

Well Name: POKER LAKE UNIT 23 DTD	Well Location: T24S / R30E / SEC 23 / SWSW /	County or Parish/State:
Well Number: 122H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2764693

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 12/05/2023	Time Sundry Submitted: 06:27
Date proposed operation will begin: 12/12/2023	

**Procedure Description:** XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD (ID 10400078621): SHL, BHL, FTP, LTP, casing and cement changes. SHL: FROM: 406' FSL & 281' FWL of Section 14-T24S-R30E TO: 366' FSL & 651' FWL of Section 14-T24S-R30E BHL: FROM: 200' FNL & 1430' FWL of Section 2-T24S-R30E TO: 50' FNL & 230' FWL of Section 2-T24-R30E FTP: FROM: 100' FSL & 1430' FWL of Section 14-T24S-R30E TO: 500' FNL & 230' FWL of Section 23-T24S-R30E LTP: FROM: 330' FNL & 1430' FWL of Section 2-T24S-R30E TO: 100' FNL & 230' FWL of Section 2-T24S-R30E Casing and cement changes are listed on the attached drilling plan. We will be using a 4-string casing program. C-102, Drilling Plan, Directional Plan, Casing Spec Sheet and MultiBowl Schematic attached.

NOI Attachments

Procedure Description

- Proprietary\_Connections\_Performance\_Data\_6.0000\_26.0000\_0.4360\_\_P110\_RY\_20231205182628.pdf
- 4\_String\_Slimhole\_SDT\_3301\_1\_20231205182608.pdf
- Well\_Plan\_Report\_\_\_\_POKER\_LAKE\_UNIT\_23\_DTD\_122H\_20231205182535.pdf
- Drilling\_Plan\_\_\_\_PLU\_23\_DTD\_122H\_20231205182451.pdf
- POKER\_LAKE\_UNIT\_23\_DTD\_122H\_C\_102\_signed\_12\_4\_2023\_20231205182428.pdf

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Conditions of Approval

Additional

Sec\_14\_24S\_30E\_NMP\_Sundry\_2764693\_Poker\_Lake\_Unit\_23\_DTD\_Federal\_Com\_122H\_COAs\_20231226101227.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

<b>Operator Electronic Signature:</b> RANELL (RUSTY) KLEIN	<b>Signed on:</b> DEC 05, 2023 06:26 PM
<b>Name:</b> XTO PERMIAN OPERATING LLC	
<b>Title:</b> Regulatory Analyst	
<b>Street Address:</b> 6401 HOLIDAY HILL ROAD BLDG 5	
<b>City:</b> MIDLAND	<b>State:</b> TX
<b>Phone:</b> (432) 620-6700	
<b>Email address:</b> RANELL.KLEIN@EXXONMOBIL.COM	

Field

<b>Representative Name:</b>		
<b>Street Address:</b>		
<b>City:</b>	<b>State:</b>	<b>Zip:</b>
<b>Phone:</b>		
<b>Email address:</b>		

BLM Point of Contact

<b>BLM POC Name:</b> CHRISTOPHER WALLS	<b>BLM POC Title:</b> Petroleum Engineer
<b>BLM POC Phone:</b> 5752342234	<b>BLM POC Email Address:</b> cwalls@blm.gov
<b>Disposition:</b> Approved	<b>Disposition Date:</b> 01/03/2024
<b>Signature:</b> 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.**

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

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 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.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)		
	Title	
Signature	Date	

**THE SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by	Title	Date
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	

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

### Location of Well

0. SHL: SWSW / 406 FSL / 281 FWL / TWSP: 24S / RANGE: 30E / SECTION: 23 / LAT: 32.211727 / LONG: -103.859365 ( TVD: 0 feet, MD: 0 feet )

PPP: SESW / 100 FSL / 1430 FWL / TWSP: 24S / RANGE: 30E / SECTION: 14 / LAT: 32.210896 / LONG: -103.855653 ( TVD: 11455 feet, MD: 11900 feet )

BHL: LOT 3 / 200 FNL / 1430 FWL / TWSP: 24S / RANGE: 30E / SECTION: 2 / LAT: 32.253567 / LONG: -103.855622 ( TVD: 11455 feet, MD: 27419 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	XTO Permian Operating LLC
<b>WELL NAME &amp; NO.:</b>	Poker Lake Unit 23 DTD 122H
<b>LOCATION:</b>	Sec 14-24S-30E-NMP
<b>COUNTY:</b>	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2764693** on 12/26/2023. Any previous COAs not addressed within the updated COAs still apply.*

**NOTE:** The attached drill plan had an error in Section 5. The replacement language for **Section 5: Pressure Control Equipment** is as follows:

The blow out preventer equipment (BOP) for surf casing / temp. wellhead will consist of a 21-1/4" minimum 2M Hydril. MASP should not exceed 873 psi.

Once the permanent WH is installed on the 13-3/8 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 3494 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

COA

<b>H<sub>2</sub>S</b>	<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-P	<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 type="checkbox"/> Primary Squeeze	<input checked="" type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
<b>Special Req</b>	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit
<b>Variance</b>	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
<b>Variance</b>	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> <b>Batch APD / Sundry</b>				

### 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 **20** inch surface casing shall be set at approximately 870 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. *Set depth adjusted per BLM geologist.*
  - 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 **24 hours in the Potash Area** 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.

*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.* If these quantities are exceeded / procedure needs to be changed, contact the PE on-call line to discuss further remediation options.

2. The minimum required fill of cement behind the **13-3/8** inch 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, Capitan Reef, or potash.**
3. 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 6253'**
- b. Second stage:
  - Operator will perform bradenhead squeeze and top-out. Cement to tie back at least **500 feet** into previous casing string. Operator should provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

- ❖ In Secretary Potash Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

**Operator has proposed to pump down 13-3/8" X 9-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 9-5/8" casing to surface after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.**

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

#### **C. PRESSURE CONTROL**

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

#### **D. SPECIAL REQUIREMENT (S)**

##### **Communitization Agreement**

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated

date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.

- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

#### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP**)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

#### **Offline Cementing**

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

## **GENERAL REQUIREMENTS**

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

- a. Spudding well (minimum of 24 hours)

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

- **Eddy County (API No. / US Well No. contains 30-015-#####)**  
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, **BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV**  
(575) 361-2822
- **Lea County (API No. / US Well No. contains 30-025-#####)**  
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,  
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - 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.
    - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### 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, 2) until cement has been in place at least 24 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-P 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 part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
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:
  - 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. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
  - e. 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.
  - a. 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).

- b. 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.)
- c. 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 part 3170 Subpart 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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 part 3170 Subpart 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.



U. S. Steel Tubular Products

6.000" 26.00lb/ft (0.436" Wall) P110 RY USS-TALON HTQ™

8/27/2021 1:46:58 PM



MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™		[6]
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON HTQ™		--
Outside Diameter	6.000	6.875	in.	--
Wall Thickness	0.436	--	in.	--
Inside Diameter	5.128	5.128	in.	--
Standard Drift	5.003	5.003	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	26.00	--	lb/ft	--
Plain End Weight	25.93	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON HTQ™		--
Critical Area	7.621	7.621	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™		--
Minimum Collapse Pressure	13,570	13,570	psi	--
Minimum Internal Yield Pressure	14,010	14,010	psi	--
Minimum Pipe Body Yield Strength	838,000	--	lb	--
Joint Strength	--	838,000	lb	--
Compression Rating	--	838,000	lb	--
Reference Length	--	21,490	ft	[5]
Maximum Uniaxial Bend Rating	--	84.0	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™		--
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	22,500	ft-lb	[4]
Maximum Make-Up Torque	--	25,500	ft-lb	[4]
Maximum Operating Torque	--	48,900	ft-lb	[4]

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.

Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
3.

Uniaxial bend rating shown is structural only.
4.

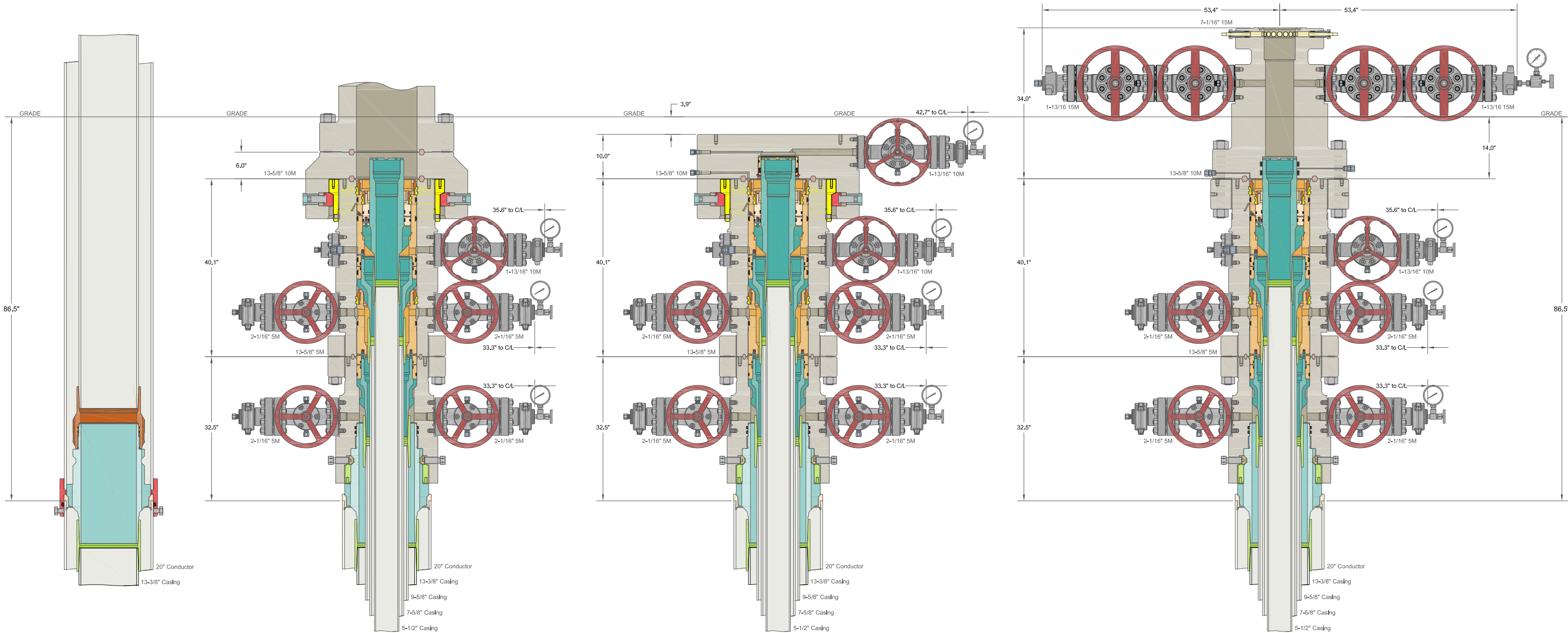
Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
5.

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.

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.



ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC			
(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			
XTO ENERGY INC DELAWARE BASIN			
DRAWN	VJK	31MAR22	
APPRV			
DRAWING NO.		SDT-3301	



## Well Plan Report - POKER LAKE UNIT 23 DTD 122H

Measured Depth: 26912.95 ft

TVD RKB: 9926.00 ft

### Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 440987.30 ft

Easting: 647110.60 ft

RKB: 3480.00 ft

Ground Level: 3480.00 ft

North Reference: Grid

Convergence Angle: 0.25 Deg

### Plan Sections

POKER LAKE UNIT 23 DTD 122H

Measured			TVD			Build	Turn	Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
2260.13	23.20	194.72	2228.68	-224.11	-58.87	2.00	0.00	2.00	
5244.12	23.20	194.72	4971.32	-1361.18	-357.53	0.00	0.00	0.00	
6404.25	0.00	0.00	6100.00	-1585.29	-416.40	-2.00	0.00	2.00	
9514.06	0.00	0.00	9209.80	-1585.29	-416.40	0.00	0.00	0.00	
10639.06	90.00	359.78	9926.00	-869.10	-419.10	8.00	0.00	8.00	FTP 1
26862.47	90.00	359.78	9926.00	15354.20	-480.30	0.00	0.00	0.00	LTP 1
26912.95	90.00	359.78	9926.00	15404.68	-480.49	0.00	0.00	0.00	BHL 1

### Position Uncertainty

POKER LAKE UNIT 23 DTD 122H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	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	2.326	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	2.375	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	2.445	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	2.487	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	2.533	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	2.583	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	2.637	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	194.717	1199.980	4.969	-0.000	4.337	0.000	2.693	0.000	0.000	5.092	4.195	127.119	MWD+IFR1+MS
1300.000	4.000	194.717	1299.838	5.740	-0.000	4.686	0.000	2.753	0.000	0.000	5.876	4.526	123.608	MWD+IFR1+MS
1400.000	6.000	194.717	1399.452	6.432	-0.000	5.036	0.000	2.819	0.000	0.000	6.588	4.857	122.139	MWD+IFR1+MS
1500.000	8.000	194.717	1498.702	7.068	-0.000	5.389	0.000	2.892	0.000	0.000	7.247	5.191	121.350	MWD+IFR1+MS
1600.000	10.000	194.717	1597.465	7.659	-0.000	5.745	0.000	2.975	0.000	0.000	7.864	5.530	120.875	MWD+IFR1+MS
1700.000	12.000	194.717	1695.623	8.215	-0.000	6.105	0.000	3.070	0.000	0.000	8.449	5.875	120.577	MWD+IFR1+MS
1800.000	14.000	194.717	1793.055	8.741	-0.000	6.470	0.000	3.178	0.000	0.000	9.006	6.226	120.394	MWD+IFR1+MS
1900.000	16.000	194.717	1889.643	9.242	-0.000	6.842	0.000	3.301	0.000	0.000	9.542	6.586	120.295	MWD+IFR1+MS
2000.000	18.000	194.717	1985.268	9.722	-0.000	7.221	0.000	3.441	0.000	0.000	10.058	6.954	120.264	MWD+IFR1+MS
2100.000	20.000	194.717	2079.816	10.183	-0.000	7.610	0.000	3.599	0.000	0.000	10.557	7.331	120.291	MWD+IFR1+MS
2200.000	22.000	194.717	2173.169	10.628	-0.000	8.008	0.000	3.776	0.000	0.000	11.042	7.720	120.374	MWD+IFR1+MS
2260.129	23.203	194.717	2228.679	10.796	-0.000	8.244	0.000	3.850	0.000	0.000	11.247	7.958	120.443	MWD+IFR1+MS
2300.000	23.203	194.717	2265.325	10.910	-0.000	8.400	0.000	3.891	0.000	0.000	11.353	8.117	120.516	MWD+IFR1+MS
2400.000	23.203	194.717	2357.237	11.199	-0.000	8.809	0.000	4.009	0.000	0.000	11.622	8.531	120.868	MWD+IFR1+MS
2500.000	23.203	194.717	2449.149	11.508	-0.000	9.235	0.000	4.137	0.000	0.000	11.910	8.955	121.404	MWD+IFR1+MS
2600.000	23.203	194.717	2541.060	11.825	-0.000	9.667	0.000	4.272	0.000	0.000	12.208	9.385	121.988	MWD+IFR1+MS
2700.000	23.203	194.717	2632.972	12.152	-0.000	10.105	0.000	4.411	0.000	0.000	12.513	9.819	122.625	MWD+IFR1+MS
2800.000	23.203	194.717	2724.884	12.486	-0.000	10.547	0.000	4.556	0.000	0.000	12.826	10.257	123.319	MWD+IFR1+MS
2900.000	23.203	194.717	2816.796	12.828	-0.000	10.993	0.000	4.706	0.000	0.000	13.146	10.697	124.075	MWD+IFR1+MS

3000.000	23.203	194.717	2908.707	13.177	-0.000	11.442	0.000	4.859	0.000	0.000	13.474	11.140	124.899	MWD+IFR1+MS
3100.000	23.203	194.717	3000.619	13.532	-0.000	11.895	0.000	5.017	0.000	0.000	13.808	11.584	125.796	MWD+IFR1+MS
3200.000	23.203	194.717	3092.531	13.892	-0.000	12.351	0.000	5.177	0.000	0.000	14.148	12.030	126.773	MWD+IFR1+MS
3300.000	23.203	194.717	3184.443	14.258	-0.000	12.809	0.000	5.342	0.000	0.000	14.494	12.477	127.837	MWD+IFR1+MS
3400.000	23.203	194.717	3276.354	14.629	-0.000	13.269	0.000	5.509	0.000	0.000	14.847	12.924	128.994	MWD+IFR1+MS
3500.000	23.203	194.717	3368.266	15.005	-0.000	13.731	0.000	5.679	0.000	0.000	15.205	13.372	130.251	MWD+IFR1+MS
3600.000	23.203	194.717	3460.178	15.385	-0.000	14.195	0.000	5.852	0.000	0.000	15.569	13.820	131.614	MWD+IFR1+MS
3700.000	23.203	194.717	3552.090	15.769	-0.000	14.661	0.000	6.027	0.000	0.000	15.939	14.267	133.088	MWD+IFR1+MS
3800.000	23.203	194.717	3644.001	16.156	-0.000	15.128	0.000	6.204	0.000	0.000	16.314	14.713	134.678	MWD+IFR1+MS
3900.000	23.203	194.717	3735.913	16.547	-0.000	15.597	0.000	6.384	0.000	0.000	16.695	15.158	-43.617	MWD+IFR1+MS
4000.000	23.203	194.717	3827.825	16.941	-0.000	16.066	0.000	6.566	0.000	0.000	17.082	15.601	-41.797	MWD+IFR1+MS
4100.000	23.203	194.717	3919.737	17.338	-0.000	16.537	0.000	6.749	0.000	0.000	17.475	16.043	-39.870	MWD+IFR1+MS
4200.000	23.203	194.717	4011.649	17.738	-0.000	17.009	0.000	6.935	0.000	0.000	17.873	16.482	-37.845	MWD+IFR1+MS
4300.000	23.203	194.717	4103.560	18.140	-0.000	17.482	0.000	7.122	0.000	0.000	18.277	16.919	-35.739	MWD+IFR1+MS
4400.000	23.203	194.717	4195.472	18.545	-0.000	17.956	0.000	7.311	0.000	0.000	18.687	17.353	-33.571	MWD+IFR1+MS
4500.000	23.203	194.717	4287.384	18.952	-0.000	18.431	0.000	7.502	0.000	0.000	19.103	17.785	-31.367	MWD+IFR1+MS
4600.000	23.203	194.717	4379.296	19.361	-0.000	18.906	0.000	7.694	0.000	0.000	19.524	18.213	-29.153	MWD+IFR1+MS
4700.000	23.203	194.717	4471.207	19.772	-0.000	19.382	0.000	7.888	0.000	0.000	19.951	18.639	-26.957	MWD+IFR1+MS
4800.000	23.203	194.717	4563.119	20.185	-0.000	19.859	0.000	8.083	0.000	0.000	20.383	19.062	-24.804	MWD+IFR1+MS
4900.000	23.203	194.717	4655.031	20.599	-0.000	20.336	0.000	8.280	0.000	0.000	20.820	19.483	-22.719	MWD+IFR1+MS
5000.000	23.203	194.717	4746.943	21.016	-0.000	20.814	0.000	8.479	0.000	0.000	21.261	19.901	-20.719	MWD+IFR1+MS
5100.000	23.203	194.717	4838.854	21.433	-0.000	21.292	0.000	8.678	0.000	0.000	21.707	20.317	-18.819	MWD+IFR1+MS
5200.000	23.203	194.717	4930.766	21.853	-0.000	21.771	0.000	8.879	0.000	0.000	22.156	20.731	-17.028	MWD+IFR1+MS
5244.124	23.203	194.717	4971.321	22.035	-0.000	21.979	0.000	8.967	0.000	0.000	22.350	20.913	-16.240	MWD+IFR1+MS
5300.000	22.085	194.717	5022.889	22.309	-0.000	22.241	0.000	9.081	0.000	0.000	22.597	21.143	-15.347	MWD+IFR1+MS
5400.000	20.085	194.717	5116.189	22.837	-0.000	22.703	0.000	9.296	0.000	0.000	23.060	21.582	-15.124	MWD+IFR1+MS
5500.000	18.085	194.717	5210.688	23.374	-0.000	23.155	0.000	9.509	0.000	0.000	23.534	22.037	-15.923	MWD+IFR1+MS
5600.000	16.085	194.717	5306.270	23.870	-0.000	23.592	0.000	9.704	0.000	0.000	23.996	22.483	-16.844	MWD+IFR1+MS
5700.000	14.085	194.717	5402.819	24.325	-0.000	24.014	0.000	9.882	0.000	0.000	24.447	22.920	-17.875	MWD+IFR1+MS
5800.000	12.085	194.717	5500.218	24.739	-0.000	24.420	0.000	10.045	0.000	0.000	24.885	23.345	-19.003	MWD+IFR1+MS
5900.000	10.085	194.717	5598.347	25.112	-0.000	24.812	0.000	10.194	0.000	0.000	25.310	23.758	-20.214	MWD+IFR1+MS
6000.000	8.085	194.717	5697.087	25.443	-0.000	25.188	0.000	10.331	0.000	0.000	25.723	24.157	-21.492	MWD+IFR1+MS
6100.000	6.085	194.717	5796.319	25.733	-0.000	25.548	0.000	10.458	0.000	0.000	26.123	24.542	-22.821	MWD+IFR1+MS

6200.000	4.085	194.717	5895.920	25.981	-0.000	25.892	0.000	10.575	0.000	0.000	26.511	24.912	-24.185	MWD+IFR1+MS
6300.000	2.085	194.717	5995.770	26.188	-0.000	26.221	0.000	10.686	0.000	0.000	26.885	25.267	-25.567	MWD+IFR1+MS
6404.253	0.000	0.000	6100.000	25.870	0.000	26.886	0.000	10.794	0.000	0.000	27.171	25.571	-25.275	MWD+IFR1+MS
6500.000	0.000	0.000	6195.747	26.167	0.000	27.137	0.000	10.893	0.000	0.000	27.434	25.854	-26.062	MWD+IFR1+MS
6600.000	0.000	0.000	6295.747	26.443	0.000	27.400	0.000	10.998	0.000	0.000	27.699	26.131	-26.180	MWD+IFR1+MS
6700.000	0.000	0.000	6395.747	26.722	0.000	27.667	0.000	11.106	0.000	0.000	27.965	26.409	-26.304	MWD+IFR1+MS
6800.000	0.000	0.000	6495.747	27.003	0.000	27.935	0.000	11.216	0.000	0.000	28.234	26.690	-26.427	MWD+IFR1+MS
6900.000	0.000	0.000	6595.747	27.285	0.000	28.205	0.000	11.330	0.000	0.000	28.505	26.972	-26.550	MWD+IFR1+MS
7000.000	0.000	0.000	6695.747	27.569	0.000	28.477	0.000	11.446	0.000	0.000	28.777	27.256	-26.672	MWD+IFR1+MS
7100.000	0.000	0.000	6795.747	27.855	0.000	28.751	0.000	11.566	0.000	0.000	29.052	27.542	-26.793	MWD+IFR1+MS
7200.000	0.000	0.000	6895.747	28.143	0.000	29.027	0.000	11.688	0.000	0.000	29.328	27.829	-26.914	MWD+IFR1+MS
7300.000	0.000	0.000	6995.747	28.432	0.000	29.305	0.000	11.813	0.000	0.000	29.606	28.118	-27.034	MWD+IFR1+MS
7400.000	0.000	0.000	7095.747	28.723	0.000	29.585	0.000	11.941	0.000	0.000	29.886	28.409	-27.154	MWD+IFR1+MS
7500.000	0.000	0.000	7195.747	29.015	0.000	29.866	0.000	12.072	0.000	0.000	30.168	28.701	-27.272	MWD+IFR1+MS
7600.000	0.000	0.000	7295.747	29.309	0.000	30.148	0.000	12.206	0.000	0.000	30.451	28.995	-27.391	MWD+IFR1+MS
7700.000	0.000	0.000	7395.747	29.604	0.000	30.433	0.000	12.343	0.000	0.000	30.736	29.290	-27.509	MWD+IFR1+MS
7800.000	0.000	0.000	7495.747	29.901	0.000	30.719	0.000	12.483	0.000	0.000	31.022	29.586	-27.626	MWD+IFR1+MS
7900.000	0.000	0.000	7595.747	30.199	0.000	31.006	0.000	12.626	0.000	0.000	31.310	29.884	-27.742	MWD+IFR1+MS
8000.000	0.000	0.000	7695.747	30.498	0.000	31.295	0.000	12.773	0.000	0.000	31.599	30.183	-27.858	MWD+IFR1+MS
8100.000	0.000	0.000	7795.747	30.798	0.000	31.585	0.000	12.923	0.000	0.000	31.889	30.484	-27.973	MWD+IFR1+MS
8200.000	0.000	0.000	7895.747	31.100	0.000	31.877	0.000	13.075	0.000	0.000	32.181	30.785	-28.088	MWD+IFR1+MS
8300.000	0.000	0.000	7995.747	31.403	0.000	32.170	0.000	13.232	0.000	0.000	32.475	31.088	-28.202	MWD+IFR1+MS
8400.000	0.000	0.000	8095.747	31.707	0.000	32.465	0.000	13.391	0.000	0.000	32.770	31.392	-28.316	MWD+IFR1+MS
8500.000	0.000	0.000	8195.747	32.012	0.000	32.760	0.000	13.553	0.000	0.000	33.065	31.697	-28.429	MWD+IFR1+MS
8600.000	0.000	0.000	8295.747	32.319	0.000	33.057	0.000	13.719	0.000	0.000	33.363	32.003	-28.541	MWD+IFR1+MS
8700.000	0.000	0.000	8395.747	32.626	0.000	33.355	0.000	13.888	0.000	0.000	33.661	32.311	-28.653	MWD+IFR1+MS
8800.000	0.000	0.000	8495.747	32.934	0.000	33.655	0.000	14.061	0.000	0.000	33.961	32.619	-28.764	MWD+IFR1+MS
8900.000	0.000	0.000	8595.747	33.244	0.000	33.955	0.000	14.236	0.000	0.000	34.261	32.928	-28.874	MWD+IFR1+MS
9000.000	0.000	0.000	8695.747	33.554	0.000	34.257	0.000	14.415	0.000	0.000	34.563	33.238	-28.984	MWD+IFR1+MS
9100.000	0.000	0.000	8795.747	33.865	0.000	34.559	0.000	14.598	0.000	0.000	34.866	33.550	-29.094	MWD+IFR1+MS
9200.000	0.000	0.000	8895.747	34.178	0.000	34.863	0.000	14.783	0.000	0.000	35.170	33.862	-29.202	MWD+IFR1+MS
9300.000	0.000	0.000	8995.747	34.491	0.000	35.168	0.000	14.972	0.000	0.000	35.475	34.175	-29.310	MWD+IFR1+MS
9400.000	0.000	0.000	9095.747	34.805	0.000	35.473	0.000	15.165	0.000	0.000	35.781	34.489	-29.418	MWD+IFR1+MS

9500.000	0.000	0.000	9195.747	35.120	0.000	35.780	0.000	15.361	0.000	0.000	36.088	34.804	-29.525	MWD+IFR1+MS
9514.056	0.000	0.000	9209.803	35.163	0.000	35.823	0.000	15.388	0.000	0.000	36.130	34.848	-29.524	MWD+IFR1+MS
9600.000	6.876	359.784	9295.541	34.658	0.000	36.081	0.000	15.559	0.000	0.000	36.431	35.220	-32.990	MWD+IFR1+MS
9700.000	14.876	359.784	9393.665	34.432	0.000	36.360	0.000	15.830	0.000	0.000	37.228	35.945	124.217	MWD+IFR1+MS
9800.000	22.876	359.784	9488.211	33.886	0.000	36.617	0.000	16.283	0.000	0.000	38.298	36.362	110.819	MWD+IFR1+MS
9900.000	30.876	359.784	9577.337	32.934	0.000	36.850	0.000	16.980	0.000	0.000	39.283	36.647	105.646	MWD+IFR1+MS
10000.000	38.876	359.784	9659.310	31.695	0.000	37.059	0.000	17.957	0.000	0.000	40.097	36.875	103.303	MWD+IFR1+MS
10100.000	46.876	359.784	9732.534	30.316	0.000	37.242	0.000	19.207	0.000	0.000	40.725	37.066	102.176	MWD+IFR1+MS
10200.000	54.876	359.784	9795.584	28.979	0.000	37.402	0.000	20.695	0.000	0.000	41.171	37.225	101.698	MWD+IFR1+MS
10300.000	62.876	359.784	9847.231	27.895	0.000	37.539	0.000	22.365	0.000	0.000	41.456	37.358	101.622	MWD+IFR1+MS
10400.000	70.876	359.784	9886.473	27.276	0.000	37.654	0.000	24.152	0.000	0.000	41.610	37.465	101.811	MWD+IFR1+MS
10500.000	78.876	359.784	9912.543	27.292	0.000	37.749	0.000	25.989	0.000	0.000	41.671	37.550	102.154	MWD+IFR1+MS
10600.000	86.876	359.784	9924.935	28.030	0.000	37.822	0.000	27.814	0.000	0.000	41.682	37.614	102.527	MWD+IFR1+MS
10639.056	90.000	359.784	9926.000	28.025	0.000	37.842	0.000	28.025	0.000	0.000	41.683	37.631	102.630	MWD+IFR1+MS
10700.000	90.000	359.784	9926.000	28.209	0.000	37.875	0.000	28.209	0.000	0.000	41.686	37.660	102.797	MWD+IFR1+MS
10800.000	90.000	359.784	9926.000	28.487	0.000	37.950	0.000	28.487	0.000	0.000	41.692	37.728	103.142	MWD+IFR1+MS
10900.000	90.000	359.784	9926.000	28.786	0.000	38.047	0.000	28.786	0.000	0.000	41.700	37.816	103.566	MWD+IFR1+MS
11000.000	90.000	359.784	9926.000	29.103	0.000	38.164	0.000	29.103	0.000	0.000	41.710	37.922	104.075	MWD+IFR1+MS
11100.000	90.000	359.784	9926.000	29.437	0.000	38.301	0.000	29.437	0.000	0.000	41.722	38.047	104.682	MWD+IFR1+MS
11200.000	90.000	359.784	9926.000	29.789	0.000	38.458	0.000	29.789	0.000	0.000	41.737	38.190	105.403	MWD+IFR1+MS
11300.000	90.000	359.784	9926.000	30.156	0.000	38.634	0.000	30.156	0.000	0.000	41.756	38.349	106.260	MWD+IFR1+MS
11400.000	90.000	359.784	9926.000	30.540	0.000	38.829	0.000	30.540	0.000	0.000	41.778	38.524	107.280	MWD+IFR1+MS
11500.000	90.000	359.784	9926.000	30.938	0.000	39.044	0.000	30.938	0.000	0.000	41.804	38.714	108.499	MWD+IFR1+MS
11600.000	90.000	359.784	9926.000	31.351	0.000	39.276	0.000	31.351	0.000	0.000	41.836	38.918	109.961	MWD+IFR1+MS
11700.000	90.000	359.784	9926.000	31.778	0.000	39.527	0.000	31.778	0.000	0.000	41.875	39.133	111.725	MWD+IFR1+MS
11800.000	90.000	359.784	9926.000	32.219	0.000	39.796	0.000	32.219	0.000	0.000	41.924	39.358	113.863	MWD+IFR1+MS
11900.000	90.000	359.784	9926.000	32.673	0.000	40.083	0.000	32.673	0.000	0.000	41.984	39.589	116.459	MWD+IFR1+MS
12000.000	90.000	359.784	9926.000	33.138	0.000	40.387	0.000	33.138	0.000	0.000	42.060	39.822	119.605	MWD+IFR1+MS
12100.000	90.000	359.784	9926.000	33.616	0.000	40.707	0.000	33.616	0.000	0.000	42.156	40.051	123.376	MWD+IFR1+MS
12200.000	90.000	359.784	9926.000	34.105	0.000	41.044	0.000	34.105	0.000	0.000	42.280	40.271	127.789	MWD+IFR1+MS
12300.000	90.000	359.784	9926.000	34.605	0.000	41.397	0.000	34.605	0.000	0.000	42.436	40.474	132.746	MWD+IFR1+MS
12400.000	90.000	359.784	9926.000	35.116	0.000	41.765	0.000	35.116	0.000	0.000	42.632	40.654	-41.997	MWD+IFR1+MS
12500.000	90.000	359.784	9926.000	35.636	0.000	42.149	0.000	35.636	0.000	0.000	42.869	40.808	-36.788	MWD+IFR1+MS



12600.000	90.000	359.784	9926.000	36.166	0.000	42.548	0.000	36.166	0.000	0.000	43.148	40.936	-31.956	MWD+IFR1+MS
12700.000	90.000	359.784	9926.000	36.705	0.000	42.960	0.000	36.705	0.000	0.000	43.466	41.041	-27.705	MWD+IFR1+MS
12800.000	90.000	359.784	9926.000	37.253	0.000	43.387	0.000	37.253	0.000	0.000	43.817	41.126	-24.093	MWD+IFR1+MS
12900.000	90.000	359.784	9926.000	37.809	0.000	43.828	0.000	37.809	0.000	0.000	44.197	41.196	-21.083	MWD+IFR1+MS
13000.000	90.000	359.784	9926.000	38.373	0.000	44.281	0.000	38.373	0.000	0.000	44.602	41.255	-18.590	MWD+IFR1+MS
13100.000	90.000	359.784	9926.000	38.945	0.000	44.747	0.000	38.945	0.000	0.000	45.030	41.304	-16.525	MWD+IFR1+MS
13200.000	90.000	359.784	9926.000	39.524	0.000	45.226	0.000	39.524	0.000	0.000	45.476	41.348	-14.804	MWD+IFR1+MS
13300.000	90.000	359.784	9926.000	40.110	0.000	45.716	0.000	40.110	0.000	0.000	45.941	41.386	-13.359	MWD+IFR1+MS
13400.000	90.000	359.784	9926.000	40.703	0.000	46.218	0.000	40.703	0.000	0.000	46.421	41.421	-12.137	MWD+IFR1+MS
13500.000	90.000	359.784	9926.000	41.302	0.000	46.732	0.000	41.302	0.000	0.000	46.915	41.453	-11.093	MWD+IFR1+MS
13600.000	90.000	359.784	9926.000	41.908	0.000	47.256	0.000	41.908	0.000	0.000	47.423	41.483	-10.196	MWD+IFR1+MS
13700.000	90.000	359.784	9926.000	42.519	0.000	47.790	0.000	42.519	0.000	0.000	47.944	41.511	-9.417	MWD+IFR1+MS
13800.000	90.000	359.784	9926.000	43.136	0.000	48.335	0.000	43.136	0.000	0.000	48.477	41.538	-8.737	MWD+IFR1+MS
13900.000	90.000	359.784	9926.000	43.758	0.000	48.890	0.000	43.758	0.000	0.000	49.021	41.564	-8.139	MWD+IFR1+MS
14000.000	90.000	359.784	9926.000	44.385	0.000	49.454	0.000	44.385	0.000	0.000	49.575	41.589	-7.609	MWD+IFR1+MS
14100.000	90.000	359.784	9926.000	45.018	0.000	50.027	0.000	45.018	0.000	0.000	50.140	41.614	-7.138	MWD+IFR1+MS
14200.000	90.000	359.784	9926.000	45.655	0.000	50.609	0.000	45.655	0.000	0.000	50.715	41.639	-6.717	MWD+IFR1+MS
14300.000	90.000	359.784	9926.000	46.296	0.000	51.199	0.000	46.296	0.000	0.000	51.299	41.663	-6.338	MWD+IFR1+MS
14400.000	90.000	359.784	9926.000	46.942	0.000	51.798	0.000	46.942	0.000	0.000	51.892	41.687	-5.995	MWD+IFR1+MS
14500.000	90.000	359.784	9926.000	47.592	0.000	52.405	0.000	47.592	0.000	0.000	52.493	41.711	-5.685	MWD+IFR1+MS
14600.000	90.000	359.784	9926.000	48.246	0.000	53.019	0.000	48.246	0.000	0.000	53.102	41.735	-5.403	MWD+IFR1+MS
14700.000	90.000	359.784	9926.000	48.904	0.000	53.641	0.000	48.904	0.000	0.000	53.720	41.759	-5.144	MWD+IFR1+MS
14800.000	90.000	359.784	9926.000	49.566	0.000	54.270	0.000	49.566	0.000	0.000	54.345	41.783	-4.908	MWD+IFR1+MS
14900.000	90.000	359.784	9926.000	50.231	0.000	54.906	0.000	50.231	0.000	0.000	54.977	41.808	-4.691	MWD+IFR1+MS
15000.000	90.000	359.784	9926.000	50.900	0.000	55.549	0.000	50.900	0.000	0.000	55.616	41.832	-4.490	MWD+IFR1+MS
15100.000	90.000	359.784	9926.000	51.571	0.000	56.198	0.000	51.571	0.000	0.000	56.262	41.857	-4.305	MWD+IFR1+MS
15200.000	90.000	359.784	9926.000	52.246	0.000	56.853	0.000	52.246	0.000	0.000	56.914	41.883	-4.133	MWD+IFR1+MS
15300.000	90.000	359.784	9926.000	52.924	0.000	57.514	0.000	52.924	0.000	0.000	57.573	41.908	-3.973	MWD+IFR1+MS
15400.000	90.000	359.784	9926.000	53.605	0.000	58.182	0.000	53.605	0.000	0.000	58.237	41.934	-3.825	MWD+IFR1+MS
15500.000	90.000	359.784	9926.000	54.289	0.000	58.854	0.000	54.289	0.000	0.000	58.908	41.960	-3.686	MWD+IFR1+MS
15600.000	90.000	359.784	9926.000	54.976	0.000	59.533	0.000	54.976	0.000	0.000	59.584	41.987	-3.557	MWD+IFR1+MS
15700.000	90.000	359.784	9926.000	55.665	0.000	60.216	0.000	55.665	0.000	0.000	60.265	42.013	-3.435	MWD+IFR1+MS
15800.000	90.000	359.784	9926.000	56.356	0.000	60.904	0.000	56.356	0.000	0.000	60.951	42.041	-3.322	MWD+IFR1+MS



15900.000	90.000	359.784	9926.000	57.050	0.000	61.598	0.000	57.050	0.000	0.000	61.643	42.068	-3.215	MWD+IFR1+MS
16000.000	90.000	359.784	9926.000	57.746	0.000	62.296	0.000	57.746	0.000	0.000	62.339	42.097	-3.114	MWD+IFR1+MS
16100.000	90.000	359.784	9926.000	58.445	0.000	62.999	0.000	58.445	0.000	0.000	63.040	42.125	-3.019	MWD+IFR1+MS
16200.000	90.000	359.784	9926.000	59.146	0.000	63.706	0.000	59.146	0.000	0.000	63.746	42.154	-2.929	MWD+IFR1+MS
16300.000	90.000	359.784	9926.000	59.848	0.000	64.417	0.000	59.848	0.000	0.000	64.456	42.183	-2.845	MWD+IFR1+MS
16400.000	90.000	359.784	9926.000	60.553	0.000	65.133	0.000	60.553	0.000	0.000	65.170	42.213	-2.765	MWD+IFR1+MS
16500.000	90.000	359.784	9926.000	61.260	0.000	65.852	0.000	61.260	0.000	0.000	65.888	42.243	-2.689	MWD+IFR1+MS
16600.000	90.000	359.784	9926.000	61.969	0.000	66.576	0.000	61.969	0.000	0.000	66.611	42.274	-2.617	MWD+IFR1+MS
16700.000	90.000	359.784	9926.000	62.679	0.000	67.303	0.000	62.679	0.000	0.000	67.337	42.305	-2.548	MWD+IFR1+MS
16800.000	90.000	359.784	9926.000	63.391	0.000	68.034	0.000	63.391	0.000	0.000	68.066	42.336	-2.483	MWD+IFR1+MS
16900.000	90.000	359.784	9926.000	64.105	0.000	68.768	0.000	64.105	0.000	0.000	68.800	42.368	-2.421	MWD+IFR1+MS
17000.000	90.000	359.784	9926.000	64.821	0.000	69.506	0.000	64.821	0.000	0.000	69.536	42.401	-2.362	MWD+IFR1+MS
17100.000	90.000	359.784	9926.000	65.538	0.000	70.247	0.000	65.538	0.000	0.000	70.277	42.433	-2.306	MWD+IFR1+MS
17200.000	90.000	359.784	9926.000	66.256	0.000	70.991	0.000	66.256	0.000	0.000	71.020	42.467	-2.252	MWD+IFR1+MS
17300.000	90.000	359.784	9926.000	66.977	0.000	71.738	0.000	66.977	0.000	0.000	71.766	42.501	-2.201	MWD+IFR1+MS
17400.000	90.000	359.784	9926.000	67.698	0.000	72.489	0.000	67.698	0.000	0.000	72.516	42.535	-2.152	MWD+IFR1+MS
17500.000	90.000	359.784	9926.000	68.421	0.000	73.242	0.000	68.421	0.000	0.000	73.268	42.569	-2.104	MWD+IFR1+MS
17600.000	90.000	359.784	9926.000	69.145	0.000	73.998	0.000	69.145	0.000	0.000	74.023	42.604	-2.059	MWD+IFR1+MS
17700.000	90.000	359.784	9926.000	69.871	0.000	74.757	0.000	69.871	0.000	0.000	74.782	42.640	-2.016	MWD+IFR1+MS
17800.000	90.000	359.784	9926.000	70.598	0.000	75.518	0.000	70.598	0.000	0.000	75.542	42.676	-1.975	MWD+IFR1+MS
17900.000	90.000	359.784	9926.000	71.326	0.000	76.282	0.000	71.326	0.000	0.000	76.306	42.713	-1.935	MWD+IFR1+MS
18000.000	90.000	359.784	9926.000	72.055	0.000	77.048	0.000	72.055	0.000	0.000	77.071	42.750	-1.897	MWD+IFR1+MS
18100.000	90.000	359.784	9926.000	72.786	0.000	77.817	0.000	72.786	0.000	0.000	77.840	42.787	-1.860	MWD+IFR1+MS
18200.000	90.000	359.784	9926.000	73.517	0.000	78.589	0.000	73.517	0.000	0.000	78.610	42.825	-1.825	MWD+IFR1+MS
18300.000	90.000	359.784	9926.000	74.250	0.000	79.362	0.000	74.250	0.000	0.000	79.383	42.863	-1.791	MWD+IFR1+MS
18400.000	90.000	359.784	9926.000	74.984	0.000	80.138	0.000	74.984	0.000	0.000	80.158	42.902	-1.758	MWD+IFR1+MS
18500.000	90.000	359.784	9926.000	75.718	0.000	80.916	0.000	75.718	0.000	0.000	80.936	42.941	-1.727	MWD+IFR1+MS
18600.000	90.000	359.784	9926.000	76.454	0.000	81.696	0.000	76.454	0.000	0.000	81.715	42.981	-1.696	MWD+IFR1+MS
18700.000	90.000	359.784	9926.000	77.191	0.000	82.478	0.000	77.191	0.000	0.000	82.497	43.021	-1.667	MWD+IFR1+MS
18800.000	90.000	359.784	9926.000	77.929	0.000	83.262	0.000	77.929	0.000	0.000	83.280	43.062	-1.639	MWD+IFR1+MS
18900.000	90.000	359.784	9926.000	78.667	0.000	84.047	0.000	78.667	0.000	0.000	84.066	43.103	-1.611	MWD+IFR1+MS
19000.000	90.000	359.784	9926.000	79.407	0.000	84.835	0.000	79.407	0.000	0.000	84.853	43.144	-1.585	MWD+IFR1+MS
19100.000	90.000	359.784	9926.000	80.147	0.000	85.625	0.000	80.147	0.000	0.000	85.642	43.186	-1.559	MWD+IFR1+MS

19200.000	90.000	359.784	9926.000	80.888	0.000	86.416	0.000	80.888	0.000	0.000	86.433	43.229	-1.535	MWD+IFR1+MS
19300.000	90.000	359.784	9926.000	81.630	0.000	87.209	0.000	81.630	0.000	0.000	87.226	43.272	-1.511	MWD+IFR1+MS
19400.000	90.000	359.784	9926.000	82.373	0.000	88.004	0.000	82.373	0.000	0.000	88.020	43.315	-1.488	MWD+IFR1+MS
19500.000	90.000	359.784	9926.000	83.116	0.000	88.800	0.000	83.116	0.000	0.000	88.816	43.359	-1.465	MWD+IFR1+MS
19600.000	90.000	359.784	9926.000	83.860	0.000	89.598	0.000	83.860	0.000	0.000	89.614	43.403	-1.444	MWD+IFR1+MS
19700.000	90.000	359.784	9926.000	84.605	0.000	90.397	0.000	84.605	0.000	0.000	90.413	43.448	-1.423	MWD+IFR1+MS
19800.000	90.000	359.784	9926.000	85.351	0.000	91.198	0.000	85.351	0.000	0.000	91.213	43.493	-1.402	MWD+IFR1+MS
19900.000	90.000	359.784	9926.000	86.098	0.000	92.001	0.000	86.098	0.000	0.000	92.015	43.539	-1.382	MWD+IFR1+MS
20000.000	90.000	359.784	9926.000	86.845	0.000	92.804	0.000	86.845	0.000	0.000	92.819	43.585	-1.363	MWD+IFR1+MS
20100.000	90.000	359.784	9926.000	87.592	0.000	93.610	0.000	87.592	0.000	0.000	93.624	43.632	-1.345	MWD+IFR1+MS
20200.000	90.000	359.784	9926.000	88.341	0.000	94.416	0.000	88.341	0.000	0.000	94.430	43.679	-1.326	MWD+IFR1+MS
20300.000	90.000	359.784	9926.000	89.090	0.000	95.224	0.000	89.090	0.000	0.000	95.238	43.726	-1.309	MWD+IFR1+MS
20400.000	90.000	359.784	9926.000	89.839	0.000	96.033	0.000	89.839	0.000	0.000	96.047	43.774	-1.292	MWD+IFR1+MS
20500.000	90.000	359.784	9926.000	90.590	0.000	96.844	0.000	90.590	0.000	0.000	96.857	43.822	-1.275	MWD+IFR1+MS
20600.000	90.000	359.784	9926.000	91.340	0.000	97.655	0.000	91.340	0.000	0.000	97.668	43.871	-1.259	MWD+IFR1+MS
20700.000	90.000	359.784	9926.000	92.092	0.000	98.468	0.000	92.092	0.000	0.000	98.481	43.921	-1.243	MWD+IFR1+MS
20800.000	90.000	359.784	9926.000	92.844	0.000	99.282	0.000	92.844	0.000	0.000	99.294	43.970	-1.228	MWD+IFR1+MS
20900.000	90.000	359.784	9926.000	93.596	0.000	100.097	0.000	93.596	0.000	0.000	100.109	44.020	-1.213	MWD+IFR1+MS
21000.000	90.000	359.784	9926.000	94.349	0.000	100.913	0.000	94.349	0.000	0.000	100.925	44.071	-1.199	MWD+IFR1+MS
21100.000	90.000	359.784	9926.000	95.103	0.000	101.730	0.000	95.103	0.000	0.000	101.742	44.122	-1.184	MWD+IFR1+MS
21200.000	90.000	359.784	9926.000	95.857	0.000	102.549	0.000	95.857	0.000	0.000	102.560	44.173	-1.171	MWD+IFR1+MS
21300.000	90.000	359.784	9926.000	96.611	0.000	103.368	0.000	96.611	0.000	0.000	103.380	44.225	-1.157	MWD+IFR1+MS
21400.000	90.000	359.784	9926.000	97.366	0.000	104.188	0.000	97.366	0.000	0.000	104.200	44.278	-1.144	MWD+IFR1+MS
21500.000	90.000	359.784	9926.000	98.122	0.000	105.010	0.000	98.122	0.000	0.000	105.021	44.330	-1.132	MWD+IFR1+MS
21600.000	90.000	359.784	9926.000	98.878	0.000	105.832	0.000	98.878	0.000	0.000	105.843	44.383	-1.119	MWD+IFR1+MS
21700.000	90.000	359.784	9926.000	99.634	0.000	106.655	0.000	99.634	0.000	0.000	106.666	44.437	-1.107	MWD+IFR1+MS
21800.000	90.000	359.784	9926.000	100.391	0.000	107.479	0.000	100.391	0.000	0.000	107.490	44.491	-1.095	MWD+IFR1+MS
21900.000	90.000	359.784	9926.000	101.148	0.000	108.304	0.000	101.148	0.000	0.000	108.315	44.546	-1.084	MWD+IFR1+MS
22000.000	90.000	359.784	9926.000	101.906	0.000	109.130	0.000	101.906	0.000	0.000	109.140	44.600	-1.072	MWD+IFR1+MS
22100.000	90.000	359.784	9926.000	102.664	0.000	109.957	0.000	102.664	0.000	0.000	109.967	44.656	-1.061	MWD+IFR1+MS
22200.000	90.000	359.784	9926.000	103.422	0.000	110.785	0.000	103.422	0.000	0.000	110.794	44.711	-1.051	MWD+IFR1+MS
22300.000	90.000	359.784	9926.000	104.181	0.000	111.613	0.000	104.181	0.000	0.000	111.623	44.768	-1.040	MWD+IFR1+MS
22400.000	90.000	359.784	9926.000	104.940	0.000	112.442	0.000	104.940	0.000	0.000	112.452	44.824	-1.030	MWD+IFR1+MS

22500.000	90.000	359.784	9926.000	105.700	0.000	113.272	0.000	105.700	0.000	0.000	113.281	44.881	-1.020	MWD+IFR1+MS
22600.000	90.000	359.784	9926.000	106.460	0.000	114.103	0.000	106.460	0.000	0.000	114.112	44.939	-1.010	MWD+IFR1+MS
22700.000	90.000	359.784	9926.000	107.220	0.000	114.934	0.000	107.220	0.000	0.000	114.943	44.996	-1.000	MWD+IFR1+MS
22800.000	90.000	359.784	9926.000	107.981	0.000	115.766	0.000	107.981	0.000	0.000	115.775	45.055	-0.991	MWD+IFR1+MS
22900.000	90.000	359.784	9926.000	108.742	0.000	116.599	0.000	108.742	0.000	0.000	116.608	45.113	-0.982	MWD+IFR1+MS
23000.000	90.000	359.784	9926.000	109.503	0.000	117.433	0.000	109.503	0.000	0.000	117.442	45.172	-0.973	MWD+IFR1+MS
23100.000	90.000	359.784	9926.000	110.265	0.000	118.267	0.000	110.265	0.000	0.000	118.276	45.232	-0.964	MWD+IFR1+MS
23200.000	90.000	359.784	9926.000	111.026	0.000	119.102	0.000	111.026	0.000	0.000	119.111	45.292	-0.955	MWD+IFR1+MS
23300.000	90.000	359.784	9926.000	111.789	0.000	119.938	0.000	111.789	0.000	0.000	119.946	45.352	-0.947	MWD+IFR1+MS
23400.000	90.000	359.784	9926.000	112.551	0.000	120.774	0.000	112.551	0.000	0.000	120.782	45.413	-0.939	MWD+IFR1+MS
23500.000	90.000	359.784	9926.000	113.314	0.000	121.611	0.000	113.314	0.000	0.000	121.619	45.474	-0.931	MWD+IFR1+MS
23600.000	90.000	359.784	9926.000	114.078	0.000	122.448	0.000	114.078	0.000	0.000	122.456	45.535	-0.923	MWD+IFR1+MS
23700.000	90.000	359.784	9926.000	114.841	0.000	123.286	0.000	114.841	0.000	0.000	123.294	45.597	-0.915	MWD+IFR1+MS
23800.000	90.000	359.784	9926.000	115.605	0.000	124.125	0.000	115.605	0.000	0.000	124.133	45.660	-0.907	MWD+IFR1+MS
23900.000	90.000	359.784	9926.000	116.369	0.000	124.964	0.000	116.369	0.000	0.000	124.972	45.722	-0.900	MWD+IFR1+MS
24000.000	90.000	359.784	9926.000	117.133	0.000	125.804	0.000	117.133	0.000	0.000	125.812	45.785	-0.892	MWD+IFR1+MS
24100.000	90.000	359.784	9926.000	117.898	0.000	126.645	0.000	117.898	0.000	0.000	126.652	45.849	-0.885	MWD+IFR1+MS
24200.000	90.000	359.784	9926.000	118.663	0.000	127.486	0.000	118.663	0.000	0.000	127.493	45.913	-0.878	MWD+IFR1+MS
24300.000	90.000	359.784	9926.000	119.428	0.000	128.327	0.000	119.428	0.000	0.000	128.334	45.977	-0.871	MWD+IFR1+MS
24400.000	90.000	359.784	9926.000	120.193	0.000	129.169	0.000	120.193	0.000	0.000	129.176	46.042	-0.865	MWD+IFR1+MS
24500.000	90.000	359.784	9926.000	120.959	0.000	130.012	0.000	120.959	0.000	0.000	130.019	46.107	-0.858	MWD+IFR1+MS
24600.000	90.000	359.784	9926.000	121.725	0.000	130.855	0.000	121.725	0.000	0.000	130.862	46.172	-0.851	MWD+IFR1+MS
24700.000	90.000	359.784	9926.000	122.491	0.000	131.698	0.000	122.491	0.000	0.000	131.705	46.238	-0.845	MWD+IFR1+MS
24800.000	90.000	359.784	9926.000	123.257	0.000	132.542	0.000	123.257	0.000	0.000	132.549	46.304	-0.839	MWD+IFR1+MS
24900.000	90.000	359.784	9926.000	124.024	0.000	133.386	0.000	124.024	0.000	0.000	133.393	46.371	-0.833	MWD+IFR1+MS
25000.000	90.000	359.784	9926.000	124.791	0.000	134.231	0.000	124.791	0.000	0.000	134.238	46.438	-0.827	MWD+IFR1+MS
25100.000	90.000	359.784	9926.000	125.558	0.000	135.077	0.000	125.558	0.000	0.000	135.083	46.505	-0.821	MWD+IFR1+MS
25200.000	90.000	359.784	9926.000	126.325	0.000	135.923	0.000	126.325	0.000	0.000	135.929	46.573	-0.815	MWD+IFR1+MS
25300.000	90.000	359.784	9926.000	127.092	0.000	136.769	0.000	127.092	0.000	0.000	136.775	46.641	-0.809	MWD+IFR1+MS
25400.000	90.000	359.784	9926.000	127.860	0.000	137.616	0.000	127.860	0.000	0.000	137.622	46.710	-0.803	MWD+IFR1+MS
25500.000	90.000	359.784	9926.000	128.628	0.000	138.463	0.000	128.628	0.000	0.000	138.469	46.779	-0.798	MWD+IFR1+MS
25600.000	90.000	359.784	9926.000	129.396	0.000	139.310	0.000	129.396	0.000	0.000	139.316	46.848	-0.792	MWD+IFR1+MS
25700.000	90.000	359.784	9926.000	130.164	0.000	140.158	0.000	130.164	0.000	0.000	140.164	46.917	-0.787	MWD+IFR1+MS

25800.000	90.000	359.784	9926.000	130.933	0.000	141.007	0.000	130.933	0.000	0.000	141.013	46.987	-0.782	MWD+IFR1+MS
25900.000	90.000	359.784	9926.000	131.701	0.000	141.855	0.000	131.701	0.000	0.000	141.861	47.058	-0.777	MWD+IFR1+MS
26000.000	90.000	359.784	9926.000	132.470	0.000	142.704	0.000	132.470	0.000	0.000	142.710	47.128	-0.772	MWD+IFR1+MS
26100.000	90.000	359.784	9926.000	133.239	0.000	143.554	0.000	133.239	0.000	0.000	143.560	47.199	-0.767	MWD+IFR1+MS
26200.000	90.000	359.784	9926.000	134.008	0.000	144.404	0.000	134.008	0.000	0.000	144.410	47.271	-0.762	MWD+IFR1+MS
26300.000	90.000	359.784	9926.000	134.778	0.000	145.254	0.000	134.778	0.000	0.000	145.260	47.343	-0.757	MWD+IFR1+MS
26400.000	90.000	359.784	9926.000	135.547	0.000	146.105	0.000	135.547	0.000	0.000	146.110	47.415	-0.752	MWD+IFR1+MS
26500.000	90.000	359.784	9926.000	136.317	0.000	146.956	0.000	136.317	0.000	0.000	146.961	47.487	-0.748	MWD+IFR1+MS
26600.000	90.000	359.784	9926.000	137.087	0.000	147.807	0.000	137.087	0.000	0.000	147.813	47.560	-0.743	MWD+IFR1+MS
26700.000	90.000	359.784	9926.000	137.857	0.000	148.659	0.000	137.857	0.000	0.000	148.664	47.633	-0.738	MWD+IFR1+MS
26800.000	90.000	359.784	9926.000	138.627	0.000	149.511	0.000	138.627	0.000	0.000	149.516	47.707	-0.734	MWD+IFR1+MS
26862.471	90.000	359.784	9926.000	139.108	0.000	150.042	0.000	139.108	0.000	0.000	150.048	47.753	-0.731	MWD+IFR1+MS
26900.000	90.000	359.784	9926.000	139.397	0.000	150.361	0.000	139.397	0.000	0.000	150.367	47.781	-0.730	MWD+IFR1+MS
26912.955	90.000	359.784	9926.000	139.497	0.000	150.471	0.000	139.497	0.000	0.000	150.477	47.790	-0.729	MWD+IFR1+MS

## Plan Targets

POKER LAKE UNIT 23 DTD 122H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 1	10639.05	440118.20	646691.50	6446.00	RECTANGLE
LTP 1	26862.47	456341.50	646630.30	6446.00	RECTANGLE
BHL 1	26912.47	456391.50	646630.00	6446.00	RECTANGLE

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

XTO Energy Inc.  
POKER LAKE UNIT 23 DTD - 122H  
Projected TD: 26913' MD / 9926' TVD  
SHL: 366' FSL & 651' FWL , Section 14, T24S, R30E  
BHL: 50' FNL & 230' FWL , Section 2, T24S, 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	647'	Water
Top of Salt	1001'	Water
Base of Salt	3833'	Water
Delaware	4041'	Water
Brushy Canyon	6253'	Water/Oil/Gas
Bone Spring	7904'	Water
1st Bone Spring Ss	8839'	Water/Oil/Gas
2nd Bone Spring Ss	9702'	Water/Oil/Gas
Target/Land Curve	9926'	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 20 inch casing @ 976' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 13.375 inch casing at 3933' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 9.625 inch casing at 9010' and cementing to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 26913 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 8710 feet) per Potash regulations.

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
26	0' – 976'	20	169	K-55	BTC	New	3.87	6.08	16.30
17.5	0' – 3933'	13.375	54.5	J-55	BTC	New	1.23	1.27	4.24
12.25	0' – 4033'	9.625	40	HC P-110	BTC	New	2.26	2.24	3.51
12.25	4033' – 9010'	9.625	40	HC L-80	BTC	New	1.65	2.60	4.60
8.5	0' – 8910'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.85	1.94
8.5	8910' - 26913'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.56	4.14

· 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

· XTO requests to not utilize centralizers in the curve and lateral

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

· 9.625 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

· XTO requests the option to use 5" BTC Float equipment for the the production casing

**Wellhead:**

*Permanent Wellhead – Multibowl System*

A. Starting Head: 24" 5M QC 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.

· Operator will test the 7-5/8" casing per BLM Onshore Order 2

· Wellhead Manufacturer representative will not be present for BOP test plug installation

#### 4. Cement Program

##### **Surface Casing: 20, 169 New BTC, K-55 casing to be set at +/- 976'**

Optional Lead: 1530 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft<sup>3</sup>/sx, 10.13 gal/sx water)  
 Tail: 670 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: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 3933'**

Lead: 1830 sxs Class C (mixed at 14.8 ppg, 2.06 ft<sup>3</sup>/sx, 10.13 gal/sx water)  
 Tail: 150 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: 9.625, 40 New casing to be set at +/- 9010'**

###### 1st Stage

Optional Lead: 390 sxs Class C (mixed at 10.5 ppg, 2.77 ft<sup>3</sup>/sx, 15.59 gal/sx water)  
 TOC: 3633  
 Tail: 910 sxs Class C (mixed at 14.8 ppg, 1.27 ft<sup>3</sup>/sx, 6.39 gal/sx water)  
 TOC: Brushy Canyon @ 6253  
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

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

Tail: 420 sxs Class C (mixed at 14.8 ppg, 2.77 ft<sup>3</sup>/sx, 6.39 gal/sx water)  
 Top of Cement: 3633  
 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 (6253') 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, 23 New Semi-Flush, RY P-110 casing to be set at +/- 26913'**

Lead: 70 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 8710 feet  
 Tail: 3030 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 9514 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 20 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3494 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

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 20, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the 9.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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. Based on discussions with the BLM on February 27th 2020, 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)
0' - 976'	26	FW/Native	8.1-8.6	35-40	NC
976' - 3933'	17.5	Brine	8.5-9	30-32	NC
3933' to 9010'	12.25	BDE/OBM or FW/Brine	9-9.5	30-32	NC
9010' to 26913'	8.5	OBM	11-11.5	50-60	NC - 20

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 13-3/8" surface casing with brine solution. A 10.0 ppg -10.5 ppg 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 20 casing.

**8. Logging, Coring and Testing Program**

Mud Logger: Mud Logging Unit (2 man) below intermediate casing where necessary. Otherwise, gamma ray will be utilized while actively drilling.

Open hole logging will not be done on this well.

**9. Abnormal Pressures and Temperatures / Potential Hazards**

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5678 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.

APD ID 10400078621

# WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015-</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	<sup>5</sup> Property Name <b>POKER LAKE UNIT 23 DTD</b>	<sup>6</sup> Well Number <b>122H</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>3,448'</b>

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>M</b>	<b>14</b>	<b>24S</b>	<b>30E</b>		<b>366</b>	<b>SOUTH</b>	<b>651</b>	<b>WEST</b>	<b>EDDY</b>

<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>4</b>	<b>2</b>	<b>24S</b>	<b>30E</b>		<b>50</b>	<b>NORTH</b>	<b>230</b>	<b>WEST</b>	<b>EDDY</b>

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
960			

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**LEGEND**

- SECTION LINE
- PROPOSED WELL BORE
- NEW MEXICO MINERAL LEASE
- 330' BUFFER
- ALLOCATION AREA

**LOT ACREAGE TABLE**  
SECTION 2  
T-24-S, R-30-E  
LOT 4 = 40.37 ACRES

**LINE TABLE**

LINE	AZUMITH	LENGTH
L1	205°44'36"	964.95'
L2	359°46'55"	16,273.91'

**COORDINATE TABLE**

**SHL (NAD 83 NME)**  
Y = 441,046.4 N  
X = 688,294.3 E  
LAT. = 32.211620 °N  
LONG. = 103.858169 °W

**SHL (NAD 27 NME)**  
Y = 440,987.3 N  
X = 647,110.6 E  
LAT. = 32.211496 °N  
LONG. = 103.857682 °W

**FTP (NAD 83 NME)**  
Y = 440,177.2 N  
X = 687,875.2 E  
LAT. = 32.209236 °N  
LONG. = 103.859536 °W

**FTP (NAD 27 NME)**  
Y = 440,118.2 N  
X = 646,691.5 E  
LAT. = 32.209112 °N  
LONG. = 103.859050 °W

**LTP (NAD 83 NME)**  
Y = 456,401.0 N  
X = 687,813.5 E  
LAT. = 32.253833 °N  
LONG. = 103.859504 °W

**LTP (NAD 27 NME)**  
Y = 456,341.5 N  
X = 646,630.3 E  
LAT. = 32.253709 °N  
LONG. = 103.859016 °W

**BHL (NAD 83 NME)**  
Y = 456,451.0 N  
X = 687,813.2 E  
LAT. = 32.253971 °N  
LONG. = 103.859504 °W

**BHL (NAD 27 NME)**  
Y = 456,391.5 N  
X = 646,630.0 E  
LAT. = 32.253847 °N  
LONG. = 103.859016 °W

**CORNER COORDINATES (NAD 83 NME)**

A - Y = 438,041.1 N	A - X = 687,651.9 E
B - Y = 440,675.5 N	B - X = 687,643.7 E
C - Y = 443,315.0 N	C - X = 687,640.1 E
D - Y = 445,948.5 N	D - X = 687,638.0 E
E - Y = 448,583.6 N	E - X = 687,624.1 E
F - Y = 451,217.2 N	F - X = 687,609.8 E
G - Y = 453,851.5 N	G - X = 687,596.7 E
H - Y = 456,489.4 N	H - X = 687,582.9 E
I - Y = 438,048.4 N	I - X = 688,988.5 E
J - Y = 440,685.6 N	J - X = 688,981.2 E
K - Y = 443,323.9 N	K - X = 688,978.3 E
L - Y = 445,958.8 N	L - X = 688,976.1 E
M - Y = 448,594.8 N	M - X = 688,960.2 E
N - Y = 451,229.1 N	N - X = 688,944.0 E
O - Y = 453,865.0 N	O - X = 688,932.1 E
P - Y = 456,509.0 N	P - X = 688,919.8 E

**CORNER COORDINATES (NAD 27 NME)**

A - Y = 437,982.1 N	A - X = 646,468.1 E
B - Y = 440,616.4 N	B - X = 646,459.9 E
C - Y = 443,255.9 N	C - X = 646,456.5 E
D - Y = 445,889.3 N	D - X = 646,454.4 E
E - Y = 448,524.3 N	E - X = 646,440.6 E
F - Y = 451,157.9 N	F - X = 646,426.4 E
G - Y = 453,792.1 N	G - X = 646,413.4 E
H - Y = 456,439.9 N	H - X = 646,399.8 E
I - Y = 437,989.4 N	I - X = 647,804.6 E
J - Y = 440,626.6 N	J - X = 647,797.5 E
K - Y = 443,264.7 N	K - X = 647,794.7 E
L - Y = 445,899.6 N	L - X = 647,792.6 E
M - Y = 448,535.6 N	M - X = 647,776.7 E
N - Y = 451,169.8 N	N - X = 647,760.7 E
O - Y = 453,805.6 N	O - X = 647,748.8 E
P - Y = 456,449.5 N	P - X = 647,736.6 E

## DB/RP 618.013003.09-08

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

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

## Last Take Point (LTP)

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

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

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 299599

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 299599
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	1/9/2024