

Well Name: POKER LAKE 23 DTD FEDERAL COM	Well Location: T24S / R30E / SEC 23 / SWSW /	County or Parish/State:
Well Number: 152H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number:
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2764695

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 12/05/2023

Time Sundry Submitted: 06:56

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 10400080739): SHL, BHL, FTP, LTP, casing and cement changes. SHL: FROM: 406' FSL & 741' FWL of Section 14-T24S-R30E TO: 366' FSL & 741' FWL of Section 14-T24S-R30E BHL: FROM: 200' FNL & 1320' FWL of Section 2-T24S-R30E TO: 230' FNL & 1800' FWL of Section 2-T24S-R30E FTP: FROM: 100' FSL & 1320' FWL of Section 14-T24S-R30E TO: 500' FNL & 1800' FWL of Section 23-T24S-R30E LTP: FROM: 330' FNL & 1320' FWL of Section 2-T24S-R30E TO: 330' FNL & 1800' 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

- Well\_Control\_Plan\_20231221084010.pdf
- 10M\_Choke\_20231221083955.pdf
- 5M10M\_BOP\_Schematics\_20231221083941.pdf
- Drilling\_Plan\_\_\_PLU\_23\_DTD\_152H\_12\_20\_2023\_20231221083924.pdf
- Proprietary\_Connections\_Performance\_Data\_6.0000\_26.0000\_0.4360\_\_\_P110\_RY\_20231205185550.pdf
- 4\_String\_Slimhole\_SDT\_3301\_1\_20231205185533.pdf
- Well\_Plan\_Report\_\_\_POKER\_LAKE\_UNIT\_23\_DTD\_152H\_20231205185435.pdf

Received by OCD: 1/3/2024 2:17:03 PM

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FEDERAL COM

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SWSW /

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OPERATING LLC

POKER\_LAKE\_UNIT\_23\_DTD\_152H\_C\_102\_signed\_12\_4\_2023\_20231205185327.pdf

Conditions of Approval

Additional

Sec\_14\_24S\_30E\_NMP\_Sundry\_2764695\_Poker\_Lake\_23\_DTD\_Federal\_Com\_152H\_COAs\_20231226092403.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: RANELL (RUSTY) KLEIN

Signed on: DEC 21, 2023 08:40 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLANDState: TX

Phone: (432) 620-6700

Email address: RANELL.KLEIN@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: 01/03/2024

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.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well    ☐ Gas Well    ☐ Other

2. Name of Operator

3a. Address

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No.

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"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

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

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.

## 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 / 741 FWL / TWSP: 24S / RANGE: 30E / SECTION: 23 / LAT: 32.211731 / LONG: -103.857878 ( TVD: 0 feet, MD: 0 feet )

PPP: SWSW / 100 FSL / 1320 FWL / TWSP: 24S / RANGE: 30E / SECTION: 14 / LAT: 32.210895 / LONG: -103.856009 ( TVD: 12270 feet, MD: 12700 feet )

BHL: LOT 4 / 200 FNL / 1320 FWL / TWSP: 24S / RANGE: 30E / SECTION: 2 / LAT: 32.253567 / LONG: -103.855978 ( TVD: 12270 feet, MD: 28176 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 Federal Com 152H
<b>LOCATION:</b>	Sec 14-24S-30E-NMP
<b>COUNTY:</b>	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2764695** on 12/26/2023. Any previous COAs not addressed within the updated COAs still apply.*

### 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 620 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. ***Surface casing 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 6261'**
- 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 7-5/8" 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 **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)

#### 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 intervals using 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 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.

### 10,000 PSI Annular BOP Variance Request

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

#### 1. Component and Preventer Compatibility Tables

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

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

## 2. Well Control Procedures

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

### General Procedure While Drilling

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

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

#### General Procedure While Tripping

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

#### General Procedure While Running Production Casing

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

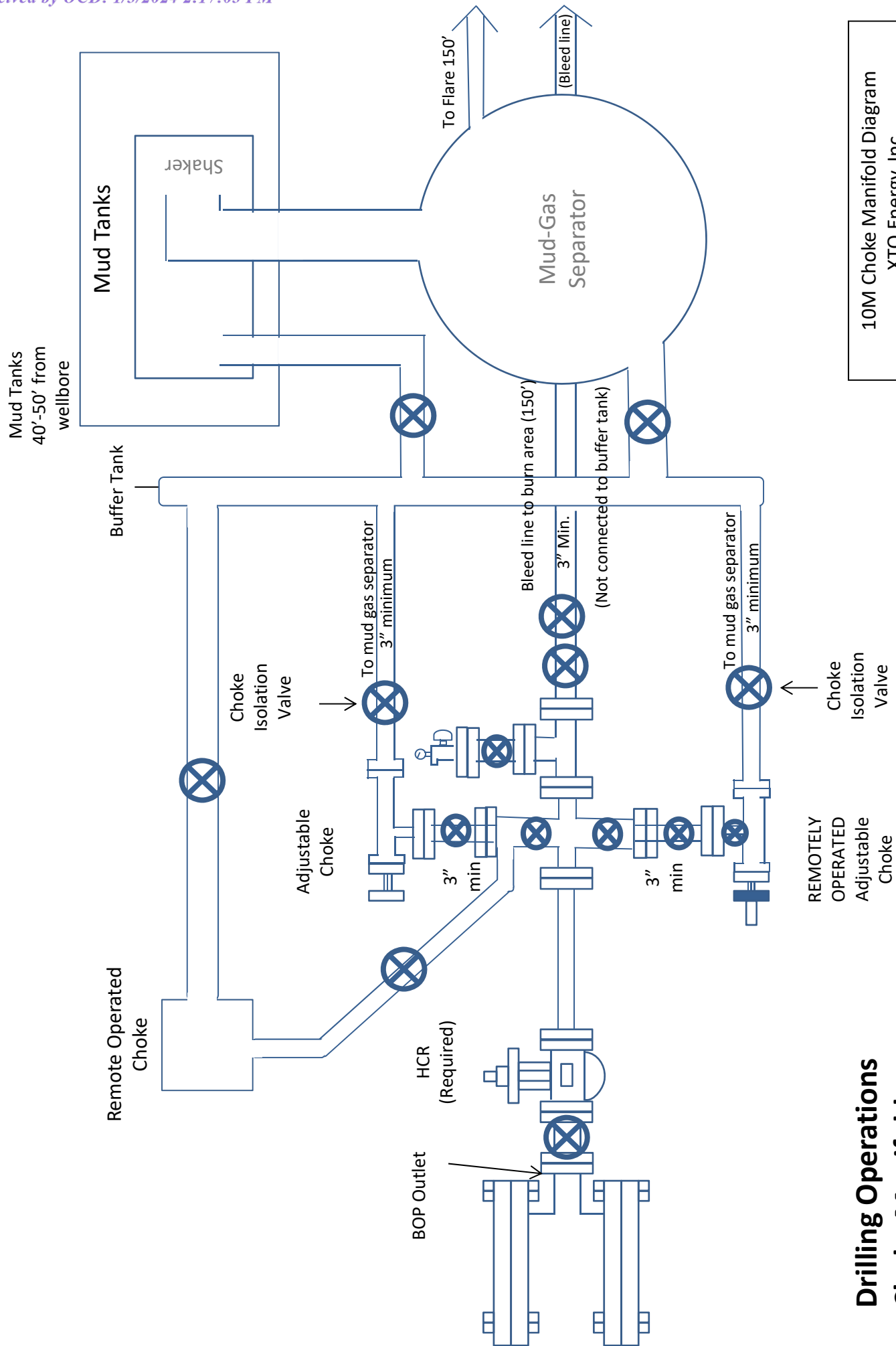
General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

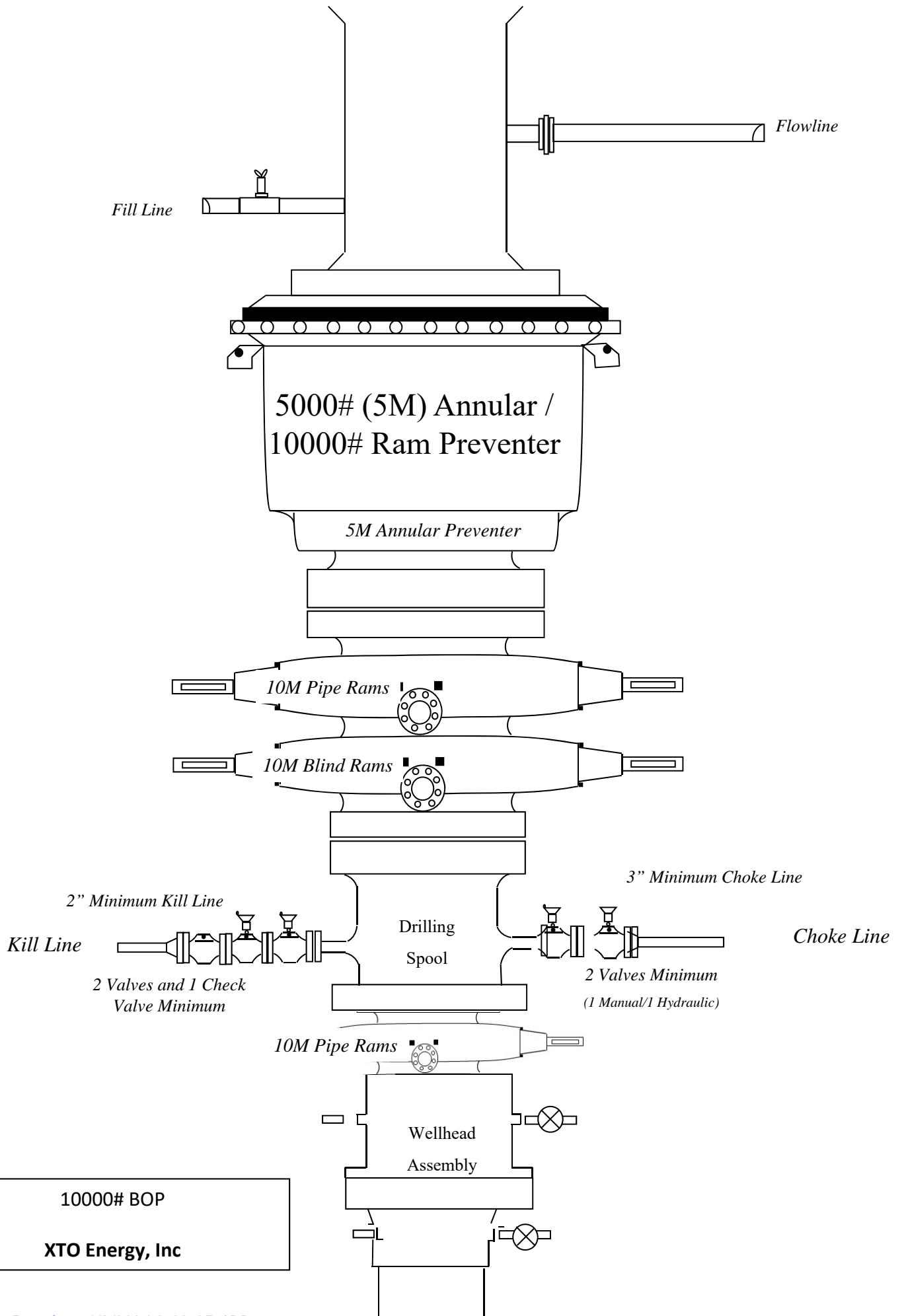
1. PRIOR to pulling last joint of drillpipe through stack:
  - a. Perform flow check. If flowing, continue to (b).
  - b. Sound alarm (alert crew)
  - c. Stab full-opening safety valve and close
  - d. Space out drill string with tool joint just beneath the upper variable bore rams
  - e. Shut-in using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

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10M Choke Manifold Diagram  
XTO Energy, Inc.

# Drilling Operations Choke Manifold 10M Service



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

XTO Energy Inc.  
POKER LAKE UNIT 23 DTD 152H  
Projected TD: 29033' MD / 12209' TVD  
SHL: 366' FSL & 741' FWL , Section 14, T24S, R30E  
BHL: 230' FNL & 1800' 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	637'	Water
Top of Salt	995'	Water
Base of Salt	3841'	Water
Delaware	4051'	Water
Brushy Canyon	6261'	Water/Oil/Gas
Bone Spring	7917'	Water
1st Bone Spring Ss	8857'	Water/Oil/Gas
2nd Bone Spring Ss	9727'	Water/Oil/Gas
3rd Bone Spring Sh	10367'	Water/Oil/Gas
Wolfcamp	11193'	Water/Oil/Gas
Wolfcamp X	11218'	Water/Oil/Gas
Wolfcamp Y	11303'	Water/Oil/Gas
Wolfcamp A	11349'	Water/Oil/Gas
Wolfcamp B	11797'	Water/Oil/Gas
Wolfcamp D	12109'	Water/Oil/Gas
Target/Land Curve	12209'	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 @ 970' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 13.375 inch casing at 3941' 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 11292' and cementing to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 29033 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 10992 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' – 970'	20	94	J-55	BTC	New	2.41	1.27	11.81
17.5	0' – 3941'	13.375	68	HC L-80	BTC	New	1.79	3.02	5.77
12.25	0' – 4041'	9.625	40	HC P-110	BTC	New	1.42	2.24	2.80
12.25	4041' – 11292'	9.625	40	HC L-80	BTC	New	1.03	2.08	3.16
8.5	0' – 11192'	5.5	23	RY P-110	Semi-Premium	New	1.21	1.92	1.71
8.5	11192' - 29033'	5.5	23	RY P-110	Semi-Flush	New	1.21	1.76	4.16

- 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, 94 New BTC, J-55 casing to be set at +/- 970'**

Optional Lead: 1510 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft3/sx, 10.13 gal/sx water)  
 Tail: 670 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft3/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, 68 New BTC, HC L-80 casing to be set at +/- 3941'**

Lead: 1840 sxs Class C (mixed at 14.8 ppg, 2.06 ft3/sx, 10.13 gal/sx water)  
 Tail: 150 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 ft3/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 +/- 11292'**

###### 1st Stage

Optional Lead: 390 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)  
 TOC: 3641  
 Tail: 1670 sxs Class C (mixed at 14.8 ppg, 1.27 ft3/sx, 6.39 gal/sx water)  
 TOC: Brushy Canyon @ 6261  
 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 ft3/sx, 6.39 gal/sx water)  
 Top of Cement: 3641  
 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 (6261') 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 +/- 29033'**

Lead: 80 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10992 feet  
 Tail: 3000 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cemen 11815 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

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" 10M 3-Ram BOP. MASP should not exceed 5766 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be conducted to at least 50% of the rated working pressure. When nipping up on the 13.375, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping up on the 9.625, 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 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' - 970'	26	FW/Native	8.1-8.6	35-40	NC
970' - 3941'	17.5	Brine	8.5-9	30-32	NC
3941' to 11292'	12.25	BDE/OBM or FW/Brine	9-9.5	30-32	NC
11292' to 29033'	8.5	OBM	13-13.5	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 185 to 205 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 8253 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.

 **U. S. Steel Tubular Products**

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



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.

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DRAWN	VJK	31MAR22
APPRV		
DRAWING NO. SDT-3301		

## Well Plan Report - POKER LAKE UNIT 23 DTD 152H

Measured Depth: 29033.05 ft

TVD RKB: 12209.00 ft

### Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 440988.00 ft

Easting: 647200.60 ft

RKB: 3477.00 ft

Ground Level: 3477.00 ft

North Reference: Grid

Convergence Angle: 0.25 Deg

### Plan Sections

POKER LAKE UNIT 23 DTD 152H

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		
2128.90	20.58	145.96	2106.92	-151.46	102.33	2.00	0.00	2.00		
6493.54	20.58	145.96	6193.08	-1422.63	961.16	0.00	0.00	0.00		
7522.44	0.00	0.00	7200.00	-1574.09	1063.49	-2.00	0.00	2.00		
11815.25	0.00	0.00	11492.80	-1574.09	1063.49	0.00	0.00	0.00		
12940.25	90.00	359.79	12209.00	-857.90	1060.80	8.00	0.00	8.00	FTP 3	
28933.16	90.00	359.79	12209.00	15134.90	1000.80	0.00	0.00	0.00	LTP 3	
29033.05	90.00	359.79	12209.00	15234.79	1000.43	0.00	0.00	0.00	BHL 3	

### Position Uncertainty

POKER LAKE UNIT 23 DTD 152H

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	2.636	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	145.956	1199.980	4.407	0.000	4.965	-0.000	2.693	0.000	0.000	5.040	4.323	126.421	MWD+IFR1+MS
1300.000	4.000	145.956	1299.838	5.262	0.000	5.279	-0.000	2.753	0.000	0.000	5.603	4.923	101.346	MWD+IFR1+MS
1400.000	6.000	145.956	1399.452	6.012	0.000	5.598	-0.000	2.819	0.000	0.000	6.282	5.311	87.790	MWD+IFR1+MS
1500.000	8.000	145.956	1498.702	6.690	0.000	5.923	-0.000	2.892	0.000	0.000	6.951	5.647	82.143	MWD+IFR1+MS
1600.000	10.000	145.956	1597.465	7.315	0.000	6.255	-0.000	2.975	0.000	0.000	7.586	5.973	79.326	MWD+IFR1+MS
1700.000	12.000	145.956	1695.623	7.899	0.000	6.593	-0.000	3.070	0.000	0.000	8.189	6.302	77.708	MWD+IFR1+MS
1800.000	14.000	145.956	1793.055	8.449	0.000	6.939	-0.000	3.178	0.000	0.000	8.764	6.636	76.701	MWD+IFR1+MS
1900.000	16.000	145.956	1889.643	8.972	0.000	7.293	-0.000	3.301	0.000	0.000	9.314	6.978	76.051	MWD+IFR1+MS
2000.000	18.000	145.956	1985.268	9.470	0.000	7.657	-0.000	3.441	0.000	0.000	9.844	7.330	75.634	MWD+IFR1+MS
2100.000	20.000	145.956	2079.816	9.948	0.000	8.031	-0.000	3.599	0.000	0.000	10.356	7.693	75.384	MWD+IFR1+MS
2128.902	20.578	145.956	2106.925	10.014	0.000	8.135	-0.000	3.620	0.000	0.000	10.441	7.799	75.425	MWD+IFR1+MS
2200.000	20.578	145.956	2173.486	10.216	0.000	8.397	-0.000	3.691	0.000	0.000	10.633	8.065	75.691	MWD+IFR1+MS
2300.000	20.578	145.956	2267.105	10.510	0.000	8.786	-0.000	3.800	0.000	0.000	10.916	8.452	76.300	MWD+IFR1+MS
2400.000	20.578	145.956	2360.725	10.818	0.000	9.188	-0.000	3.916	0.000	0.000	11.214	8.848	77.037	MWD+IFR1+MS
2500.000	20.578	145.956	2454.344	11.135	0.000	9.596	-0.000	4.037	0.000	0.000	11.521	9.249	77.817	MWD+IFR1+MS
2600.000	20.578	145.956	2547.963	11.460	0.000	10.010	-0.000	4.163	0.000	0.000	11.835	9.655	78.645	MWD+IFR1+MS
2700.000	20.578	145.956	2641.583	11.792	0.000	10.428	-0.000	4.293	0.000	0.000	12.156	10.066	79.525	MWD+IFR1+MS
2800.000	20.578	145.956	2735.202	12.130	0.000	10.851	-0.000	4.427	0.000	0.000	12.484	10.480	80.462	MWD+IFR1+MS
2900.000	20.578	145.956	2828.822	12.475	0.000	11.277	-0.000	4.565	0.000	0.000	12.818	10.896	81.459	MWD+IFR1+MS

3000.000	20.578	145.956	2922.441	12.826	0.000	11.707	-0.000	4.706	0.000	0.000	13.158	11.315	82.523	MWD+IFR1+MS
3100.000	20.578	145.956	3016.061	13.181	0.000	12.140	-0.000	4.850	0.000	0.000	13.503	11.736	83.656	MWD+IFR1+MS
3200.000	20.578	145.956	3109.680	13.541	0.000	12.575	-0.000	4.997	0.000	0.000	13.854	12.158	84.864	MWD+IFR1+MS
3300.000	20.578	145.956	3203.299	13.906	0.000	13.013	-0.000	5.146	0.000	0.000	14.211	12.581	86.150	MWD+IFR1+MS
3400.000	20.578	145.956	3296.919	14.274	0.000	13.453	-0.000	5.298	0.000	0.000	14.572	13.005	87.518	MWD+IFR1+MS
3500.000	20.578	145.956	3390.538	14.647	0.000	13.895	-0.000	5.453	0.000	0.000	14.939	13.430	88.970	MWD+IFR1+MS
3600.000	20.578	145.956	3484.158	15.023	0.000	14.339	-0.000	5.610	0.000	0.000	15.310	13.854	90.507	MWD+IFR1+MS
3700.000	20.578	145.956	3577.777	15.402	0.000	14.784	-0.000	5.768	0.000	0.000	15.687	14.278	92.128	MWD+IFR1+MS
3800.000	20.578	145.956	3671.397	15.784	0.000	15.231	-0.000	5.929	0.000	0.000	16.068	14.701	93.830	MWD+IFR1+MS
3900.000	20.578	145.956	3765.016	16.168	0.000	15.679	-0.000	6.092	0.000	0.000	16.454	15.124	95.606	MWD+IFR1+MS
4000.000	20.578	145.956	3858.635	16.556	0.000	16.129	-0.000	6.257	0.000	0.000	16.844	15.546	97.448	MWD+IFR1+MS
4100.000	20.578	145.956	3952.255	16.946	0.000	16.579	-0.000	6.423	0.000	0.000	17.240	15.966	99.345	MWD+IFR1+MS
4200.000	20.578	145.956	4045.874	17.338	0.000	17.031	-0.000	6.591	0.000	0.000	17.640	16.385	101.283	MWD+IFR1+MS
4300.000	20.578	145.956	4139.494	17.732	0.000	17.483	-0.000	6.761	0.000	0.000	18.044	16.802	103.246	MWD+IFR1+MS
4400.000	20.578	145.956	4233.113	18.128	0.000	17.937	-0.000	6.933	0.000	0.000	18.453	17.218	105.216	MWD+IFR1+MS
4500.000	20.578	145.956	4326.733	18.525	0.000	18.391	-0.000	7.106	0.000	0.000	18.866	17.632	107.176	MWD+IFR1+MS
4600.000	20.578	145.956	4420.352	18.925	0.000	18.847	-0.000	7.280	0.000	0.000	19.283	18.044	109.107	MWD+IFR1+MS
4700.000	20.578	145.956	4513.971	19.326	0.000	19.302	-0.000	7.456	0.000	0.000	19.703	18.455	110.994	MWD+IFR1+MS
4800.000	20.578	145.956	4607.591	19.729	0.000	19.759	-0.000	7.634	0.000	0.000	20.128	18.864	112.824	MWD+IFR1+MS
4900.000	20.578	145.956	4701.210	20.133	0.000	20.216	-0.000	7.813	0.000	0.000	20.556	19.272	114.585	MWD+IFR1+MS
5000.000	20.578	145.956	4794.830	20.538	0.000	20.674	-0.000	7.993	0.000	0.000	20.987	19.679	116.269	MWD+IFR1+MS
5100.000	20.578	145.956	4888.449	20.945	0.000	21.132	-0.000	8.175	0.000	0.000	21.421	20.084	117.870	MWD+IFR1+MS
5200.000	20.578	145.956	4982.069	21.353	0.000	21.591	-0.000	8.358	0.000	0.000	21.858	20.489	119.385	MWD+IFR1+MS
5300.000	20.578	145.956	5075.688	21.762	0.000	22.050	-0.000	8.543	0.000	0.000	22.297	20.892	120.814	MWD+IFR1+MS
5400.000	20.578	145.956	5169.307	22.172	0.000	22.510	-0.000	8.729	0.000	0.000	22.739	21.295	122.157	MWD+IFR1+MS
5500.000	20.578	145.956	5262.927	22.583	0.000	22.970	-0.000	8.917	0.000	0.000	23.182	21.698	123.417	MWD+IFR1+MS
5600.000	20.578	145.956	5356.546	22.995	0.000	23.431	-0.000	9.106	0.000	0.000	23.628	22.099	124.596	MWD+IFR1+MS
5700.000	20.578	145.956	5450.166	23.407	0.000	23.891	-0.000	9.296	0.000	0.000	24.075	22.501	125.700	MWD+IFR1+MS
5800.000	20.578	145.956	5543.785	23.821	0.000	24.353	-0.000	9.488	0.000	0.000	24.523	22.902	126.732	MWD+IFR1+MS
5900.000	20.578	145.956	5637.405	24.236	0.000	24.814	-0.000	9.681	0.000	0.000	24.973	23.303	127.696	MWD+IFR1+MS
6000.000	20.578	145.956	5731.024	24.651	0.000	25.276	-0.000	9.876	0.000	0.000	25.425	23.703	128.598	MWD+IFR1+MS
6100.000	20.578	145.956	5824.643	25.067	0.000	25.738	-0.000	10.072	0.000	0.000	25.877	24.104	129.441	MWD+IFR1+MS
6200.000	20.578	145.956	5918.263	25.483	0.000	26.201	-0.000	10.269	0.000	0.000	26.331	24.505	130.230	MWD+IFR1+MS

6300.000	20.578	145.956	6011.882	25.901	0.000	26.664	-0.000	10.468	0.000	0.000	26.785	24.905	130.969	MWD+IFR1+MS
6400.000	20.578	145.956	6105.502	26.319	0.000	27.127	-0.000	10.668	0.000	0.000	27.241	25.306	131.662	MWD+IFR1+MS
6493.542	20.578	145.956	6193.075	26.709	0.000	27.559	-0.000	10.857	0.000	0.000	27.666	25.680	132.289	MWD+IFR1+MS
6500.000	20.449	145.956	6199.124	26.740	0.000	27.589	-0.000	10.870	0.000	0.000	27.695	25.706	132.339	MWD+IFR1+MS
6600.000	18.449	145.956	6293.413	27.221	0.000	28.039	-0.000	11.075	0.000	0.000	28.141	26.121	132.742	MWD+IFR1+MS
6700.000	16.449	145.956	6388.806	27.731	0.000	28.479	-0.000	11.287	0.000	0.000	28.588	26.585	132.243	MWD+IFR1+MS
6800.000	14.449	145.956	6485.188	28.197	0.000	28.903	-0.000	11.484	0.000	0.000	29.020	27.041	131.667	MWD+IFR1+MS
6900.000	12.449	145.956	6582.441	28.618	0.000	29.312	-0.000	11.667	0.000	0.000	29.437	27.488	131.012	MWD+IFR1+MS
7000.000	10.449	145.956	6680.446	28.994	0.000	29.704	-0.000	11.839	0.000	0.000	29.840	27.925	130.276	MWD+IFR1+MS
7100.000	8.449	145.956	6779.085	29.324	0.000	30.081	-0.000	11.999	0.000	0.000	30.228	28.350	129.458	MWD+IFR1+MS
7200.000	6.449	145.956	6878.236	29.610	0.000	30.441	-0.000	12.150	0.000	0.000	30.601	28.763	128.557	MWD+IFR1+MS
7300.000	4.449	145.956	6977.779	29.849	0.000	30.786	-0.000	12.292	0.000	0.000	30.960	29.162	127.573	MWD+IFR1+MS
7400.000	2.449	145.956	7077.593	30.043	0.000	31.116	-0.000	12.428	0.000	0.000	31.306	29.547	126.508	MWD+IFR1+MS
7500.000	0.449	145.956	7177.556	30.193	0.000	31.430	-0.000	12.558	0.000	0.000	31.637	29.917	125.367	MWD+IFR1+MS
7522.445	0.000	0.000	7200.000	31.134	0.000	30.568	0.000	12.587	0.000	0.000	31.700	29.981	125.379	MWD+IFR1+MS
7600.000	0.000	0.000	7277.555	31.346	0.000	30.775	0.000	12.686	0.000	0.000	31.910	30.189	125.303	MWD+IFR1+MS
7700.000	0.000	0.000	7377.555	31.622	0.000	31.046	0.000	12.817	0.000	0.000	32.187	30.460	125.266	MWD+IFR1+MS
7800.000	0.000	0.000	7477.555	31.901	0.000	31.321	0.000	12.950	0.000	0.000	32.468	30.733	125.243	MWD+IFR1+MS
7900.000	0.000	0.000	7577.555	32.181	0.000	31.598	0.000	13.087	0.000	0.000	32.750	31.007	125.221	MWD+IFR1+MS
8000.000	0.000	0.000	7677.555	32.463	0.000	31.876	0.000	13.227	0.000	0.000	33.034	31.283	125.199	MWD+IFR1+MS
8100.000	0.000	0.000	7777.555	32.746	0.000	32.155	0.000	13.370	0.000	0.000	33.319	31.561	125.178	MWD+IFR1+MS
8200.000	0.000	0.000	7877.555	33.031	0.000	32.436	0.000	13.517	0.000	0.000	33.605	31.841	125.158	MWD+IFR1+MS
8300.000	0.000	0.000	7977.555	33.317	0.000	32.719	0.000	13.666	0.000	0.000	33.893	32.122	125.138	MWD+IFR1+MS
8400.000	0.000	0.000	8077.555	33.604	0.000	33.003	0.000	13.819	0.000	0.000	34.183	32.404	125.118	MWD+IFR1+MS
8500.000	0.000	0.000	8177.555	33.893	0.000	33.289	0.000	13.975	0.000	0.000	34.473	32.688	125.099	MWD+IFR1+MS
8600.000	0.000	0.000	8277.555	34.184	0.000	33.576	0.000	14.134	0.000	0.000	34.765	32.974	125.080	MWD+IFR1+MS
8700.000	0.000	0.000	8377.555	34.475	0.000	33.864	0.000	14.297	0.000	0.000	35.058	33.261	125.062	MWD+IFR1+MS
8800.000	0.000	0.000	8477.555	34.768	0.000	34.154	0.000	14.463	0.000	0.000	35.352	33.549	125.045	MWD+IFR1+MS
8900.000	0.000	0.000	8577.555	35.062	0.000	34.445	0.000	14.632	0.000	0.000	35.648	33.838	125.027	MWD+IFR1+MS
9000.000	0.000	0.000	8677.555	35.357	0.000	34.737	0.000	14.805	0.000	0.000	35.944	34.129	125.010	MWD+IFR1+MS
9100.000	0.000	0.000	8777.555	35.653	0.000	35.031	0.000	14.981	0.000	0.000	36.242	34.421	124.994	MWD+IFR1+MS
9200.000	0.000	0.000	8877.555	35.951	0.000	35.325	0.000	15.161	0.000	0.000	36.541	34.715	124.978	MWD+IFR1+MS
9300.000	0.000	0.000	8977.555	36.249	0.000	35.621	0.000	15.344	0.000	0.000	36.840	35.010	124.962	MWD+IFR1+MS

9400.000	0.000	0.000	9077.555	36.549	0.000	35.918	0.000	15.530	0.000	0.000	37.141	35.305	124.947	MWD+IFR1+MS
9500.000	0.000	0.000	9177.555	36.850	0.000	36.216	0.000	15.720	0.000	0.000	37.443	35.602	124.931	MWD+IFR1+MS
9600.000	0.000	0.000	9277.555	37.152	0.000	36.515	0.000	15.913	0.000	0.000	37.746	35.900	124.917	MWD+IFR1+MS
9700.000	0.000	0.000	9377.555	37.454	0.000	36.816	0.000	16.109	0.000	0.000	38.050	36.200	124.902	MWD+IFR1+MS
9800.000	0.000	0.000	9477.555	37.758	0.000	37.117	0.000	16.309	0.000	0.000	38.355	36.500	124.888	MWD+IFR1+MS
9900.000	0.000	0.000	9577.555	38.063	0.000	37.419	0.000	16.513	0.000	0.000	38.661	36.801	124.874	MWD+IFR1+MS
10000.000	0.000	0.000	9677.555	38.368	0.000	37.722	0.000	16.720	0.000	0.000	38.967	37.103	124.861	MWD+IFR1+MS
10100.000	0.000	0.000	9777.555	38.675	0.000	38.027	0.000	16.930	0.000	0.000	39.275	37.407	124.847	MWD+IFR1+MS
10200.000	0.000	0.000	9877.555	38.982	0.000	38.332	0.000	17.144	0.000	0.000	39.583	37.711	124.834	MWD+IFR1+MS
10300.000	0.000	0.000	9977.555	39.290	0.000	38.638	0.000	17.362	0.000	0.000	39.892	38.016	124.821	MWD+IFR1+MS
10400.000	0.000	0.000	10077.555	39.599	0.000	38.945	0.000	17.583	0.000	0.000	40.202	38.322	124.809	MWD+IFR1+MS
10500.000	0.000	0.000	10177.555	39.909	0.000	39.253	0.000	17.807	0.000	0.000	40.513	38.629	124.797	MWD+IFR1+MS
10600.000	0.000	0.000	10277.555	40.220	0.000	39.561	0.000	18.035	0.000	0.000	40.825	38.937	124.785	MWD+IFR1+MS
10700.000	0.000	0.000	10377.555	40.532	0.000	39.871	0.000	18.266	0.000	0.000	41.137	39.246	124.773	MWD+IFR1+MS
10800.000	0.000	0.000	10477.555	40.844	0.000	40.181	0.000	18.501	0.000	0.000	41.450	39.556	124.761	MWD+IFR1+MS
10900.000	0.000	0.000	10577.555	41.157	0.000	40.492	0.000	18.739	0.000	0.000	41.764	39.866	124.750	MWD+IFR1+MS
11000.000	0.000	0.000	10677.555	41.471	0.000	40.804	0.000	18.981	0.000	0.000	42.078	40.177	124.739	MWD+IFR1+MS
11100.000	0.000	0.000	10777.555	41.785	0.000	41.117	0.000	19.226	0.000	0.000	42.394	40.489	124.728	MWD+IFR1+MS
11200.000	0.000	0.000	10877.555	42.100	0.000	41.430	0.000	19.475	0.000	0.000	42.710	40.802	124.717	MWD+IFR1+MS
11300.000	0.000	0.000	10977.555	42.416	0.000	41.745	0.000	19.727	0.000	0.000	43.026	41.116	124.706	MWD+IFR1+MS
11400.000	0.000	0.000	11077.555	42.733	0.000	42.059	0.000	19.983	0.000	0.000	43.343	41.430	124.696	MWD+IFR1+MS
11500.000	0.000	0.000	11177.555	43.050	0.000	42.375	0.000	20.243	0.000	0.000	43.661	41.745	124.686	MWD+IFR1+MS
11600.000	0.000	0.000	11277.555	43.368	0.000	42.691	0.000	20.505	0.000	0.000	43.980	42.060	124.676	MWD+IFR1+MS
11700.000	0.000	0.000	11377.555	43.686	0.000	43.008	0.000	20.771	0.000	0.000	44.299	42.377	124.666	MWD+IFR1+MS
11800.000	0.000	0.000	11477.555	44.005	0.000	43.326	0.000	21.041	0.000	0.000	44.619	42.694	124.656	MWD+IFR1+MS
11815.247	0.000	0.000	11492.803	44.054	0.000	43.374	0.000	21.083	0.000	0.000	44.666	42.742	124.649	MWD+IFR1+MS
11900.000	6.780	359.785	11577.358	43.541	0.000	43.640	0.000	21.313	0.000	0.000	45.018	43.033	123.073	MWD+IFR1+MS
12000.000	14.780	359.785	11675.513	43.032	0.000	43.931	0.000	21.635	0.000	0.000	45.933	43.462	115.315	MWD+IFR1+MS
12100.000	22.780	359.785	11770.112	42.082	0.000	44.199	0.000	22.085	0.000	0.000	46.916	43.805	110.313	MWD+IFR1+MS
12200.000	30.780	359.785	11859.314	40.639	0.000	44.441	0.000	22.711	0.000	0.000	47.785	44.078	107.661	MWD+IFR1+MS
12300.000	38.780	359.785	11941.382	38.832	0.000	44.655	0.000	23.542	0.000	0.000	48.505	44.303	106.242	MWD+IFR1+MS
12400.000	46.780	359.785	12014.719	36.830	0.000	44.840	0.000	24.587	0.000	0.000	49.065	44.487	105.529	MWD+IFR1+MS
12500.000	54.780	359.785	12077.897	34.844	0.000	44.997	0.000	25.828	0.000	0.000	49.469	44.636	105.251	MWD+IFR1+MS

12600.000	62.780	359.785	12129.687	33.128	0.000	45.126	0.000	27.232	0.000	0.000	49.730	44.755	105.242	MWD+IFR1+MS
12700.000	70.780	359.785	12169.081	31.953	0.000	45.228	0.000	28.751	0.000	0.000	49.872	44.846	105.379	MWD+IFR1+MS
12800.000	78.780	359.785	12195.312	31.557	0.000	45.303	0.000	30.334	0.000	0.000	49.927	44.915	105.543	MWD+IFR1+MS
12900.000	86.780	359.785	12207.869	32.081	0.000	45.353	0.000	31.924	0.000	0.000	49.931	44.965	105.607	MWD+IFR1+MS
12940.247	90.000	359.785	12209.000	32.123	0.000	45.362	0.000	32.123	0.000	0.000	49.927	44.978	105.558	MWD+IFR1+MS
13000.000	90.000	359.785	12209.000	32.286	0.000	45.377	0.000	32.286	0.000	0.000	49.921	45.000	105.470	MWD+IFR1+MS
13100.000	90.000	359.785	12209.000	32.536	0.000	45.420	0.000	32.536	0.000	0.000	49.912	45.052	105.372	MWD+IFR1+MS
13200.000	90.000	359.785	12209.000	32.805	0.000	45.481	0.000	32.805	0.000	0.000	49.906	45.121	105.324	MWD+IFR1+MS
13300.000	90.000	359.785	12209.000	33.090	0.000	45.560	0.000	33.090	0.000	0.000	49.901	45.207	105.323	MWD+IFR1+MS
13400.000	90.000	359.785	12209.000	33.392	0.000	45.655	0.000	33.392	0.000	0.000	49.897	45.308	105.374	MWD+IFR1+MS
13500.000	90.000	359.785	12209.000	33.709	0.000	45.767	0.000	33.709	0.000	0.000	49.896	45.425	105.478	MWD+IFR1+MS
13600.000	90.000	359.785	12209.000	34.041	0.000	45.895	0.000	34.041	0.000	0.000	49.896	45.557	105.642	MWD+IFR1+MS
13700.000	90.000	359.785	12209.000	34.388	0.000	46.040	0.000	34.388	0.000	0.000	49.898	45.704	105.872	MWD+IFR1+MS
13800.000	90.000	359.785	12209.000	34.750	0.000	46.201	0.000	34.750	0.000	0.000	49.902	45.867	106.178	MWD+IFR1+MS
13900.000	90.000	359.785	12209.000	35.125	0.000	46.379	0.000	35.125	0.000	0.000	49.908	46.044	106.570	MWD+IFR1+MS
14000.000	90.000	359.785	12209.000	35.513	0.000	46.572	0.000	35.513	0.000	0.000	49.916	46.236	107.066	MWD+IFR1+MS
14100.000	90.000	359.785	12209.000	35.914	0.000	46.781	0.000	35.914	0.000	0.000	49.927	46.441	107.685	MWD+IFR1+MS
14200.000	90.000	359.785	12209.000	36.328	0.000	47.006	0.000	36.328	0.000	0.000	49.941	46.659	108.455	MWD+IFR1+MS
14300.000	90.000	359.785	12209.000	36.754	0.000	47.246	0.000	36.754	0.000	0.000	49.959	46.890	109.413	MWD+IFR1+MS
14400.000	90.000	359.785	12209.000	37.192	0.000	47.501	0.000	37.192	0.000	0.000	49.980	47.132	110.608	MWD+IFR1+MS
14500.000	90.000	359.785	12209.000	37.641	0.000	47.772	0.000	37.641	0.000	0.000	50.008	47.384	112.110	MWD+IFR1+MS
14600.000	90.000	359.785	12209.000	38.101	0.000	48.056	0.000	38.101	0.000	0.000	50.042	47.644	114.012	MWD+IFR1+MS
14700.000	90.000	359.785	12209.000	38.571	0.000	48.355	0.000	38.571	0.000	0.000	50.087	47.909	116.440	MWD+IFR1+MS
14800.000	90.000	359.785	12209.000	39.051	0.000	48.669	0.000	39.051	0.000	0.000	50.145	48.176	119.559	MWD+IFR1+MS
14900.000	90.000	359.785	12209.000	39.542	0.000	48.996	0.000	39.542	0.000	0.000	50.221	48.438	123.555	MWD+IFR1+MS
15000.000	90.000	359.785	12209.000	40.041	0.000	49.336	0.000	40.041	0.000	0.000	50.325	48.687	128.579	MWD+IFR1+MS
15100.000	90.000	359.785	12209.000	40.550	0.000	49.690	0.000	40.550	0.000	0.000	50.465	48.914	134.599	MWD+IFR1+MS
15200.000	90.000	359.785	12209.000	41.067	0.000	50.057	0.000	41.067	0.000	0.000	50.650	49.108	-38.763	MWD+IFR1+MS
15300.000	90.000	359.785	12209.000	41.593	0.000	50.437	0.000	41.593	0.000	0.000	50.886	49.267	-32.193	MWD+IFR1+MS
15400.000	90.000	359.785	12209.000	42.126	0.000	50.829	0.000	42.126	0.000	0.000	51.169	49.390	-26.339	MWD+IFR1+MS
15500.000	90.000	359.785	12209.000	42.668	0.000	51.233	0.000	42.668	0.000	0.000	51.493	49.485	-21.502	MWD+IFR1+MS
15600.000	90.000	359.785	12209.000	43.217	0.000	51.649	0.000	43.217	0.000	0.000	51.851	49.559	-17.661	MWD+IFR1+MS
15700.000	90.000	359.785	12209.000	43.773	0.000	52.076	0.000	43.773	0.000	0.000	52.235	49.618	-14.651	MWD+IFR1+MS

15800.000	90.000	359.785	12209.000	44.336	0.000	52.515	0.000	44.336	0.000	0.000	52.642	49.667	-12.286	MWD+IFR1+MS
15900.000	90.000	359.785	12209.000	44.906	0.000	52.965	0.000	44.906	0.000	0.000	53.067	49.709	-10.409	MWD+IFR1+MS
16000.000	90.000	359.785	12209.000	45.482	0.000	53.426	0.000	45.482	0.000	0.000	53.509	49.746	-8.901	MWD+IFR1+MS
16100.000	90.000	359.785	12209.000	46.064	0.000	53.897	0.000	46.064	0.000	0.000	53.965	49.779	-7.673	MWD+IFR1+MS
16200.000	90.000	359.785	12209.000	46.652	0.000	54.378	0.000	46.652	0.000	0.000	54.434	49.810	-6.661	MWD+IFR1+MS
16300.000	90.000	359.785	12209.000	47.246	0.000	54.869	0.000	47.246	0.000	0.000	54.916	49.840	-5.816	MWD+IFR1+MS
16400.000	90.000	359.785	12209.000	47.846	0.000	55.370	0.000	47.846	0.000	0.000	55.409	49.868	-5.104	MWD+IFR1+MS
16500.000	90.000	359.785	12209.000	48.450	0.000	55.880	0.000	48.450	0.000	0.000	55.912	49.895	-4.498	MWD+IFR1+MS
16600.000	90.000	359.785	12209.000	49.060	0.000	56.400	0.000	49.060	0.000	0.000	56.426	49.922	-3.977	MWD+IFR1+MS
16700.000	90.000	359.785	12209.000	49.675	0.000	56.928	0.000	49.675	0.000	0.000	56.950	49.948	-3.527	MWD+IFR1+MS
16800.000	90.000	359.785	12209.000	50.294	0.000	57.465	0.000	50.294	0.000	0.000	57.483	49.974	-3.135	MWD+IFR1+MS
16900.000	90.000	359.785	12209.000	50.918	0.000	58.010	0.000	50.918	0.000	0.000	58.025	50.001	-2.792	MWD+IFR1+MS
17000.000	90.000	359.785	12209.000	51.547	0.000	58.564	0.000	51.547	0.000	0.000	58.576	50.027	-2.489	MWD+IFR1+MS
17100.000	90.000	359.785	12209.000	52.179	0.000	59.125	0.000	52.179	0.000	0.000	59.135	50.053	-2.221	MWD+IFR1+MS
17200.000	90.000	359.785	12209.000	52.816	0.000	59.694	0.000	52.816	0.000	0.000	59.703	50.080	-1.983	MWD+IFR1+MS
17300.000	90.000	359.785	12209.000	53.457	0.000	60.271	0.000	53.457	0.000	0.000	60.278	50.107	-1.770	MWD+IFR1+MS
17400.000	90.000	359.785	12209.000	54.101	0.000	60.855	0.000	54.101	0.000	0.000	60.860	50.134	-1.579	MWD+IFR1+MS
17500.000	90.000	359.785	12209.000	54.749	0.000	61.446	0.000	54.749	0.000	0.000	61.450	50.162	-1.408	MWD+IFR1+MS
17600.000	90.000	359.785	12209.000	55.401	0.000	62.044	0.000	55.401	0.000	0.000	62.047	50.189	-1.253	MWD+IFR1+MS
17700.000	90.000	359.785	12209.000	56.056	0.000	62.648	0.000	56.056	0.000	0.000	62.651	50.218	-1.113	MWD+IFR1+MS
17800.000	90.000	359.785	12209.000	56.714	0.000	63.259	0.000	56.714	0.000	0.000	63.261	50.247	-0.985	MWD+IFR1+MS
17900.000	90.000	359.785	12209.000	57.376	0.000	63.876	0.000	57.376	0.000	0.000	63.878	50.276	-0.870	MWD+IFR1+MS
18000.000	90.000	359.785	12209.000	58.041	0.000	64.500	0.000	58.041	0.000	0.000	64.501	50.306	-0.764	MWD+IFR1+MS
18100.000	90.000	359.785	12209.000	58.708	0.000	65.129	0.000	58.708	0.000	0.000	65.130	50.336	-0.668	MWD+IFR1+MS
18200.000	90.000	359.785	12209.000	59.379	0.000	65.764	0.000	59.379	0.000	0.000	65.765	50.367	-0.580	MWD+IFR1+MS
18300.000	90.000	359.785	12209.000	60.052	0.000	66.405	0.000	60.052	0.000	0.000	66.406	50.398	-0.499	MWD+IFR1+MS
18400.000	90.000	359.785	12209.000	60.728	0.000	67.051	0.000	60.728	0.000	0.000	67.052	50.430	-0.425	MWD+IFR1+MS
18500.000	90.000	359.785	12209.000	61.406	0.000	67.703	0.000	61.406	0.000	0.000	67.703	50.462	-0.356	MWD+IFR1+MS
18600.000	90.000	359.785	12209.000	62.087	0.000	68.359	0.000	62.087	0.000	0.000	68.360	50.495	-0.294	MWD+IFR1+MS
18700.000	90.000	359.785	12209.000	62.771	0.000	69.021	0.000	62.771	0.000	0.000	69.021	50.528	-0.235	MWD+IFR1+MS
18800.000	90.000	359.785	12209.000	63.456	0.000	69.688	0.000	63.456	0.000	0.000	69.688	50.562	-0.182	MWD+IFR1+MS
18900.000	90.000	359.785	12209.000	64.145	0.000	70.359	0.000	64.145	0.000	0.000	70.359	50.596	-0.132	MWD+IFR1+MS
19000.000	90.000	359.785	12209.000	64.835	0.000	71.034	0.000	64.835	0.000	0.000	71.035	50.631	-0.086	MWD+IFR1+MS

19100.000	90.000	359.785	12209.000	65.527	0.000	71.715	0.000	65.527	0.000	0.000	71.715	50.667	-0.044	MWD+IFR1+MS
19200.000	90.000	359.785	12209.000	66.222	0.000	72.399	0.000	66.222	0.000	0.000	72.399	50.703	-0.005	MWD+IFR1+MS
19300.000	90.000	359.785	12209.000	66.918	0.000	73.088	0.000	66.918	0.000	0.000	73.088	50.739	0.032	MWD+IFR1+MS
19400.000	90.000	359.785	12209.000	67.616	0.000	73.781	0.000	67.616	0.000	0.000	73.781	50.777	0.066	MWD+IFR1+MS
19500.000	90.000	359.785	12209.000	68.317	0.000	74.478	0.000	68.317	0.000	0.000	74.478	50.814	0.097	MWD+IFR1+MS
19600.000	90.000	359.785	12209.000	69.019	0.000	75.178	0.000	69.019	0.000	0.000	75.179	50.853	0.127	MWD+IFR1+MS
19700.000	90.000	359.785	12209.000	69.722	0.000	75.883	0.000	69.722	0.000	0.000	75.883	50.891	0.154	MWD+IFR1+MS
19800.000	90.000	359.785	12209.000	70.428	0.000	76.591	0.000	70.428	0.000	0.000	76.592	50.931	0.179	MWD+IFR1+MS
19900.000	90.000	359.785	12209.000	71.135	0.000	77.302	0.000	71.135	0.000	0.000	77.303	50.971	0.203	MWD+IFR1+MS
20000.000	90.000	359.785	12209.000	71.844	0.000	78.017	0.000	71.844	0.000	0.000	78.019	51.011	0.225	MWD+IFR1+MS
20100.000	90.000	359.785	12209.000	72.554	0.000	78.736	0.000	72.554	0.000	0.000	78.737	51.052	0.245	MWD+IFR1+MS
20200.000	90.000	359.785	12209.000	73.266	0.000	79.457	0.000	73.266	0.000	0.000	79.459	51.094	0.265	MWD+IFR1+MS
20300.000	90.000	359.785	12209.000	73.980	0.000	80.182	0.000	73.980	0.000	0.000	80.184	51.136	0.282	MWD+IFR1+MS
20400.000	90.000	359.785	12209.000	74.694	0.000	80.910	0.000	74.694	0.000	0.000	80.912	51.178	0.299	MWD+IFR1+MS
20500.000	90.000	359.785	12209.000	75.411	0.000	81.641	0.000	75.411	0.000	0.000	81.643	51.221	0.315	MWD+IFR1+MS
20600.000	90.000	359.785	12209.000	76.128	0.000	82.375	0.000	76.128	0.000	0.000	82.377	51.265	0.329	MWD+IFR1+MS
20700.000	90.000	359.785	12209.000	76.847	0.000	83.112	0.000	76.847	0.000	0.000	83.114	51.310	0.342	MWD+IFR1+MS
20800.000	90.000	359.785	12209.000	77.567	0.000	83.851	0.000	77.567	0.000	0.000	83.854	51.354	0.355	MWD+IFR1+MS
20900.000	90.000	359.785	12209.000	78.288	0.000	84.593	0.000	78.288	0.000	0.000	84.596	51.400	0.367	MWD+IFR1+MS
21000.000	90.000	359.785	12209.000	79.011	0.000	85.338	0.000	79.011	0.000	0.000	85.341	51.446	0.378	MWD+IFR1+MS
21100.000	90.000	359.785	12209.000	79.735	0.000	86.086	0.000	79.735	0.000	0.000	86.089	51.492	0.388	MWD+IFR1+MS
21200.000	90.000	359.785	12209.000	80.460	0.000	86.836	0.000	80.460	0.000	0.000	86.839	51.539	0.397	MWD+IFR1+MS
21300.000	90.000	359.785	12209.000	81.186	0.000	87.588	0.000	81.186	0.000	0.000	87.591	51.587	0.406	MWD+IFR1+MS
21400.000	90.000	359.785	12209.000	81.913	0.000	88.343	0.000	81.913	0.000	0.000	88.346	51.635	0.414	MWD+IFR1+MS
21500.000	90.000	359.785	12209.000	82.641	0.000	89.100	0.000	82.641	0.000	0.000	89.103	51.684	0.422	MWD+IFR1+MS
21600.000	90.000	359.785	12209.000	83.370	0.000	89.859	0.000	83.370	0.000	0.000	89.863	51.733	0.429	MWD+IFR1+MS
21700.000	90.000	359.785	12209.000	84.100	0.000	90.621	0.000	84.100	0.000	0.000	90.624	51.782	0.435	MWD+IFR1+MS
21800.000	90.000	359.785	12209.000	84.831	0.000	91.384	0.000	84.831	0.000	0.000	91.388	51.833	0.441	MWD+IFR1+MS
21900.000	90.000	359.785	12209.000	85.564	0.000	92.150	0.000	85.564	0.000	0.000	92.154	51.884	0.447	MWD+IFR1+MS
22000.000	90.000	359.785	12209.000	86.297	0.000	92.918	0.000	86.297	0.000	0.000	92.922	51.935	0.452	MWD+IFR1+MS
22100.000	90.000	359.785	12209.000	87.031	0.000	93.687	0.000	87.031	0.000	0.000	93.692	51.987	0.457	MWD+IFR1+MS
22200.000	90.000	359.785	12209.000	87.765	0.000	94.459	0.000	87.765	0.000	0.000	94.464	52.039	0.462	MWD+IFR1+MS
22300.000	90.000	359.785	12209.000	88.501	0.000	95.233	0.000	88.501	0.000	0.000	95.237	52.092	0.466	MWD+IFR1+MS

22400.000	90.000	359.785	12209.000	89.238	0.000	96.008	0.000	89.238	0.000	0.000	96.013	52.146	0.469	MWD+IFR1+MS
22500.000	90.000	359.785	12209.000	89.975	0.000	96.785	0.000	89.975	0.000	0.000	96.790	52.200	0.473	MWD+IFR1+MS
22600.000	90.000	359.785	12209.000	90.713	0.000	97.564	0.000	90.713	0.000	0.000	97.569	52.254	0.476	MWD+IFR1+MS
22700.000	90.000	359.785	12209.000	91.452	0.000	98.345	0.000	91.452	0.000	0.000	98.350	52.309	0.479	MWD+IFR1+MS
22800.000	90.000	359.785	12209.000	92.192	0.000	99.127	0.000	92.192	0.000	0.000	99.133	52.365	0.481	MWD+IFR1+MS
22900.000	90.000	359.785	12209.000	92.932	0.000	99.911	0.000	92.932	0.000	0.000	99.917	52.421	0.484	MWD+IFR1+MS
23000.000	90.000	359.785	12209.000	93.673	0.000	100.697	0.000	93.673	0.000	0.000	100.703	52.477	0.486	MWD+IFR1+MS
23100.000	90.000	359.785	12209.000	94.415	0.000	101.484	0.000	94.415	0.000	0.000	101.490	52.534	0.488	MWD+IFR1+MS
23200.000	90.000	359.785	12209.000	95.157	0.000	102.273	0.000	95.157	0.000	0.000	102.279	52.592	0.489	MWD+IFR1+MS
23300.000	90.000	359.785	12209.000	95.901	0.000	103.063	0.000	95.901	0.000	0.000	103.069	52.650	0.491	MWD+IFR1+MS
23400.000	90.000	359.785	12209.000	96.644	0.000	103.855	0.000	96.644	0.000	0.000	103.861	52.709	0.492	MWD+IFR1+MS
23500.000	90.000	359.785	12209.000	97.389	0.000	104.648	0.000	97.389	0.000	0.000	104.654	52.768	0.493	MWD+IFR1+MS
23600.000	90.000	359.785	12209.000	98.134	0.000	105.442	0.000	98.134	0.000	0.000	105.448	52.828	0.494	MWD+IFR1+MS
23700.000	90.000	359.785	12209.000	98.880	0.000	106.238	0.000	98.880	0.000	0.000	106.244	52.888	0.495	MWD+IFR1+MS
23800.000	90.000	359.785	12209.000	99.626	0.000	107.035	0.000	99.626	0.000	0.000	107.042	52.948	0.495	MWD+IFR1+MS
23900.000	90.000	359.785	12209.000	100.373	0.000	107.834	0.000	100.373	0.000	0.000	107.840	53.010	0.496	MWD+IFR1+MS
24000.000	90.000	359.785	12209.000	101.121	0.000	108.633	0.000	101.121	0.000	0.000	108.640	53.071	0.496	MWD+IFR1+MS
24100.000	90.000	359.785	12209.000	101.869	0.000	109.434	0.000	101.869	0.000	0.000	109.441	53.134	0.496	MWD+IFR1+MS
24200.000	90.000	359.785	12209.000	102.617	0.000	110.237	0.000	102.617	0.000	0.000	110.243	53.196	0.496	MWD+IFR1+MS
24300.000	90.000	359.785	12209.000	103.366	0.000	111.040	0.000	103.366	0.000	0.000	111.047	53.259	0.496	MWD+IFR1+MS
24400.000	90.000	359.785	12209.000	104.116	0.000	111.845	0.000	104.116	0.000	0.000	111.851	53.323	0.496	MWD+IFR1+MS
24500.000	90.000	359.785	12209.000	104.866	0.000	112.650	0.000	104.866	0.000	0.000	112.657	53.387	0.496	MWD+IFR1+MS
24600.000	90.000	359.785	12209.000	105.617	0.000	113.457	0.000	105.617	0.000	0.000	113.464	53.452	0.496	MWD+IFR1+MS
24700.000	90.000	359.785	12209.000	106.368	0.000	114.265	0.000	106.368	0.000	0.000	114.272	53.517	0.495	MWD+IFR1+MS
24800.000	90.000	359.785	12209.000	107.120	0.000	115.074	0.000	107.120	0.000	0.000	115.081	53.583	0.495	MWD+IFR1+MS
24900.000	90.000	359.785	12209.000	107.872	0.000	115.884	0.000	107.872	0.000	0.000	115.891	53.649	0.494	MWD+IFR1+MS
25000.000	90.000	359.785	12209.000	108.624	0.000	116.695	0.000	108.624	0.000	0.000	116.702	53.715	0.493	MWD+IFR1+MS
25100.000	90.000	359.785	12209.000	109.377	0.000	117.507	0.000	109.377	0.000	0.000	117.514	53.783	0.493	MWD+IFR1+MS
25200.000	90.000	359.785	12209.000	110.131	0.000	118.320	0.000	110.131	0.000	0.000	118.327	53.850	0.492	MWD+IFR1+MS
25300.000	90.000	359.785	12209.000	110.885	0.000	119.134	0.000	110.885	0.000	0.000	119.141	53.918	0.491	MWD+IFR1+MS
25400.000	90.000	359.785	12209.000	111.639	0.000	119.949	0.000	111.639	0.000	0.000	119.956	53.987	0.490	MWD+IFR1+MS
25500.000	90.000	359.785	12209.000	112.394	0.000	120.765	0.000	112.394	0.000	0.000	120.772	54.056	0.489	MWD+IFR1+MS
25600.000	90.000	359.785	12209.000	113.149	0.000	121.581	0.000	113.149	0.000	0.000	121.589	54.125	0.488	MWD+IFR1+MS

25700.000	90.000	359.785	12209.000	113.905	0.000	122.399	0.000	113.905	0.000	0.000	122.407	54.195	0.487	MWD+IFR1+MS
25800.000	90.000	359.785	12209.000	114.661	0.000	123.218	0.000	114.661	0.000	0.000	123.225	54.265	0.486	MWD+IFR1+MS
25900.000	90.000	359.785	12209.000	115.417	0.000	124.037	0.000	115.417	0.000	0.000	124.044	54.336	0.484	MWD+IFR1+MS
26000.000	90.000	359.785	12209.000	116.174	0.000	124.857	0.000	116.174	0.000	0.000	124.865	54.408	0.483	MWD+IFR1+MS
26100.000	90.000	359.785	12209.000	116.931	0.000	125.678	0.000	116.931	0.000	0.000	125.686	54.479	0.482	MWD+IFR1+MS
26200.000	90.000	359.785	12209.000	117.688	0.000	126.500	0.000	117.688	0.000	0.000	126.508	54.552	0.481	MWD+IFR1+MS
26300.000	90.000	359.785	12209.000	118.446	0.000	127.323	0.000	118.446	0.000	0.000	127.330	54.624	0.479	MWD+IFR1+MS
26400.000	90.000	359.785	12209.000	119.204	0.000	128.146	0.000	119.204	0.000	0.000	128.154	54.698	0.478	MWD+IFR1+MS
26500.000	90.000	359.785	12209.000	119.963	0.000	128.970	0.000	119.963	0.000	0.000	128.978	54.771	0.476	MWD+IFR1+MS
26600.000	90.000	359.785	12209.000	120.722	0.000	129.795	0.000	120.722	0.000	0.000	129.803	54.845	0.475	MWD+IFR1+MS
26700.000	90.000	359.785	12209.000	121.481	0.000	130.621	0.000	121.481	0.000	0.000	130.628	54.920	0.473	MWD+IFR1+MS
26800.000	90.000	359.785	12209.000	122.240	0.000	131.447	0.000	122.240	0.000	0.000	131.455	54.995	0.472	MWD+IFR1+MS
26900.000	90.000	359.785	12209.000	123.000	0.000	132.274	0.000	123.000	0.000	0.000	132.282	55.070	0.470	MWD+IFR1+MS
27000.000	90.000	359.785	12209.000	123.760	0.000	133.102	0.000	123.760	0.000	0.000	133.110	55.146	0.469	MWD+IFR1+MS
27100.000	90.000	359.785	12209.000	124.521	0.000	133.930	0.000	124.521	0.000	0.000	133.938	55.223	0.467	MWD+IFR1+MS
27200.000	90.000	359.785	12209.000	125.281	0.000	134.759	0.000	125.281	0.000	0.000	134.767	55.299	0.465	MWD+IFR1+MS
27300.000	90.000	359.785	12209.000	126.042	0.000	135.589	0.000	126.042	0.000	0.000	135.597	55.377	0.464	MWD+IFR1+MS
27400.000	90.000	359.785	12209.000	126.804	0.000	136.419	0.000	126.804	0.000	0.000	136.427	55.454	0.462	MWD+IFR1+MS
27500.000	90.000	359.785	12209.000	127.565	0.000	137.250	0.000	127.565	0.000	0.000	137.258	55.532	0.460	MWD+IFR1+MS
27600.000	90.000	359.785	12209.000	128.327	0.000	138.082	0.000	128.327	0.000	0.000	138.090	55.611	0.459	MWD+IFR1+MS
27700.000	90.000	359.785	12209.000	129.089	0.000	138.914	0.000	129.089	0.000	0.000	138.922	55.690	0.457	MWD+IFR1+MS
27800.000	90.000	359.785	12209.000	129.852	0.000	139.747	0.000	129.852	0.000	0.000	139.755	55.769	0.455	MWD+IFR1+MS
27900.000	90.000	359.785	12209.000	130.614	0.000	140.580	0.000	130.614	0.000	0.000	140.588	55.849	0.453	MWD+IFR1+MS
28000.000	90.000	359.785	12209.000	131.377	0.000	141.414	0.000	131.377	0.000	0.000	141.422	55.929	0.452	MWD+IFR1+MS
28100.000	90.000	359.785	12209.000	132.141	0.000	142.249	0.000	132.141	0.000	0.000	142.257	56.010	0.450	MWD+IFR1+MS
28200.000	90.000	359.785	12209.000	132.904	0.000	143.084	0.000	132.904	0.000	0.000	143.092	56.091	0.448	MWD+IFR1+MS
28300.000	90.000	359.785	12209.000	133.668	0.000	143.919	0.000	133.668	0.000	0.000	143.927	56.173	0.446	MWD+IFR1+MS
28400.000	90.000	359.785	12209.000	134.432	0.000	144.755	0.000	134.432	0.000	0.000	144.764	56.255	0.444	MWD+IFR1+MS
28500.000	90.000	359.785	12209.000	135.196	0.000	145.592	0.000	135.196	0.000	0.000	145.600	56.337	0.443	MWD+IFR1+MS
28600.000	90.000	359.785	12209.000	135.960	0.000	146.429	0.000	135.960	0.000	0.000	146.437	56.420	0.441	MWD+IFR1+MS
28700.000	90.000	359.785	12209.000	136.725	0.000	147.267	0.000	136.725	0.000	0.000	147.275	56.503	0.439	MWD+IFR1+MS
28800.000	90.000	359.785	12209.000	137.490	0.000	148.105	0.000	137.490	0.000	0.000	148.113	56.587	0.437	MWD+IFR1+MS
28900.000	90.000	359.785	12209.000	138.255	0.000	148.944	0.000	138.255	0.000	0.000	148.952	56.671	0.435	MWD+IFR1+MS

28933.160	90.000	359.785	12209.000	138.508	0.000	149.221	0.000	138.508	0.000	0.000	149.230	56.699	0.435	MWD+IFR1+MS
29000.000	90.000	359.785	12209.000	139.019	0.000	149.781	0.000	139.019	0.000	0.000	149.790	56.755	0.434	MWD+IFR1+MS
29033.052	90.000	359.785	12209.000	139.272	0.000	150.058	0.000	139.272	0.000	0.000	150.066	56.783	0.433	MWD+IFR1+MS

Plan Targets

POKER LAKE UNIT 23 DTD 152H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 3	12940.24	440130.10	648261.40	8732.00	RECTANGLE
LTP 3	28933.16	456122.90	648201.40	8732.00	RECTANGLE
BHL 3	29033.18	456222.80	648200.90	8732.00	RECTANGLE

District I  
1625 N. French Dr., Hobbs, NM 88240  
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District II  
811 S. First St., Artesia, NM 88210  
Phone: (575) 748-1283 Fax: (575) 748-9720  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☒ AMENDED REPORT

APD ID 10400080739

WELL LOCATION AND ACREAGE DEDICATION PLAT

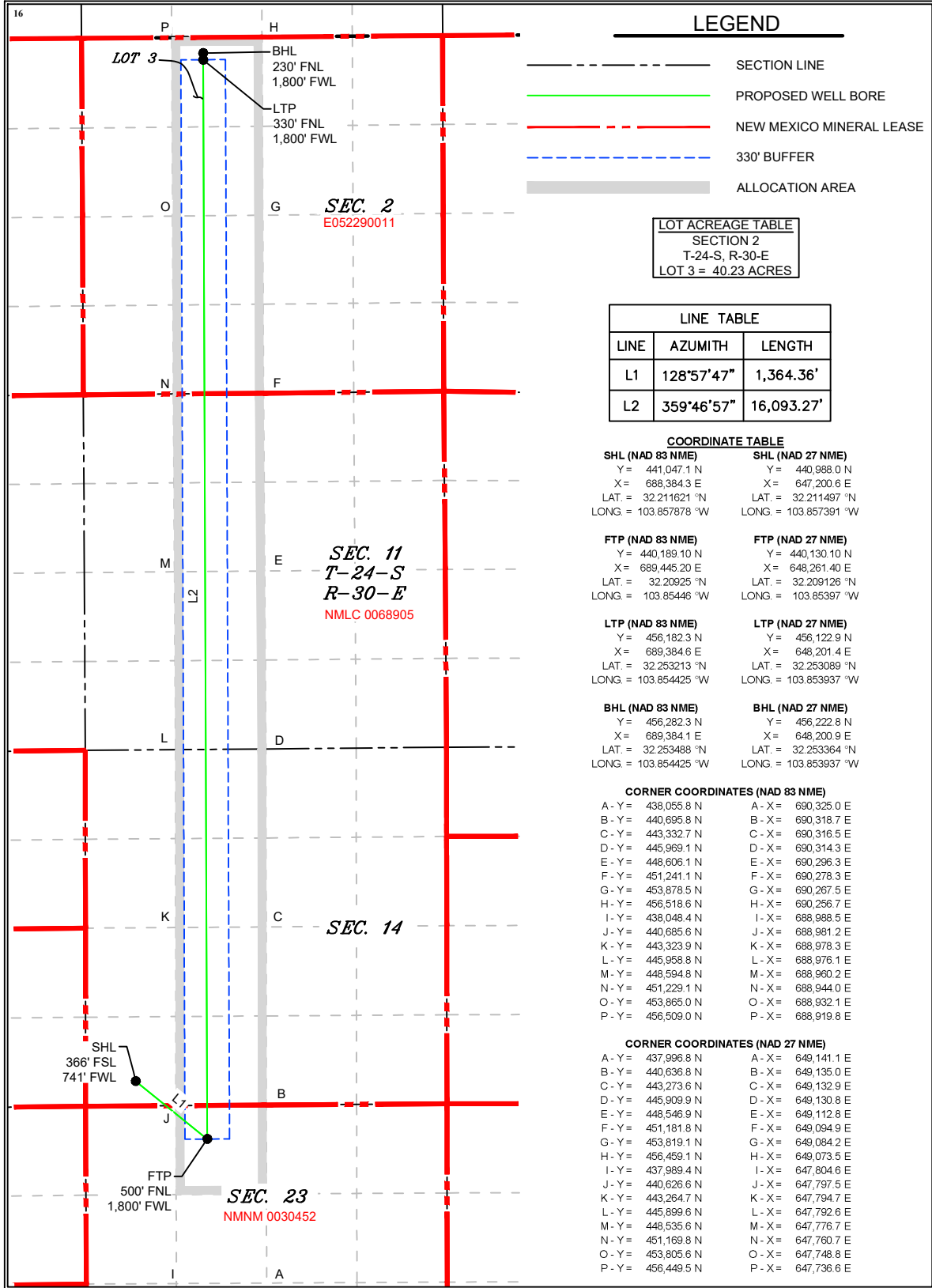
<sup>1</sup> API Number <b>30-015-</b>	<sup>2</sup> Pool Code 98220	<sup>3</sup> Pool Name Purple Sage; Wolfcamp (gas)
<sup>4</sup> Property Code	<sup>5</sup> Property Name <b>POKER LAKE UNIT 23 DTD</b>	<sup>6</sup> Well Number <b>152H</b>
<sup>7</sup> OGRID No. <b>373075</b>	<sup>8</sup> Operator Name <b>XTO PERMIAN OPERATING, LLC.</b>	<sup>9</sup> Elevation <b>3,445'</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>741</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>3</b>	<b>2</b>	<b>24S</b>	<b>30E</b>		<b>230</b>	<b>NORTH</b>	<b>1,800</b>	<b>WEST</b>	<b>EDDY</b>

<sup>12</sup> Dedicated Acres 960	<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.

Rusty Klein 12-4-23  
Signature Date

RUSTY KLEIN  
Printed Name

ranell.klein@exxonmobil.com  
E-mail Address

<sup>18</sup> SURVEYOR  
CERTIFICATION

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

11-01-2023  
Date of Survey

Signature and Seal of  
Professional Surveyor:



MARK DILLON HARP 23786  
Certificate Number

DB/AI/RP 618.013003.09-10

Intent ☒ As Drilled ☐

API # <b>30015</b>		
Operator Name: <b>XTO PERMIAN OPERATING, LLC</b>	Property Name: <b>Poker Lake Unit 23 DTD</b>	Well Number <b>152H</b>

## 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 <b>C</b>	Section <b>23</b>	Township <b>24S</b>	Range <b>30E</b>	Lot	Feet <b>500</b>	From N/S <b>North</b>	Feet <b>1,800</b>	From E/W <b>West</b>	County <b>Eddy</b>
Latitude <b>32.20925</b>					Longitude <b>103.85446</b>				NAD <b>83</b>

## Last Take Point (LTP)

UL <b>3</b>	Section <b>2</b>	Township <b>24S</b>	Range <b>30E</b>	Lot	Feet <b>330</b>	From N/S <b>North</b>	Feet <b>1,800</b>	From E/W <b>West</b>	County <b>Eddy</b>
Latitude <b>32.253213</b>					Longitude <b>103.854425</b>				NAD <b>83</b>

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

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

CONDITIONS  
  
Action 299605

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 299605
	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