	42.201	-0.000	31.843	0.000	44.982	41.795	110.184	MWD+IFR1+MS
12900.000	90.000	179.641	11148.997	32.212	0.000	42.434	-0.000	32.212	0.000	45.036	41.985	111.826	MWD+IFR1+MS
13000.000	90.000	179.641	11148.997	32.595	0.000	42.680	-0.000	32.595	0.000	45.098	42.181	113.698	MWD+IFR1+MS
13100.000	90.000	179.641	11148.997	32.993	0.000	42.938	-0.000	32.993	0.000	45.170	42.380	115.831	MWD+IFR1+MS
13200.000	90.000	179.641	11148.997	33.404	0.000	43.208	-0.000	33.404	0.000	45.253	42.580	118.253	MWD+IFR1+MS
13300.000	90.000	179.641	11148.997	33.829	0.000	43.489	-0.000	33.829	0.000	45.349	42.779	120.985	MWD+IFR1+MS
13400.000	90.000	179.641	11148.997	34.266	0.000	43.783	-0.000	34.266	0.000	45.462	42.974	124.029	MWD+IFR1+MS
13500.000	90.000	179.641	11148.997	34.715	0.000	44.088	-0.000	34.715	0.000	45.595	43.161	127.362	MWD+IFR1+MS
13600.000	90.000	179.641	11148.997	35.176	0.000	44.404	-0.000	35.176	0.000	45.749	43.338	130.922	MWD+IFR1+MS
13700.000	90.000	179.641	11148.997	35.649	0.000	44.730	-0.000	35.649	0.000	45.927	43.502	134.616	MWD+IFR1+MS
13800.000	90.000	179.641	11148.997	36.132	0.000	45.068	-0.000	36.132	0.000	46.132	43.652	-41.675	MWD+IFR1+MS
13900.000	90.000	179.641	11148.997	36.626	0.000	45.415	-0.000	36.626	0.000	46.362	43.787	-38.074	MWD+IFR1+MS
14000.000	90.000	179.641	11148.997	37.130	0.000	45.773	-0.000	37.130	0.000	46.618	43.907	-34.682	MWD+IFR1+MS
14100.000	90.000	179.641	11148.997	37.643	0.000	46.141	-0.000	37.643	0.000	46.898	44.013	-31.567	MWD+IFR1+MS
14200.000	90.000	179.641	11148.997	38.166	0.000	46.519	-0.000	38.166	0.000	47.201	44.107	-28.761	MWD+IFR1+MS
14300.000	90.000	179.641	11148.997	38.698	0.000	46.906	-0.000	38.698	0.000	47.524	44.190	-26.266	MWD+IFR1+MS
14400.000	90.000	179.641	11148.997	39.238	0.000	47.302	-0.000	39.238	0.000	47.866	44.265	-24.066	MWD+IFR1+MS
14500.000	90.000	179.641	11148.997	39.786	0.000	47.707	-0.000	39.786	0.000	48.224	44.333	-22.133	MWD+IFR1+MS
14600.000	90.000	179.641	11148.997	40.342	0.000	48.121	-0.000	40.342	0.000	48.598	44.395	-20.436	MWD+IFR1+MS
14700.000	90.000	179.641	11148.997	40.905	0.000	48.544	-0.000	40.905	0.000	48.985	44.452	-18.944	MWD+IFR1+MS
14800.000	90.000	179.641	11148.997	41.476	0.000	48.975	-0.000	41.476	0.000	49.386	44.505	-17.630	MWD+IFR1+MS
14900.000	90.000	179.641	11148.997	42.054	0.000	49.414	-0.000	42.054	0.000	49.798	44.555	-16.468	MWD+IFR1+MS
15000.000	90.000	179.641	11148.997	42.638	0.000	49.861	-0.000	42.638	0.000	50.221	44.603	-15.437	MWD+IFR1+MS
15100.000	90.000	179.641	11148.997	43.229	0.000	50.315	-0.000	43.229	0.000	50.655	44.648	-14.518	MWD+IFR1+MS
15200.000	90.000	179.641	11148.997	43.825	0.000	50.777	-0.000	43.825	0.000	51.098	44.692	-13.695	MWD+IFR1+MS
15300.000	90.000	179.641	11148.997	44.428	0.000	51.247	-0.000	44.428	0.000	51.550	44.734	-12.955	MWD+IFR1+MS
15400.000	90.000	179.641	11148.997	45.036	0.000	51.723	-0.000	45.036	0.000	52.012	44.776	-12.287	MWD+IFR1+MS
15500.000	90.000	179.641	11148.997	45.649	0.000	52.206	-0.000	45.649	0.000	52.481	44.816	-11.682	MWD+IFR1+MS
15600.000	90.000	179.641	11148.997	46.268	0.000	52.696	-0.000	46.268	0.000	52.959	44.856	-11.132	MWD+IFR1+MS
15700.000	90.000	179.641	11148.997	46.892	0.000	53.193	-0.000	46.892	0.000	53.444	44.896	-10.630	MWD+IFR1+MS



Well Plan Report															
3/24, 11:21 AM	15800.000	90.000	179.641	11148.997	47.520	0.000	53.696	-0.000	47.520	0.000	0.000	53.936	44.935	-10.170	MWD+IFR1+MS
	15900.000	90.000	179.641	11148.997	48.153	0.000	54.205	-0.000	48.153	0.000	0.000	54.435	44.974	-9.748	MWD+IFR1+MS
	16000.000	90.000	179.641	11148.997	48.791	0.000	54.720	-0.000	48.791	0.000	0.000	54.941	45.012	-9.359	MWD+IFR1+MS
	16100.000	90.000	179.641	11148.997	49.433	0.000	55.240	-0.000	49.433	0.000	0.000	55.454	45.051	-9.000	MWD+IFR1+MS
	16200.000	90.000	179.641	11148.997	50.078	0.000	55.767	-0.000	50.078	0.000	0.000	55.972	45.089	-8.666	MWD+IFR1+MS
	16300.000	90.000	179.641	11148.997	50.728	0.000	56.299	-0.000	50.728	0.000	0.000	56.497	45.128	-8.357	MWD+IFR1+MS
	16400.000	90.000	179.641	11148.997	51.381	0.000	56.836	-0.000	51.381	0.000	0.000	57.027	45.167	-8.069	MWD+IFR1+MS
	16500.000	90.000	179.641	11148.997	52.039	0.000	57.378	-0.000	52.039	0.000	0.000	57.564	45.206	-7.800	MWD+IFR1+MS
	16600.000	90.000	179.641	11148.997	52.699	0.000	57.926	-0.000	52.699	0.000	0.000	58.105	45.245	-7.549	MWD+IFR1+MS
	16700.000	90.000	179.641	11148.997	53.363	0.000	58.478	-0.000	53.363	0.000	0.000	58.652	45.284	-7.314	MWD+IFR1+MS
	16800.000	90.000	179.641	11148.997	54.030	0.000	59.035	-0.000	54.030	0.000	0.000	59.204	45.324	-7.093	MWD+IFR1+MS
	16900.000	90.000	179.641	11148.997	54.701	0.000	59.597	-0.000	54.701	0.000	0.000	59.761	45.363	-6.885	MWD+IFR1+MS
	17000.000	90.000	179.641	11148.997	55.374	0.000	60.163	-0.000	55.374	0.000	0.000	60.322	45.404	-6.689	MWD+IFR1+MS
	17100.000	90.000	179.641	11148.997	56.050	0.000	60.734	-0.000	56.050	0.000	0.000	60.889	45.444	-6.505	MWD+IFR1+MS
	17200.000	90.000	179.641	11148.997	56.729	0.000	61.309	-0.000	56.729	0.000	0.000	61.459	45.485	-6.330	MWD+IFR1+MS
	17300.000	90.000	179.641	11148.997	57.411	0.000	61.888	-0.000	57.411	0.000	0.000	62.034	45.526	-6.165	MWD+IFR1+MS
	17400.000	90.000	179.641	11148.997	58.095	0.000	62.471	-0.000	58.095	0.000	0.000	62.614	45.567	-6.009	MWD+IFR1+MS
	17500.000	90.000	179.641	11148.997	58.782	0.000	63.058	-0.000	58.782	0.000	0.000	63.197	45.609	-5.860	MWD+IFR1+MS
	17600.000	90.000	179.641	11148.997	59.471	0.000	63.648	-0.000	59.471	0.000	0.000	63.784	45.652	-5.719	MWD+IFR1+MS
	17700.000	90.000	179.641	11148.997	60.163	0.000	64.243	-0.000	60.163	0.000	0.000	64.375	45.694	-5.585	MWD+IFR1+MS
	17800.000	90.000	179.641	11148.997	60.857	0.000	64.841	-0.000	60.857	0.000	0.000	64.970	45.737	-5.458	MWD+IFR1+MS
	17900.000	90.000	179.641	11148.997	61.553	0.000	65.442	-0.000	61.553	0.000	0.000	65.569	45.781	-5.336	MWD+IFR1+MS
	18000.000	90.000	179.641	11148.997	62.251	0.000	66.047	-0.000	62.251	0.000	0.000	66.171	45.825	-5.220	MWD+IFR1+MS
	18100.000	90.000	179.641	11148.997	62.951	0.000	66.655	-0.000	62.951	0.000	0.000	66.776	45.869	-5.108	MWD+IFR1+MS
	18200.000	90.000	179.641	11148.997	63.653	0.000	67.267	-0.000	63.653	0.000	0.000	67.385	45.914	-5.002	MWD+IFR1+MS
	18300.000	90.000	179.641	11148.997	64.357	0.000	67.881	-0.000	64.357	0.000	0.000	67.997	45.959	-4.901	MWD+IFR1+MS
	18400.000	90.000	179.641	11148.997	65.063	0.000	68.499	-0.000	65.063	0.000	0.000	68.612	46.005	-4.803	MWD+IFR1+MS
	18500.000	90.000	179.641	11148.997	65.771	0.000	69.119	-0.000	65.771	0.000	0.000	69.231	46.051	-4.710	MWD+IFR1+MS
	18600.000	90.000	179.641	11148.997	66.480	0.000	69.743	-0.000	66.480	0.000	0.000	69.852	46.097	-4.620	MWD+IFR1+MS
	18700.000	90.000	179.641	11148.997	67.191	0.000	70.369	-0.000	67.191	0.000	0.000	70.476	46.144	-4.534	MWD+IFR1+MS
	18800.000	90.000	179.641	11148.997	67.904	0.000	70.998	-0.000	67.904	0.000	0.000	71.103	46.192	-4.451	MWD+IFR1+MS
	18900.000	90.000	179.641	11148.997	68.618	0.000	71.630	-0.000	68.618	0.000	0.000	71.732	46.240	-4.372	MWD+IFR1+MS
	19000.000	90.000	179.641	11148.997	69.334	0.000	72.264	-0.000	69.334	0.000	0.000	72.365	46.288	-4.295	MWD+IFR1+MS

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Well Plan Report

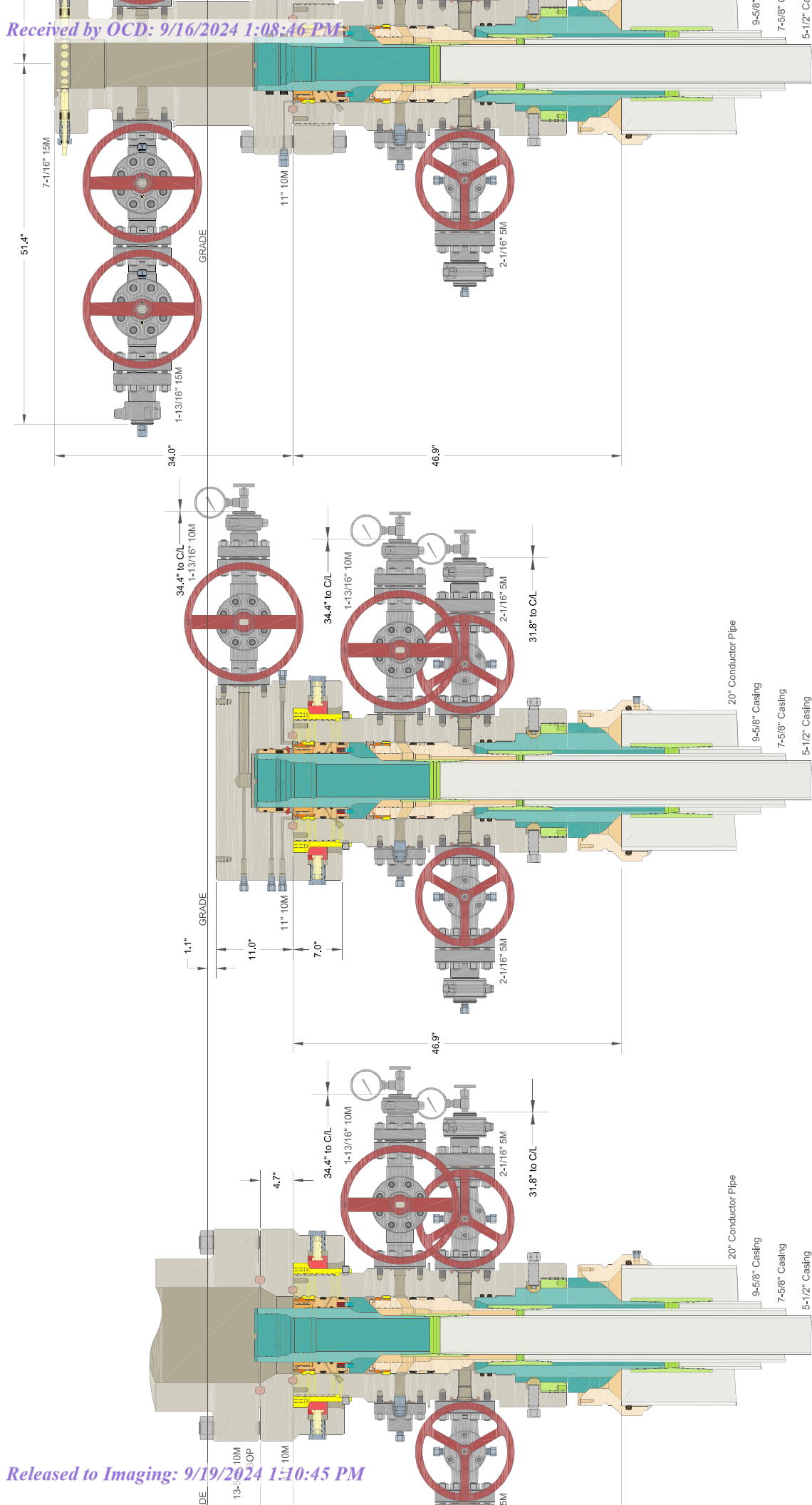
19100.000	90.000	179.641	11148.997	70.052	0.000	72.901	-0.000	70.052	0.000	0.000	73.000	46.337	-4.222	MWD+IFR1+MS
19200.000	90.000	179.641	11148.997	70.770	0.000	73.540	-0.000	70.770	0.000	0.000	73.637	46.387	-4.150	MWD+IFR1+MS
19300.000	90.000	179.641	11148.997	71.490	0.000	74.181	-0.000	71.490	0.000	0.000	74.277	46.436	-4.082	MWD+IFR1+MS
19400.000	90.000	179.641	11148.997	72.212	0.000	74.825	-0.000	72.212	0.000	0.000	74.919	46.487	-4.016	MWD+IFR1+MS
19500.000	90.000	179.641	11148.997	72.935	0.000	75.472	-0.000	72.935	0.000	0.000	75.564	46.537	-3.952	MWD+IFR1+MS
19600.000	90.000	179.641	11148.997	73.659	0.000	76.120	-0.000	73.659	0.000	0.000	76.211	46.589	-3.890	MWD+IFR1+MS
19700.000	90.000	179.641	11148.997	74.384	0.000	76.771	-0.000	74.384	0.000	0.000	76.860	46.640	-3.830	MWD+IFR1+MS
19800.000	90.000	179.641	11148.997	75.111	0.000	77.423	-0.000	75.111	0.000	0.000	77.511	46.693	-3.773	MWD+IFR1+MS
19900.000	90.000	179.641	11148.997	75.838	0.000	78.078	-0.000	75.838	0.000	0.000	78.164	46.745	-3.717	MWD+IFR1+MS
20000.000	90.000	179.641	11148.997	76.567	0.000	78.735	-0.000	76.567	0.000	0.000	78.820	46.798	-3.663	MWD+IFR1+MS
20100.000	90.000	179.641	11148.997	77.297	0.000	79.393	-0.000	77.297	0.000	0.000	79.477	46.852	-3.610	MWD+IFR1+MS
20200.000	90.000	179.641	11148.997	78.028	0.000	80.054	-0.000	78.028	0.000	0.000	80.136	46.906	-3.559	MWD+IFR1+MS
20300.000	90.000	179.641	11148.997	78.760	0.000	80.717	-0.000	78.760	0.000	0.000	80.797	46.961	-3.510	MWD+IFR1+MS
20400.000	90.000	179.641	11148.997	79.493	0.000	81.381	-0.000	79.493	0.000	0.000	81.460	47.016	-3.462	MWD+IFR1+MS
20500.000	90.000	179.641	11148.997	80.227	0.000	82.047	-0.000	80.227	0.000	0.000	82.125	47.071	-3.416	MWD+IFR1+MS
20600.000	90.000	179.641	11148.997	80.962	0.000	82.715	-0.000	80.962	0.000	0.000	82.792	47.127	-3.371	MWD+IFR1+MS
20700.000	90.000	179.641	11148.997	81.697	0.000	83.384	-0.000	81.697	0.000	0.000	83.460	47.183	-3.327	MWD+IFR1+MS
20800.000	90.000	179.641	11148.997	82.434	0.000	84.055	-0.000	82.434	0.000	0.000	84.130	47.240	-3.285	MWD+IFR1+MS
20900.000	90.000	179.641	11148.997	83.172	0.000	84.728	-0.000	83.172	0.000	0.000	84.802	47.298	-3.243	MWD+IFR1+MS
21000.000	90.000	179.641	11148.997	83.910	0.000	85.402	-0.000	83.910	0.000	0.000	85.475	47.356	-3.203	MWD+IFR1+MS
21100.000	90.000	179.641	11148.997	84.650	0.000	86.078	-0.000	84.650	0.000	0.000	86.150	47.414	-3.164	MWD+IFR1+MS
21200.000	90.000	179.641	11148.997	85.390	0.000	86.755	-0.000	85.390	0.000	0.000	86.826	47.473	-3.126	MWD+IFR1+MS
21300.000	90.000	179.641	11148.997	86.131	0.000	87.434	-0.000	86.131	0.000	0.000	87.504	47.532	-3.089	MWD+IFR1+MS
21400.000	90.000	179.641	11148.997	86.872	0.000	88.114	-0.000	86.872	0.000	0.000	88.183	47.592	-3.053	MWD+IFR1+MS
21500.000	90.000	179.641	11148.997	87.615	0.000	88.795	-0.000	87.615	0.000	0.000	88.864	47.652	-3.018	MWD+IFR1+MS
21600.000	90.000	179.641	11148.997	88.358	0.000	89.478	-0.000	88.358	0.000	0.000	89.546	47.713	-2.984	MWD+IFR1+MS
21700.000	90.000	179.641	11148.997	89.102	0.000	90.163	-0.000	89.102	0.000	0.000	90.229	47.774	-2.950	MWD+IFR1+MS
21800.000	90.000	179.641	11148.997	89.846	0.000	90.848	-0.000	89.846	0.000	0.000	90.914	47.835	-2.918	MWD+IFR1+MS
21900.000	90.000	179.641	11148.997	90.592	0.000	91.535	-0.000	90.592	0.000	0.000	91.600	47.897	-2.886	MWD+IFR1+MS
22000.000	90.000	179.641	11148.997	91.337	0.000	92.223	-0.000	91.337	0.000	0.000	92.287	47.960	-2.855	MWD+IFR1+MS
22100.000	90.000	179.641	11148.997	92.084	0.000	92.912	-0.000	92.084	0.000	0.000	92.975	48.023	-2.825	MWD+IFR1+MS
22200.000	90.000	179.641	11148.997	92.831	0.000	93.603	-0.000	92.831	0.000	0.000	93.665	48.086	-2.795	MWD+IFR1+MS
22300.000	90.000	179.641	11148.997	93.579	0.000	94.294	-0.000	93.579	0.000	0.000	94.356	48.150	-2.766	MWD+IFR1+MS

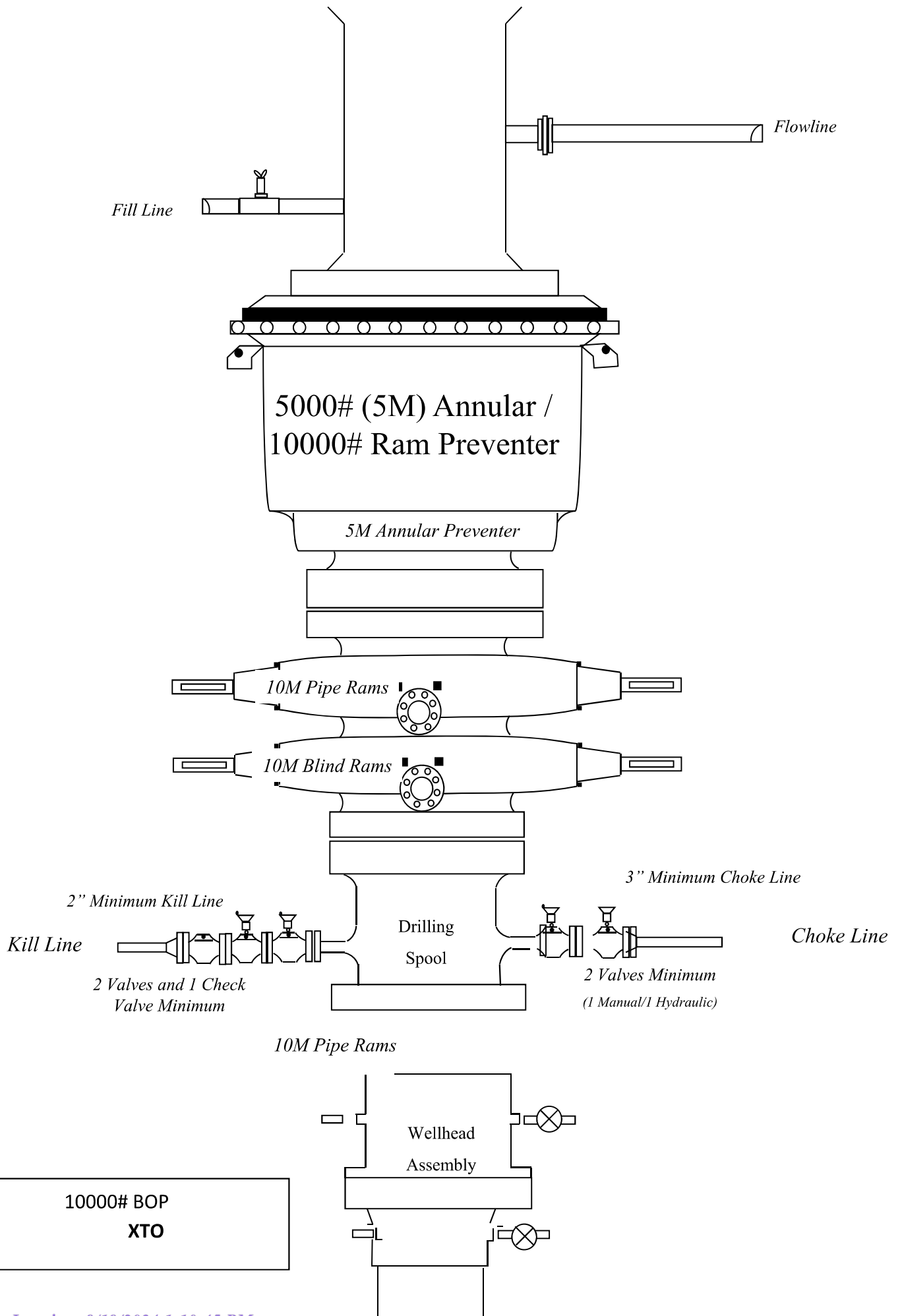
22400.000	90.000	179.641	11148.997	94.327	0.000	94.987	-0.000	94.327	0.000	95.048	48.214	-2.738	MWD+IFR1+MS
22500.000	90.000	179.641	11148.997	95.076	0.000	95.681	-0.000	95.076	0.000	95.741	48.279	-2.710	MWD+IFR1+MS
22600.000	90.000	179.641	11148.997	95.826	0.000	96.376	-0.000	95.826	0.000	96.435	48.344	-2.684	MWD+IFR1+MS
22700.000	90.000	179.641	11148.997	96.576	0.000	97.072	-0.000	96.576	0.000	97.130	48.410	-2.657	MWD+IFR1+MS
22800.000	90.000	179.641	11148.997	97.327	0.000	97.769	-0.000	97.327	0.000	97.827	48.476	-2.632	MWD+IFR1+MS
22900.000	90.000	179.641	11148.997	98.078	0.000	98.467	-0.000	98.078	0.000	98.524	48.543	-2.606	MWD+IFR1+MS
23000.000	90.000	179.641	11148.997	98.830	0.000	99.166	-0.000	98.830	0.000	99.223	48.610	-2.582	MWD+IFR1+MS
23100.000	90.000	179.641	11148.997	99.582	0.000	99.866	-0.000	99.582	0.000	99.922	48.677	-2.558	MWD+IFR1+MS
23200.000	90.000	179.641	11148.997	100.335	0.000	100.567	-0.000	100.335	0.000	100.622	48.745	-2.534	MWD+IFR1+MS
23300.000	90.000	179.641	11148.997	101.088	0.000	101.269	-0.000	101.088	0.000	101.324	48.813	-2.511	MWD+IFR1+MS
23400.000	90.000	179.641	11148.997	101.842	0.000	101.972	-0.000	101.842	0.000	102.026	48.882	-2.488	MWD+IFR1+MS
23500.000	90.000	179.641	11148.997	102.596	0.000	102.675	-0.000	102.596	0.000	102.729	48.951	-2.466	MWD+IFR1+MS
23600.000	90.000	179.641	11148.997	103.350	0.000	103.380	-0.000	103.350	0.000	103.433	49.021	-2.445	MWD+IFR1+MS
23700.000	90.000	179.641	11148.997	104.106	0.000	104.086	-0.000	104.106	0.000	104.138	49.091	-2.423	MWD+IFR1+MS
23800.000	90.000	179.641	11148.997	104.861	0.000	104.792	-0.000	104.861	0.000	104.844	49.162	-2.403	MWD+IFR1+MS
23875.256	90.000	179.641	11148.997	105.429	0.000	105.323	-0.000	105.429	0.000	105.375	49.215	-2.387	MWD+IFR1+MS
23900.000	90.000	179.641	11148.997	105.616	0.000	105.498	-0.000	105.616	0.000	105.549	49.233	-2.382	MWD+IFR1+MS
23965.308	90.000	179.641	11148.997	106.109	0.000	105.959	-0.000	106.109	0.000	106.010	49.279	-2.369	MWD+IFR1+MS

Plan Targets

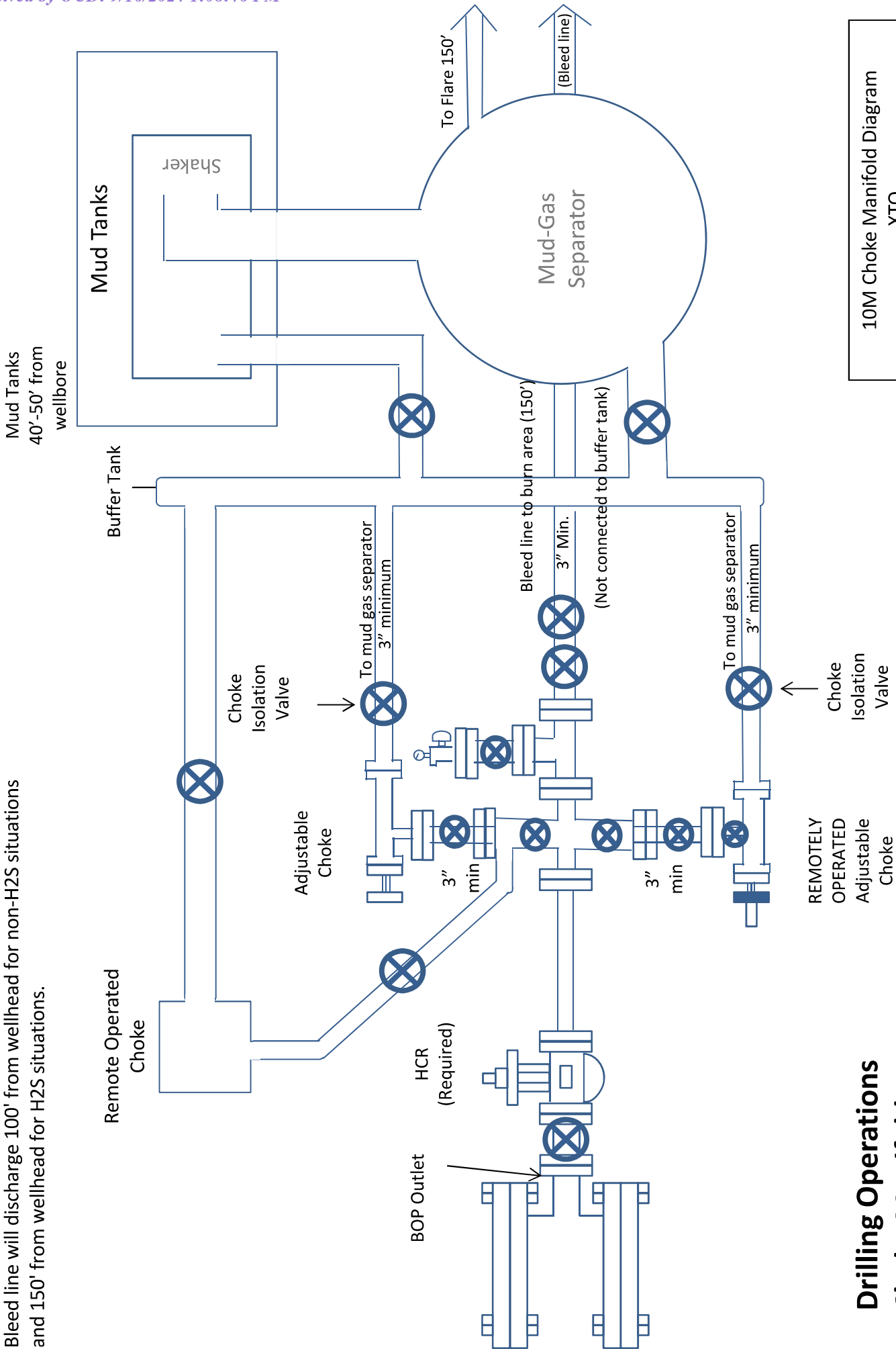
Poker Lake Unit 21 DTD South 183H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 24	11298.57	440429.90	637938.60	7789.00	RECTANGLE
SHL 3	12183.99	440101.36	637947.88	8522.00	RECTANGLE
LTP 24	23875.34	427429.50	638020.00	7789.00	RECTANGLE
BHL 24	23965.53	427339.50	638020.40	7789.00	RECTANGLE





Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



10M Choke Manifold Diagram  
XTO

**Drilling Operations  
Choke Manifold  
10M Service**

5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®

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

Notes

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

Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

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Spring, Texas 77380

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

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 nipped 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.



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

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

Notes

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

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**Oil Conservation Division**  
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CONDITIONS  
  
Action 383960

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 383960
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	9/19/2024