

Well Name: POKER LAKE UNIT 20 DTD	Well Location: T24S / R30E / SEC 20 / NENW /	County or Parish/State:
Well Number: 223H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMLC068905	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2775974

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 02/20/2024

Time Sundry Submitted: 08:37

Date proposed operation will begin: 03/07/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, FTP, LTP, BHL, proposed total depth and formation (pool). There will not be any changes to casing sizes. FROM: TO: SHL: 965' FNL & 2360' FEL of Section 20-T24S-R30E 910' FNL & 2360' FWL of Section 20-T24S-R30E FTP: 100' FSL & 1210' FEL of Section 17-T24S-R30E 100' FNL & 2246' FWL of Section 20-T24S-R30E LTP: 330' FNL & 1210' FEL of Section 32-T23S-R30E 2569' FNL & 2246' FWL of Section 5-T25S-R30E BHL: 200' FNL & 1210' FEL of Section 32-T23S-R30E 2619' FNL & 2246' FWL of Section 5-T25S-R30E Proposed total depth will change from 33027' MD; 11655' TVD (Wolfcamp) to 27454' MD; TVD 9303' (Bone Spring). Attachments: C-102, Drilling Plan, Directional Drilling Plan, MBS

NOI Attachments

Procedure Description

- 3_String_Bighole_Four_Miler_HBE0000833_20240220203733.pdf
- Well_Plan_Report___Poker_Lake_Unit_20_DTD_South_223H_20240220203708.pdf
- PLU_20_DTD_223H_Pad_B_BigHole_AA_Drilling_Plan__2_14_2024__20240220203616.pdf
- POKER_LAKE_UNIT_20_DTD_223H_C_102_signed_2_19_2024_20240220203553.pdf

Well Name: POKER LAKE UNIT 20 DTD	Well Location: T24S / R30E / SEC 20 / NENW /	County or Parish/State:
Well Number: 223H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMLC068905	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number:	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2775974_Poker_Lake_Unit_20_DTD_223H_COAs_20240404145635.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: FEB 20, 2024 08:37 PM
Name: XTO PERMIAN OPERATING LLC	
Title: Regulatory Analyst	
Street Address: 6401 HOLIDAY HILL ROAD BLDG 5	
City: MIDLAND	State: 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: 04/04/2024
Signature: Chris Walls	

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

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

SUBMIT IN TRIPLICATE - Other instructions on page 2	
1. Type of Well	
<input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> 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)	

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 recompleat 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 recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

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

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Location of Well

0. SHL: NENW / 965 FNL / 2360 FEL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.20775 / LONG: -103.904562 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 330 FSL / 1210 FEL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.22539 / LONG: -103.89881 (TVD: 11655 feet, MD: 17500 feet)

PPP: SESE / 100 FSL / 1210 FEL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210709 / LONG: -103.898794 (TVD: 11655 feet, MD: 12200 feet)

PPP: NESE / 330 FSL / 1210 FEL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.21442 / LONG: -103.89881 (TVD: 11655 feet, MD: 13600 feet)

PPP: SESE / 330 FSL / 1210 FEL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.24024 / LONG: -103.89881 (TVD: 11655 feet, MD: 22800 feet)

BHL: NENE / 200 FNL / 1210 FEL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268063 / LONG: -103.898799 (TVD: 11655 feet, MD: 33027 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 223H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2775974** on 04/04/2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

H₂S	<input checked="" type="radio"/> No	<input type="radio"/> Yes		
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input checked="" type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Variance	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
Variance	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> Batch APD / Sundry				

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 700 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. ***Set depth adjusted per BLM geologist.***
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead

cement)

- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
 - 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.**

Operator has proposed to pump down 13-3/8" X 9-5/8" annulus after primary cementing stage. Operator must run a CBL from TD of the 9-5/8" casing to surface. Submit results to the BLM.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

3. The minimum required fill of cement behind the **6** inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

BOPE Break Testing Variance

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

Offline Cementing

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

GENERAL REQUIREMENTS

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

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

Eddy County (API No. / US Well No. contains 30-015-#####)

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM NM CFO DrillingNotifications@blm.gov; (575) 361-2822

Lea County (API No. / US Well No. contains 30-025-#####)

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd 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.



XTO ENERGY INC
DELAWARE BASIN

ALL DIMENSIONS APPROXIMATE

DRAWN	DLE	04NOV20
APPRV		

DRAWING NO. HBE0000833

Well Plan Report - Poker Lake Unit 20 DTD South 223H

Measured Depth:	27454.47 ft
TVD RKB:	9303.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439573.80 ft
Easting:	632767.20 ft
RKB:	3276.00 ft
Ground Level:	3244.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan SectionsPoker Lake Unit 20 DTD South 223H

Measured		TVD		Build		Turn		Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	
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	
1630.26	10.61	351.40	1627.23	48.38	-7.32	2.00	0.00	2.00	
5542.62	10.61	351.40	5472.77	760.32	-114.98	0.00	0.00	0.00	
6072.87	0.00	0.00	6000.00	808.70	-122.30	-2.00	0.00	2.00	
8659.67	0.00	0.00	8586.80	808.70	-122.30	0.00	0.00	0.00	
9784.67	90.00	179.68	9303.00	92.51	-118.28	8.00	0.00	8.00	
27404.53	90.00	179.68	9303.00	-17527.07	-19.25	0.00	0.00	0.00	LTP 13
27454.47	90.00	179.68	9303.00	-17577.00	-18.97	0.00	0.00	0.00	BHL 13

Position UncertaintyPoker Lake Unit 20 DTD South 223H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
----------	-----	----------	---------	----------	-----------	------------	------------	------------	------

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	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.346	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	2.373	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	2.405	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	2.442	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	2.484	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	2.529	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	2.579	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	2.632	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	351.400	1199.980	4.828	0.000	4.719	0.000	2.688	0.000	0.000	5.256	4.239	123.252	MWD+IFR1+MS
1300.000	4.000	351.400	1299.838	5.646	0.000	5.069	0.000	2.747	0.000	0.000	5.983	4.676	113.031	MWD+IFR1+MS
1400.000	6.000	351.400	1399.452	6.373	0.000	5.420	0.000	2.813	0.000	0.000	6.683	5.055	107.960	MWD+IFR1+MS
1500.000	8.000	351.400	1498.702	7.035	0.000	5.771	0.000	2.885	0.000	0.000	7.343	5.415	105.120	MWD+IFR1+MS
1600.000	10.000	351.400	1597.465	7.649	0.000	6.122	0.000	2.968	0.000	0.000	7.966	5.767	103.353	MWD+IFR1+MS
1630.256	10.605	351.400	1627.234	7.734	0.000	6.220	0.000	2.984	0.000	0.000	8.059	5.871	103.261	MWD+IFR1+MS
1700.000	10.605	351.400	1695.786	7.934	0.000	6.451	0.000	3.034	0.000	0.000	8.253	6.111	103.271	MWD+IFR1+MS
1800.000	10.605	351.400	1794.078	8.229	0.000	6.799	0.000	3.111	0.000	0.000	8.546	6.463	103.581	MWD+IFR1+MS
1900.000	10.605	351.400	1892.370	8.538	0.000	7.157	0.000	3.192	0.000	0.000	8.854	6.820	104.009	MWD+IFR1+MS
2000.000	10.605	351.400	1990.662	8.851	0.000	7.516	0.000	3.276	0.000	0.000	9.168	7.178	104.418	MWD+IFR1+MS
2100.000	10.605	351.400	2088.954	9.170	0.000	7.877	0.000	3.362	0.000	0.000	9.486	7.537	104.811	MWD+IFR1+MS
2200.000	10.605	351.400	2187.246	9.494	0.000	8.239	0.000	3.451	0.000	0.000	9.809	7.898	105.188	MWD+IFR1+MS
2300.000	10.605	351.400	2285.537	9.822	0.000	8.602	0.000	3.542	0.000	0.000	10.135	8.259	105.548	MWD+IFR1+MS
2400.000	10.605	351.400	2383.829	10.153	0.000	8.965	0.000	3.635	0.000	0.000	10.465	8.621	105.893	MWD+IFR1+MS
2500.000	10.605	351.400	2482.121	10.488	0.000	9.329	0.000	3.731	0.000	0.000	10.798	8.984	106.224	MWD+IFR1+MS
2600.000	10.605	351.400	2580.413	10.826	0.000	9.694	0.000	3.828	0.000	0.000	11.134	9.348	106.541	MWD+IFR1+MS
2700.000	10.605	351.400	2678.705	11.167	0.000	10.060	0.000	3.928	0.000	0.000	11.472	9.712	106.844	MWD+IFR1+MS
2800.000	10.605	351.400	2776.997	11.510	0.000	10.426	0.000	4.029	0.000	0.000	11.813	10.076	107.135	MWD+IFR1+MS
2900.000	10.605	351.400	2875.289	11.856	0.000	10.792	0.000	4.132	0.000	0.000	12.156	10.442	107.414	MWD+IFR1+MS

3000.000	10.605	351.400	2973.581	12.204	0.000	11.159	0.000	4.237	0.000	0.000	12.501	10.807	107.680	MWD+IFR1+MS
3100.000	10.605	351.400	3071.873	12.554	0.000	11.527	0.000	4.343	0.000	0.000	12.847	11.173	107.936	MWD+IFR1+MS
3200.000	10.605	351.400	3170.164	12.905	0.000	11.894	0.000	4.451	0.000	0.000	13.196	11.539	108.181	MWD+IFR1+MS
3300.000	10.605	351.400	3268.456	13.258	0.000	12.262	0.000	4.561	0.000	0.000	13.545	11.906	108.415	MWD+IFR1+MS
3400.000	10.605	351.400	3366.748	13.613	0.000	12.631	0.000	4.672	0.000	0.000	13.897	12.273	108.640	MWD+IFR1+MS
3500.000	10.605	351.400	3465.040	13.969	0.000	12.999	0.000	4.785	0.000	0.000	14.249	12.640	108.855	MWD+IFR1+MS
3600.000	10.605	351.400	3563.332	14.327	0.000	13.368	0.000	4.899	0.000	0.000	14.603	13.008	109.061	MWD+IFR1+MS
3700.000	10.605	351.400	3661.624	14.686	0.000	13.737	0.000	5.015	0.000	0.000	14.958	13.376	109.258	MWD+IFR1+MS
3800.000	10.605	351.400	3759.916	15.045	0.000	14.106	0.000	5.132	0.000	0.000	15.313	13.744	109.447	MWD+IFR1+MS
3900.000	10.605	351.400	3858.208	15.406	0.000	14.475	0.000	5.251	0.000	0.000	15.670	14.112	109.628	MWD+IFR1+MS
4000.000	10.605	351.400	3956.500	15.768	0.000	14.845	0.000	5.371	0.000	0.000	16.028	14.481	109.802	MWD+IFR1+MS
4100.000	10.605	351.400	4054.791	16.131	0.000	15.215	0.000	5.493	0.000	0.000	16.386	14.849	109.968	MWD+IFR1+MS
4200.000	10.605	351.400	4153.083	16.494	0.000	15.584	0.000	5.617	0.000	0.000	16.746	15.218	110.127	MWD+IFR1+MS
4300.000	10.605	351.400	4251.375	16.859	0.000	15.954	0.000	5.742	0.000	0.000	17.106	15.587	110.279	MWD+IFR1+MS
4400.000	10.605	351.400	4349.667	17.224	0.000	16.324	0.000	5.869	0.000	0.000	17.467	15.956	110.424	MWD+IFR1+MS
4500.000	10.605	351.400	4447.959	17.590	0.000	16.695	0.000	5.997	0.000	0.000	17.828	16.326	110.563	MWD+IFR1+MS
4600.000	10.605	351.400	4546.251	17.956	0.000	17.065	0.000	6.127	0.000	0.000	18.190	16.695	110.697	MWD+IFR1+MS
4700.000	10.605	351.400	4644.543	18.323	0.000	17.435	0.000	6.259	0.000	0.000	18.553	17.065	110.824	MWD+IFR1+MS
4800.000	10.605	351.400	4742.835	18.691	0.000	17.806	0.000	6.392	0.000	0.000	18.916	17.435	110.946	MWD+IFR1+MS
4900.000	10.605	351.400	4841.127	19.059	0.000	18.177	0.000	6.527	0.000	0.000	19.279	17.804	111.062	MWD+IFR1+MS
5000.000	10.605	351.400	4939.418	19.428	0.000	18.547	0.000	6.663	0.000	0.000	19.643	18.174	111.173	MWD+IFR1+MS
5100.000	10.605	351.400	5037.710	19.797	0.000	18.918	0.000	6.802	0.000	0.000	20.008	18.545	111.279	MWD+IFR1+MS
5200.000	10.605	351.400	5136.002	20.167	0.000	19.289	0.000	6.942	0.000	0.000	20.373	18.915	111.380	MWD+IFR1+MS
5300.000	10.605	351.400	5234.294	20.537	0.000	19.660	0.000	7.084	0.000	0.000	20.738	19.285	111.476	MWD+IFR1+MS
5400.000	10.605	351.400	5332.586	20.908	0.000	20.031	0.000	7.227	0.000	0.000	21.104	19.655	111.568	MWD+IFR1+MS
5500.000	10.605	351.400	5430.878	21.279	0.000	20.402	0.000	7.373	0.000	0.000	21.470	20.026	111.655	MWD+IFR1+MS
5542.616	10.605	351.400	5472.766	21.434	0.000	20.557	0.000	7.435	0.000	0.000	21.621	20.183	111.633	MWD+IFR1+MS
5600.000	9.457	351.400	5529.272	21.660	0.000	20.765	0.000	7.520	0.000	0.000	21.827	20.395	111.552	MWD+IFR1+MS
5700.000	7.457	351.400	5628.179	22.098	0.000	21.129	0.000	7.671	0.000	0.000	22.248	20.765	110.661	MWD+IFR1+MS
5800.000	5.457	351.400	5727.540	22.549	0.000	21.491	0.000	7.818	0.000	0.000	22.709	21.133	109.429	MWD+IFR1+MS
5900.000	3.457	351.400	5827.232	22.965	0.000	21.847	0.000	7.960	0.000	0.000	23.162	21.494	108.367	MWD+IFR1+MS
6000.000	1.457	351.400	5927.135	23.345	0.000	22.199	0.000	8.097	0.000	0.000	23.608	21.849	107.455	MWD+IFR1+MS
6072.873	0.000	0.000	6000.000	23.738	0.000	22.263	0.000	8.195	0.000	0.000	23.890	22.100	107.224	MWD+IFR1+MS

6100.000	0.000	0.000	6027.127	23.827	0.000	22.355	0.000	8.231	0.000	0.000	23.978	22.193	107.223	MWD+IFR1+MS
6200.000	0.000	0.000	6127.127	24.151	0.000	22.698	0.000	8.365	0.000	0.000	24.302	22.536	107.300	MWD+IFR1+MS
6300.000	0.000	0.000	6227.127	24.482	0.000	23.046	0.000	8.502	0.000	0.000	24.635	22.882	107.498	MWD+IFR1+MS
6400.000	0.000	0.000	6327.127	24.812	0.000	23.394	0.000	8.642	0.000	0.000	24.968	23.228	107.694	MWD+IFR1+MS
6500.000	0.000	0.000	6427.127	25.144	0.000	23.743	0.000	8.784	0.000	0.000	25.302	23.574	107.887	MWD+IFR1+MS
6600.000	0.000	0.000	6527.127	25.477	0.000	24.091	0.000	8.928	0.000	0.000	25.637	23.921	108.077	MWD+IFR1+MS
6700.000	0.000	0.000	6627.127	25.810	0.000	24.441	0.000	9.076	0.000	0.000	25.972	24.268	108.265	MWD+IFR1+MS
6800.000	0.000	0.000	6727.127	26.143	0.000	24.790	0.000	9.226	0.000	0.000	26.308	24.615	108.450	MWD+IFR1+MS
6900.000	0.000	0.000	6827.127	26.478	0.000	25.140	0.000	9.378	0.000	0.000	26.645	24.963	108.633	MWD+IFR1+MS
7000.000	0.000	0.000	6927.127	26.813	0.000	25.490	0.000	9.534	0.000	0.000	26.982	25.311	108.813	MWD+IFR1+MS
7100.000	0.000	0.000	7027.127	27.149	0.000	25.840	0.000	9.692	0.000	0.000	27.320	25.659	108.991	MWD+IFR1+MS
7200.000	0.000	0.000	7127.127	27.485	0.000	26.190	0.000	9.853	0.000	0.000	27.658	26.007	109.166	MWD+IFR1+MS
7300.000	0.000	0.000	7227.127	27.822	0.000	26.541	0.000	10.016	0.000	0.000	27.997	26.356	109.339	MWD+IFR1+MS
7400.000	0.000	0.000	7327.127	28.159	0.000	26.892	0.000	10.183	0.000	0.000	28.336	26.705	109.510	MWD+IFR1+MS
7500.000	0.000	0.000	7427.127	28.497	0.000	27.243	0.000	10.352	0.000	0.000	28.676	27.054	109.678	MWD+IFR1+MS
7600.000	0.000	0.000	7527.127	28.835	0.000	27.594	0.000	10.524	0.000	0.000	29.016	27.403	109.845	MWD+IFR1+MS
7700.000	0.000	0.000	7627.127	29.174	0.000	27.945	0.000	10.699	0.000	0.000	29.357	27.753	110.008	MWD+IFR1+MS
7800.000	0.000	0.000	7727.127	29.513	0.000	28.297	0.000	10.877	0.000	0.000	29.698	28.103	110.170	MWD+IFR1+MS
7900.000	0.000	0.000	7827.127	29.853	0.000	28.649	0.000	11.057	0.000	0.000	30.040	28.452	110.330	MWD+IFR1+MS
8000.000	0.000	0.000	7927.127	30.193	0.000	29.001	0.000	11.241	0.000	0.000	30.382	28.803	110.487	MWD+IFR1+MS
8100.000	0.000	0.000	8027.127	30.534	0.000	29.353	0.000	11.427	0.000	0.000	30.725	29.153	110.643	MWD+IFR1+MS
8200.000	0.000	0.000	8127.127	30.875	0.000	29.705	0.000	11.617	0.000	0.000	31.067	29.503	110.796	MWD+IFR1+MS
8300.000	0.000	0.000	8227.127	31.216	0.000	30.057	0.000	11.809	0.000	0.000	31.411	29.854	110.947	MWD+IFR1+MS
8400.000	0.000	0.000	8327.127	31.558	0.000	30.410	0.000	12.004	0.000	0.000	31.754	30.205	111.096	MWD+IFR1+MS
8500.000	0.000	0.000	8427.127	31.900	0.000	30.763	0.000	12.202	0.000	0.000	32.098	30.556	111.244	MWD+IFR1+MS
8600.000	0.000	0.000	8527.127	32.242	0.000	31.115	0.000	12.404	0.000	0.000	32.442	30.907	111.389	MWD+IFR1+MS
8659.673	0.000	0.000	8586.800	32.445	0.000	31.324	0.000	12.525	0.000	0.000	32.644	31.116	111.417	MWD+IFR1+MS
8700.000	3.226	179.678	8627.106	32.374	0.000	31.462	-0.000	12.607	0.000	0.000	32.777	31.250	111.332	MWD+IFR1+MS
8800.000	11.226	179.678	8726.231	32.446	0.000	31.765	-0.000	12.840	0.000	0.000	33.640	31.595	106.167	MWD+IFR1+MS
8900.000	19.226	179.678	8822.643	32.662	0.000	32.048	-0.000	13.244	0.000	0.000	35.025	31.911	101.506	MWD+IFR1+MS
9000.000	27.226	179.678	8914.463	32.388	0.000	32.305	-0.000	13.896	0.000	0.000	36.242	32.178	99.578	MWD+IFR1+MS
9100.000	35.226	179.678	8999.907	31.697	0.000	32.536	-0.000	14.844	0.000	0.000	37.261	32.410	98.642	MWD+IFR1+MS
9200.000	43.226	179.678	9077.309	30.688	0.000	32.739	-0.000	16.089	0.000	0.000	38.073	32.610	98.181	MWD+IFR1+MS

9300.000	51.226	179.678	9145.165	29.484	0.000	32.913	-0.000	17.592	0.000	0.000	38.683	32.779	97.989	MWD+IFR1+MS
9400.000	59.226	179.678	9202.152	28.244	0.000	33.058	-0.000	19.295	0.000	0.000	39.106	32.918	97.963	MWD+IFR1+MS
9500.000	67.226	179.678	9247.163	27.150	0.000	33.176	-0.000	21.129	0.000	0.000	39.366	33.029	98.038	MWD+IFR1+MS
9600.000	75.226	179.678	9279.320	26.399	0.000	33.265	-0.000	23.024	0.000	0.000	39.498	33.114	98.158	MWD+IFR1+MS
9700.000	83.226	179.678	9297.998	26.170	0.000	33.327	-0.000	24.917	0.000	0.000	39.542	33.172	98.262	MWD+IFR1+MS
9784.673	90.000	179.678	9302.997	26.088	0.000	33.356	-0.000	26.088	0.000	0.000	39.546	33.201	98.276	MWD+IFR1+MS
9800.000	90.000	179.678	9302.997	26.121	0.000	33.359	-0.000	26.121	0.000	0.000	39.547	33.204	98.269	MWD+IFR1+MS
9900.000	90.000	179.678	9302.997	26.305	0.000	33.391	-0.000	26.305	0.000	0.000	39.547	33.238	98.252	MWD+IFR1+MS
10000.000	90.000	179.678	9302.997	26.515	0.000	33.444	-0.000	26.515	0.000	0.000	39.549	33.292	98.259	MWD+IFR1+MS
10100.000	90.000	179.678	9302.997	26.747	0.000	33.515	-0.000	26.747	0.000	0.000	39.551	33.363	98.288	MWD+IFR1+MS
10200.000	90.000	179.678	9302.997	26.999	0.000	33.603	-0.000	26.999	0.000	0.000	39.554	33.452	98.340	MWD+IFR1+MS
10300.000	90.000	179.678	9302.997	27.272	0.000	33.708	-0.000	27.272	0.000	0.000	39.558	33.557	98.414	MWD+IFR1+MS
10400.000	90.000	179.678	9302.997	27.565	0.000	33.830	-0.000	27.565	0.000	0.000	39.563	33.679	98.514	MWD+IFR1+MS
10500.000	90.000	179.678	9302.997	27.876	0.000	33.969	-0.000	27.876	0.000	0.000	39.568	33.818	98.641	MWD+IFR1+MS
10600.000	90.000	179.678	9302.997	28.206	0.000	34.124	-0.000	28.206	0.000	0.000	39.575	33.972	98.797	MWD+IFR1+MS
10700.000	90.000	179.678	9302.997	28.554	0.000	34.296	-0.000	28.554	0.000	0.000	39.583	34.143	98.988	MWD+IFR1+MS
10800.000	90.000	179.678	9302.997	28.918	0.000	34.484	-0.000	28.918	0.000	0.000	39.592	34.329	99.216	MWD+IFR1+MS
10900.000	90.000	179.678	9302.997	29.300	0.000	34.688	-0.000	29.300	0.000	0.000	39.601	34.530	99.488	MWD+IFR1+MS
11000.000	90.000	179.678	9302.997	29.697	0.000	34.908	-0.000	29.697	0.000	0.000	39.612	34.747	99.810	MWD+IFR1+MS
11100.000	90.000	179.678	9302.997	30.109	0.000	35.143	-0.000	30.109	0.000	0.000	39.625	34.978	100.191	MWD+IFR1+MS
11200.000	90.000	179.678	9302.997	30.536	0.000	35.392	-0.000	30.536	0.000	0.000	39.639	35.223	100.644	MWD+IFR1+MS
11300.000	90.000	179.678	9302.997	30.977	0.000	35.657	-0.000	30.977	0.000	0.000	39.654	35.482	101.184	MWD+IFR1+MS
11400.000	90.000	179.678	9302.997	31.431	0.000	35.936	-0.000	31.431	0.000	0.000	39.671	35.753	101.830	MWD+IFR1+MS
11500.000	90.000	179.678	9302.997	31.898	0.000	36.229	-0.000	31.898	0.000	0.000	39.691	36.037	102.610	MWD+IFR1+MS
11600.000	90.000	179.678	9302.997	32.378	0.000	36.536	-0.000	32.378	0.000	0.000	39.714	36.332	103.562	MWD+IFR1+MS
11700.000	90.000	179.678	9302.997	32.869	0.000	36.856	-0.000	32.869	0.000	0.000	39.740	36.638	104.737	MWD+IFR1+MS
11800.000	90.000	179.678	9302.997	33.371	0.000	37.189	-0.000	33.371	0.000	0.000	39.770	36.952	106.211	MWD+IFR1+MS
11900.000	90.000	179.678	9302.997	33.885	0.000	37.534	-0.000	33.885	0.000	0.000	39.807	37.274	108.089	MWD+IFR1+MS
12000.000	90.000	179.678	9302.997	34.408	0.000	37.892	-0.000	34.408	0.000	0.000	39.853	37.599	110.528	MWD+IFR1+MS
12100.000	90.000	179.678	9302.997	34.941	0.000	38.262	-0.000	34.941	0.000	0.000	39.912	37.924	113.750	MWD+IFR1+MS
12200.000	90.000	179.678	9302.997	35.484	0.000	38.644	-0.000	35.484	0.000	0.000	39.989	38.242	118.049	MWD+IFR1+MS
12300.000	90.000	179.678	9302.997	36.035	0.000	39.037	-0.000	36.035	0.000	0.000	40.097	38.543	123.730	MWD+IFR1+MS
12400.000	90.000	179.678	9302.997	36.595	0.000	39.440	-0.000	36.595	0.000	0.000	40.247	38.812	130.866	MWD+IFR1+MS

12500.000	90.000	179.678	9302.997	37.163	0.000	39.855	-0.000	37.163	0.000	0.000	40.454	39.035	-41.091	MWD+IFR1+MS
12600.000	90.000	179.678	9302.997	37.739	0.000	40.280	-0.000	37.739	0.000	0.000	40.723	39.207	-33.296	MWD+IFR1+MS
12700.000	90.000	179.678	9302.997	38.323	0.000	40.714	-0.000	38.323	0.000	0.000	41.047	39.334	-26.720	MWD+IFR1+MS
12800.000	90.000	179.678	9302.997	38.913	0.000	41.159	-0.000	38.913	0.000	0.000	41.415	39.427	-21.620	MWD+IFR1+MS
12900.000	90.000	179.678	9302.997	39.510	0.000	41.612	-0.000	39.510	0.000	0.000	41.816	39.499	-17.783	MWD+IFR1+MS
13000.000	90.000	179.678	9302.997	40.114	0.000	42.075	-0.000	40.114	0.000	0.000	42.240	39.556	-14.895	MWD+IFR1+MS
13100.000	90.000	179.678	9302.997	40.723	0.000	42.547	-0.000	40.723	0.000	0.000	42.683	39.603	-12.686	MWD+IFR1+MS
13200.000	90.000	179.678	9302.997	41.339	0.000	43.027	-0.000	41.339	0.000	0.000	43.141	39.644	-10.965	MWD+IFR1+MS
13300.000	90.000	179.678	9302.997	41.961	0.000	43.515	-0.000	41.961	0.000	0.000	43.612	39.681	-9.598	MWD+IFR1+MS
13400.000	90.000	179.678	9302.997	42.587	0.000	44.011	-0.000	42.587	0.000	0.000	44.095	39.715	-8.491	MWD+IFR1+MS
13500.000	90.000	179.678	9302.997	43.219	0.000	44.514	-0.000	43.219	0.000	0.000	44.588	39.747	-7.581	MWD+IFR1+MS
13600.000	90.000	179.678	9302.997	43.856	0.000	45.025	-0.000	43.856	0.000	0.000	45.090	39.777	-6.823	MWD+IFR1+MS
13700.000	90.000	179.678	9302.997	44.498	0.000	45.544	-0.000	44.498	0.000	0.000	45.600	39.807	-6.182	MWD+IFR1+MS
13800.000	90.000	179.678	9302.997	45.144	0.000	46.069	-0.000	45.144	0.000	0.000	46.119	39.835	-5.635	MWD+IFR1+MS
13900.000	90.000	179.678	9302.997	45.794	0.000	46.600	-0.000	45.794	0.000	0.000	46.645	39.864	-5.164	MWD+IFR1+MS
14000.000	90.000	179.678	9302.997	46.449	0.000	47.139	-0.000	46.449	0.000	0.000	47.179	39.892	-4.754	MWD+IFR1+MS
14100.000	90.000	179.678	9302.997	47.107	0.000	47.683	-0.000	47.107	0.000	0.000	47.719	39.920	-4.394	MWD+IFR1+MS
14200.000	90.000	179.678	9302.997	47.770	0.000	48.233	-0.000	47.770	0.000	0.000	48.266	39.948	-4.078	MWD+IFR1+MS
14300.000	90.000	179.678	9302.997	48.436	0.000	48.790	-0.000	48.436	0.000	0.000	48.819	39.976	-3.796	MWD+IFR1+MS
14400.000	90.000	179.678	9302.997	49.105	0.000	49.351	-0.000	49.105	0.000	0.000	49.378	40.004	-3.546	MWD+IFR1+MS
14500.000	90.000	179.678	9302.997	49.778	0.000	49.919	-0.000	49.778	0.000	0.000	49.943	40.032	-3.321	MWD+IFR1+MS
14600.000	90.000	179.678	9302.997	50.454	0.000	50.491	-0.000	50.454	0.000	0.000	50.513	40.061	-3.118	MWD+IFR1+MS
14700.000	90.000	179.678	9302.997	51.133	0.000	51.069	-0.000	51.133	0.000	0.000	51.089	40.089	-2.934	MWD+IFR1+MS
14800.000	90.000	179.678	9302.997	51.816	0.000	51.651	-0.000	51.816	0.000	0.000	51.670	40.119	-2.768	MWD+IFR1+MS
14900.000	90.000	179.678	9302.997	52.501	0.000	52.238	-0.000	52.501	0.000	0.000	52.255	40.148	-2.616	MWD+IFR1+MS
15000.000	90.000	179.678	9302.997	53.189	0.000	52.830	-0.000	53.189	0.000	0.000	52.846	40.178	-2.477	MWD+IFR1+MS
15100.000	90.000	179.678	9302.997	53.879	0.000	53.426	-0.000	53.879	0.000	0.000	53.440	40.208	-2.350	MWD+IFR1+MS
15200.000	90.000	179.678	9302.997	54.572	0.000	54.026	-0.000	54.572	0.000	0.000	54.040	40.239	-2.233	MWD+IFR1+MS
15300.000	90.000	179.678	9302.997	55.268	0.000	54.631	-0.000	55.268	0.000	0.000	54.643	40.269	-2.125	MWD+IFR1+MS
15400.000	90.000	179.678	9302.997	55.966	0.000	55.239	-0.000	55.966	0.000	0.000	55.251	40.301	-2.026	MWD+IFR1+MS
15500.000	90.000	179.678	9302.997	56.666	0.000	55.852	-0.000	56.666	0.000	0.000	55.862	40.332	-1.933	MWD+IFR1+MS
15600.000	90.000	179.678	9302.997	57.368	0.000	56.468	-0.000	57.368	0.000	0.000	56.478	40.365	-1.848	MWD+IFR1+MS
15700.000	90.000	179.678	9302.997	58.072	0.000	57.088	-0.000	58.072	0.000	0.000	57.097	40.397	-1.768	MWD+IFR1+MS

15800.000	90.000	179.678	9302.997	58.779	0.000	57.711	-0.000	58.779	0.000	0.000	57.719	40.430	-1.694	MWD+IFR1+MS
15900.000	90.000	179.678	9302.997	59.487	0.000	58.338	-0.000	59.487	0.000	0.000	58.345	40.464	-1.625	MWD+IFR1+MS
16000.000	90.000	179.678	9302.997	60.198	0.000	58.967	-0.000	60.198	0.000	0.000	58.975	40.498	-1.560	MWD+IFR1+MS
16100.000	90.000	179.678	9302.997	60.910	0.000	59.601	-0.000	60.910	0.000	0.000	59.607	40.532	-1.499	MWD+IFR1+MS
16200.000	90.000	179.678	9302.997	61.624	0.000	60.237	-0.000	61.624	0.000	0.000	60.243	40.567	-1.442	MWD+IFR1+MS
16300.000	90.000	179.678	9302.997	62.339	0.000	60.876	-0.000	62.339	0.000	0.000	60.882	40.602	-1.389	MWD+IFR1+MS
16400.000	90.000	179.678	9302.997	63.057	0.000	61.518	-0.000	63.057	0.000	0.000	61.523	40.637	-1.339	MWD+IFR1+MS
16500.000	90.000	179.678	9302.997	63.775	0.000	62.163	-0.000	63.775	0.000	0.000	62.168	40.674	-1.292	MWD+IFR1+MS
16600.000	90.000	179.678	9302.997	64.496	0.000	62.810	-0.000	64.496	0.000	0.000	62.815	40.710	-1.247	MWD+IFR1+MS
16700.000	90.000	179.678	9302.997	65.218	0.000	63.461	-0.000	65.218	0.000	0.000	63.465	40.747	-1.205	MWD+IFR1+MS
16800.000	90.000	179.678	9302.997	65.941	0.000	64.113	-0.000	65.941	0.000	0.000	64.117	40.785	-1.165	MWD+IFR1+MS
16900.000	90.000	179.678	9302.997	66.666	0.000	64.768	-0.000	66.666	0.000	0.000	64.772	40.823	-1.128	MWD+IFR1+MS
17000.000	90.000	179.678	9302.997	67.392	0.000	65.426	-0.000	67.392	0.000	0.000	65.430	40.861	-1.092	MWD+IFR1+MS
17100.000	90.000	179.678	9302.997	68.119	0.000	66.086	-0.000	68.119	0.000	0.000	66.089	40.900	-1.059	MWD+IFR1+MS
17200.000	90.000	179.678	9302.997	68.848	0.000	66.748	-0.000	68.848	0.000	0.000	66.751	40.939	-1.027	MWD+IFR1+MS
17300.000	90.000	179.678	9302.997	69.578	0.000	67.412	-0.000	69.578	0.000	0.000	67.415	40.979	-0.996	MWD+IFR1+MS
17400.000	90.000	179.678	9302.997	70.309	0.000	68.079	-0.000	70.309	0.000	0.000	68.082	41.019	-0.968	MWD+IFR1+MS
17500.000	90.000	179.678	9302.997	71.041	0.000	68.748	-0.000	71.041	0.000	0.000	68.750	41.060	-0.940	MWD+IFR1+MS
17600.000	90.000	179.678	9302.997	71.774	0.000	69.418	-0.000	71.774	0.000	0.000	69.421	41.101	-0.914	MWD+IFR1+MS
17700.000	90.000	179.678	9302.997	72.509	0.000	70.091	-0.000	72.509	0.000	0.000	70.093	41.142	-0.889	MWD+IFR1+MS
17800.000	90.000	179.678	9302.997	73.244	0.000	70.765	-0.000	73.244	0.000	0.000	70.767	41.184	-0.866	MWD+IFR1+MS
17900.000	90.000	179.678	9302.997	73.980	0.000	71.441	-0.000	73.980	0.000	0.000	71.443	41.227	-0.843	MWD+IFR1+MS
18000.000	90.000	179.678	9302.997	74.718	0.000	72.119	-0.000	74.718	0.000	0.000	72.121	41.270	-0.822	MWD+IFR1+MS
18100.000	90.000	179.678	9302.997	75.456	0.000	72.799	-0.000	75.456	0.000	0.000	72.801	41.313	-0.801	MWD+IFR1+MS
18200.000	90.000	179.678	9302.997	76.195	0.000	73.480	-0.000	76.195	0.000	0.000	73.482	41.357	-0.782	MWD+IFR1+MS
18300.000	90.000	179.678	9302.997	76.936	0.000	74.164	-0.000	76.936	0.000	0.000	74.165	41.401	-0.763	MWD+IFR1+MS
18400.000	90.000	179.678	9302.997	77.677	0.000	74.848	-0.000	77.677	0.000	0.000	74.850	41.446	-0.745	MWD+IFR1+MS
18500.000	90.000	179.678	9302.997	78.419	0.000	75.534	-0.000	78.419	0.000	0.000	75.536	41.491	-0.728	MWD+IFR1+MS
18600.000	90.000	179.678	9302.997	79.161	0.000	76.222	-0.000	79.161	0.000	0.000	76.223	41.537	-0.711	MWD+IFR1+MS
18700.000	90.000	179.678	9302.997	79.905	0.000	76.911	-0.000	79.905	0.000	0.000	76.913	41.583	-0.696	MWD+IFR1+MS
18800.000	90.000	179.678	9302.997	80.649	0.000	77.602	-0.000	80.649	0.000	0.000	77.603	41.630	-0.681	MWD+IFR1+MS
18900.000	90.000	179.678	9302.997	81.394	0.000	78.294	-0.000	81.394	0.000	0.000	78.295	41.677	-0.666	MWD+IFR1+MS
19000.000	90.000	179.678	9302.997	82.140	0.000	78.988	-0.000	82.140	0.000	0.000	78.989	41.724	-0.652	MWD+IFR1+MS

19100.000	90.000	179.678	9302.997	82.887	0.000	79.682	-0.000	82.887	0.000	0.000	79.683	41.772	-0.639	MWD+IFR1+MS
19200.000	90.000	179.678	9302.997	83.634	0.000	80.378	-0.000	83.634	0.000	0.000	80.379	41.820	-0.626	MWD+IFR1+MS
19300.000	90.000	179.678	9302.997	84.382	0.000	81.076	-0.000	84.382	0.000	0.000	81.076	41.869	-0.614	MWD+IFR1+MS
19400.000	90.000	179.678	9302.997	85.131	0.000	81.774	-0.000	85.131	0.000	0.000	81.775	41.918	-0.602	MWD+IFR1+MS
19500.000	90.000	179.678	9302.997	85.880	0.000	82.474	-0.000	85.880	0.000	0.000	82.474	41.968	-0.591	MWD+IFR1+MS
19600.000	90.000	179.678	9302.997	86.630	0.000	83.175	-0.000	86.630	0.000	0.000	83.175	42.018	-0.580	MWD+IFR1+MS
19700.000	90.000	179.678	9302.997	87.380	0.000	83.877	-0.000	87.380	0.000	0.000	83.877	42.068	-0.569	MWD+IFR1+MS
19800.000	90.000	179.678	9302.997	88.131	0.000	84.580	-0.000	88.131	0.000	0.000	84.580	42.119	-0.559	MWD+IFR1+MS
19900.000	90.000	179.678	9302.997	88.883	0.000	85.284	-0.000	88.883	0.000	0.000	85.284	42.171	-0.549	MWD+IFR1+MS
20000.000	90.000	179.678	9302.997	89.635	0.000	85.989	-0.000	89.635	0.000	0.000	85.989	42.222	-0.540	MWD+IFR1+MS
20100.000	90.000	179.678	9302.997	90.388	0.000	86.695	-0.000	90.388	0.000	0.000	86.696	42.275	-0.531	MWD+IFR1+MS
20200.000	90.000	179.678	9302.997	91.141	0.000	87.402	-0.000	91.141	0.000	0.000	87.403	42.327	-0.522	MWD+IFR1+MS
20300.000	90.000	179.678	9302.997	91.895	0.000	88.111	-0.000	91.895	0.000	0.000	88.111	42.380	-0.514	MWD+IFR1+MS
20400.000	90.000	179.678	9302.997	92.649	0.000	88.820	-0.000	92.649	0.000	0.000	88.820	42.434	-0.505	MWD+IFR1+MS
20500.000	90.000	179.678	9302.997	93.404	0.000	89.530	-0.000	93.404	0.000	0.000	89.530	42.488	-0.498	MWD+IFR1+MS
20600.000	90.000	179.678	9302.997	94.160	0.000	90.241	-0.000	94.160	0.000	0.000	90.241	42.542	-0.490	MWD+IFR1+MS
20700.000	90.000	179.678	9302.997	94.915	0.000	90.953	-0.000	94.915	0.000	0.000	90.953	42.597	-0.483	MWD+IFR1+MS
20800.000	90.000	179.678	9302.997	95.672	0.000	91.666	-0.000	95.672	0.000	0.000	91.666	42.652	-0.476	MWD+IFR1+MS
20900.000	90.000	179.678	9302.997	96.429	0.000	92.379	-0.000	96.429	0.000	0.000	92.379	42.708	-0.469	MWD+IFR1+MS
21000.000	90.000	179.678	9302.997	97.186	0.000	93.094	-0.000	97.186	0.000	0.000	93.094	42.764	-0.462	MWD+IFR1+MS
21100.000	90.000	179.678	9302.997	97.943	0.000	93.809	-0.000	97.943	0.000	0.000	93.809	42.820	-0.456	MWD+IFR1+MS
21200.000	90.000	179.678	9302.997	98.701	0.000	94.525	-0.000	98.701	0.000	0.000	94.525	42.877	-0.450	MWD+IFR1+MS
21300.000	90.000	179.678	9302.997	99.460	0.000	95.242	-0.000	99.460	0.000	0.000	95.242	42.934	-0.444	MWD+IFR1+MS
21400.000	90.000	179.678	9302.997	100.219	0.000	95.959	-0.000	100.219	0.000	0.000	95.959	42.992	-0.438	MWD+IFR1+MS
21500.000	90.000	179.678	9302.997	100.978	0.000	96.677	-0.000	100.978	0.000	0.000	96.678	43.050	-0.432	MWD+IFR1+MS
21600.000	90.000	179.678	9302.997	101.738	0.000	97.396	-0.000	101.738	0.000	0.000	97.397	43.108	-0.427	MWD+IFR1+MS
21700.000	90.000	179.678	9302.997	102.498	0.000	98.116	-0.000	102.498	0.000	0.000	98.116	43.167	-0.422	MWD+IFR1+MS
21800.000	90.000	179.678	9302.997	103.258	0.000	98.836	-0.000	103.258	0.000	0.000	98.837	43.227	-0.417	MWD+IFR1+MS
21900.000	90.000	179.678	9302.997	104.019	0.000	99.558	-0.000	104.019	0.000	0.000	99.558	43.286	-0.412	MWD+IFR1+MS
22000.000	90.000	179.678	9302.997	104.780	0.000	100.279	-0.000	104.780	0.000	0.000	100.279	43.346	-0.407	MWD+IFR1+MS
22100.000	90.000	179.678	9302.997	105.542	0.000	101.002	-0.000	105.542	0.000	0.000	101.002	43.407	-0.403	MWD+IFR1+MS
22200.000	90.000	179.678	9302.997	106.303	0.000	101.725	-0.000	106.303	0.000	0.000	101.725	43.468	-0.398	MWD+IFR1+MS
22300.000	90.000	179.678	9302.997	107.066	0.000	102.448	-0.000	107.066	0.000	0.000	102.448	43.529	-0.394	MWD+IFR1+MS

22400.000	90.000	179.678	9302.997	107.828	0.000	103.173	-0.000	107.828	0.000	0.000	103.173	43.591	-0.390	MWD+IFR1+MS
22500.000	90.000	179.678	9302.997	108.591	0.000	103.897	-0.000	108.591	0.000	0.000	103.897	43.653	-0.386	MWD+IFR1+MS
22600.000	90.000	179.678	9302.997	109.354	0.000	104.623	-0.000	109.354	0.000	0.000	104.623	43.715	-0.382	MWD+IFR1+MS
22700.000	90.000	179.678	9302.997	110.117	0.000	105.349	-0.000	110.117	0.000	0.000	105.349	43.778	-0.378	MWD+IFR1+MS
22800.000	90.000	179.678	9302.997	110.881	0.000	106.075	-0.000	110.881	0.000	0.000	106.075	43.841	-0.374	MWD+IFR1+MS
22900.000	90.000	179.678	9302.997	111.645	0.000	106.802	-0.000	111.645	0.000	0.000	106.802	43.905	-0.370	MWD+IFR1+MS
23000.000	90.000	179.678	9302.997	112.409	0.000	107.530	-0.000	112.409	0.000	0.000	107.530	43.969	-0.367	MWD+IFR1+MS
23100.000	90.000	179.678	9302.997	113.174	0.000	108.258	-0.000	113.174	0.000	0.000	108.258	44.033	-0.364	MWD+IFR1+MS
23200.000	90.000	179.678	9302.997	113.939	0.000	108.987	-0.000	113.939	0.000	0.000	108.987	44.098	-0.360	MWD+IFR1+MS
23300.000	90.000	179.678	9302.997	114.704	0.000	109.716	-0.000	114.704	0.000	0.000	109.716	44.163	-0.357	MWD+IFR1+MS
23400.000	90.000	179.678	9302.997	115.469	0.000	110.446	-0.000	115.469	0.000	0.000	110.446	44.229	-0.354	MWD+IFR1+MS
23500.000	90.000	179.678	9302.997	116.235	0.000	111.176	-0.000	116.235	0.000	0.000	111.176	44.295	-0.351	MWD+IFR1+MS
23600.000	90.000	179.678	9302.997	117.001	0.000	111.906	-0.000	117.001	0.000	0.000	111.906	44.361	-0.348	MWD+IFR1+MS
23700.000	90.000	179.678	9302.997	117.767	0.000	112.637	-0.000	117.767	0.000	0.000	112.637	44.428	-0.345	MWD+IFR1+MS
23800.000	90.000	179.678	9302.997	118.533	0.000	113.369	-0.000	118.533	0.000	0.000	113.369	44.495	-0.342	MWD+IFR1+MS
23900.000	90.000	179.678	9302.997	119.300	0.000	114.101	-0.000	119.300	0.000	0.000	114.101	44.562	-0.340	MWD+IFR1+MS
24000.000	90.000	179.678	9302.997	120.067	0.000	114.833	-0.000	120.067	0.000	0.000	114.833	44.630	-0.337	MWD+IFR1+MS
24100.000	90.000	179.678	9302.997	120.834	0.000	115.566	-0.000	120.834	0.000	0.000	115.566	44.698	-0.335	MWD+IFR1+MS
24200.000	90.000	179.678	9302.997	121.601	0.000	116.299	-0.000	121.601	0.000	0.000	116.299	44.767	-0.332	MWD+IFR1+MS
24300.000	90.000	179.678	9302.997	122.369	0.000	117.033	-0.000	122.369	0.000	0.000	117.033	44.836	-0.330	MWD+IFR1+MS
24400.000	90.000	179.678	9302.997	123.136	0.000	117.767	-0.000	123.136	0.000	0.000	117.767	44.905	-0.327	MWD+IFR1+MS
24500.000	90.000	179.678	9302.997	123.904	0.000	118.502	-0.000	123.904	0.000	0.000	118.502	44.974	-0.325	MWD+IFR1+MS
24600.000	90.000	179.678	9302.997	124.672	0.000	119.236	-0.000	124.672	0.000	0.000	119.236	45.044	-0.323	MWD+IFR1+MS
24700.000	90.000	179.678	9302.997	125.441	0.000	119.972	-0.000	125.441	0.000	0.000	119.972	45.115	-0.321	MWD+IFR1+MS
24800.000	90.000	179.678	9302.997	126.209	0.000	120.707	-0.000	126.209	0.000	0.000	120.707	45.185	-0.319	MWD+IFR1+MS
24900.000	90.000	179.678	9302.997	126.978	0.000	121.443	-0.000	126.978	0.000	0.000	121.443	45.256	-0.317	MWD+IFR1+MS
25000.000	90.000	179.678	9302.997	127.747	0.000	122.180	-0.000	127.747	0.000	0.000	122.180	45.328	-0.315	MWD+IFR1+MS
25100.000	90.000	179.678	9302.997	128.516	0.000	122.916	-0.000	128.516	0.000	0.000	122.916	45.399	-0.313	MWD+IFR1+MS
25200.000	90.000	179.678	9302.997	129.286	0.000	123.653	-0.000	129.286	0.000	0.000	123.653	45.471	-0.311	MWD+IFR1+MS
25300.000	90.000	179.678	9302.997	130.055	0.000	124.391	-0.000	130.055	0.000	0.000	124.391	45.544	-0.309	MWD+IFR1+MS
25400.000	90.000	179.678	9302.997	130.825	0.000	125.129	-0.000	130.825	0.000	0.000	125.129	45.616	-0.307	MWD+IFR1+MS
25500.000	90.000	179.678	9302.997	131.595	0.000	125.867	-0.000	131.595	0.000	0.000	125.867	45.690	-0.306	MWD+IFR1+MS
25600.000	90.000	179.678	9302.997	132.365	0.000	126.605	-0.000	132.365	0.000	0.000	126.605	45.763	-0.304	MWD+IFR1+MS

25700.000	90.000	179.678	9302.997	133.135	0.000	127.344	-0.000	133.135	0.000	0.000	127.344	45.837	-0.302	MWD+IFR1+MS
25800.000	90.000	179.678	9302.997	133.905	0.000	128.083	-0.000	133.905	0.000	0.000	128.083	45.911	-0.301	MWD+IFR1+MS
25900.000	90.000	179.678	9302.997	134.676	0.000	128.822	-0.000	134.676	0.000	0.000	128.822	45.985	-0.299	MWD+IFR1+MS
26000.000	90.000	179.678	9302.997	135.447	0.000	129.562	-0.000	135.447	0.000	0.000	129.562	46.060	-0.298	MWD+IFR1+MS
26100.000	90.000	179.678	9302.997	136.218	0.000	130.302	-0.000	136.218	0.000	0.000	130.302	46.135	-0.296	MWD+IFR1+MS
26200.000	90.000	179.678	9302.997	136.989	0.000	131.042	-0.000	136.989	0.000	0.000	131.042	46.211	-0.295	MWD+IFR1+MS
26300.000	90.000	179.678	9302.997	137.760	0.000	131.783	-0.000	137.760	0.000	0.000	131.783	46.286	-0.293	MWD+IFR1+MS
26400.000	90.000	179.678	9302.997	138.531	0.000	132.524	-0.000	138.531	0.000	0.000	132.524	46.363	-0.292	MWD+IFR1+MS
26500.000	90.000	179.678	9302.997	139.303	0.000	133.265	-0.000	139.303	0.000	0.000	133.265	46.439	-0.291	MWD+IFR1+MS
26600.000	90.000	179.678	9302.997	140.074	0.000	134.006	-0.000	140.074	0.000	0.000	134.006	46.516	-0.289	MWD+IFR1+MS
26700.000	90.000	179.678	9302.997	140.846	0.000	134.748	-0.000	140.846	0.000	0.000	134.748	46.593	-0.288	MWD+IFR1+MS
26800.000	90.000	179.678	9302.997	141.618	0.000	135.490	-0.000	141.618	0.000	0.000	135.490	46.670	-0.287	MWD+IFR1+MS
26900.000	90.000	179.678	9302.997	142.390	0.000	136.232	-0.000	142.390	0.000	0.000	136.232	46.748	-0.286	MWD+IFR1+MS
27000.000	90.000	179.678	9302.997	143.163	0.000	136.974	-0.000	143.163	0.000	0.000	136.974	46.826	-0.285	MWD+IFR1+MS
27100.000	90.000	179.678	9302.997	143.935	0.000	137.717	-0.000	143.935	0.000	0.000	137.717	46.904	-0.284	MWD+IFR1+MS
27200.000	90.000	179.678	9302.997	144.707	0.000	138.460	-0.000	144.707	0.000	0.000	138.460	46.983	-0.282	MWD+IFR1+MS
27300.000	90.000	179.678	9302.997	145.480	0.000	139.203	-0.000	145.480	0.000	0.000	139.203	47.062	-0.281	MWD+IFR1+MS
27404.532	90.000	179.678	9302.997	146.288	0.000	139.980	-0.000	146.288	0.000	0.000	139.980	47.145	-0.280	MWD+IFR1+MS
27454.466	90.000	179.678	9302.997	146.673	0.000	140.351	-0.000	146.673	0.000	0.000	140.351	47.185	-0.280	MWD+IFR1+MS

Plan Targets

Poker Lake Unit 20 DTD South 223H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 13	9497.83	440382.50	632644.90	6027.00	RECTANGLE
SHL 13	10196.17	439573.89	632767.08	5756.10	RECTANGLE
LTP 13	27404.47	422046.80	632748.00	6027.00	RECTANGLE
BHL 13	27454.47	421996.80	632748.20	6027.00	RECTANGLE

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

XTO Energy Inc.
PLU 20 Dog Town Draw 223H
Projected TD: 27454.47' MD / 9303' TVD
SHL: 910' FNL & 2360' FWL , Section 20, T24S, R30E
BHL: 2619' FNL & 2246' FWL , Section 5, T25S, 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	833'	Water
Top of Salt	1236'	Water
Base of Salt	3429'	Water
Delaware	3623'	Water
Brushy Canyon	6121'	Water/Oil/Gas
Bone Spring	7417'	Water
1st Bone Spring	8403'	Water/Oil/Gas
2nd Bone Spring	9221'	Water/Oil/Gas
Target/Land Curve	9303'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 933' (303' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 9.625 inch casing at 8459.67' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 27454.47 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8159.67 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 933'	13.375	54.5	J-55	BTC	New	1.36	2.77	17.88
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	3.36	2.31	3.74
12.25	4000' – 8459.67'	9.625	40	HC L-80	BTC	New	2.44	2.07	5.13
8.5	0' – 8359.67'	6	26	P-110	Semi-Premium	New	1.17	3.43	1.80
8.5	8359.67' - 27454.47'	6	26	P-110	Semi-Premium	New	1.17	3.08	2.02

- XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
- XTO requests to not utilize centralizers in the curve and lateral
- 9.625 Collapse analyzed using 50% evacuation based on regional experience.
- 6 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
- XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 13-3/8" SOW bottom (or equivalent)

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

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 9-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 933'

Lead: 470 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft³/sx, 10.13 gal/sx water)

Tail: 300 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 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 +/- 8459.67'

1st Stage

Optional Lead: 1030 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 670 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6121

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

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft³/sx, 9.61 gal/sx water)

Tail: 2160 sxs Class C (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

Top of Cement: 0

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

XTO requests to pump a two stage cement job on the 9-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6121') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

Production Casing: 6, 26 New Semi-Premium, P-110 casing to be set at +/- 27454.47'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 8159.67 feet

Tail: 3190 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 8659.67 feet

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

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

5. Pressure Control Equipment

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 2356 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13.375, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the 9.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week.

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

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

on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. 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' - 933'	17.5	FW/Native	8.4-8.9	35-40	NC
933' - 8459.67'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
8459.67' - 27454.47'	8.5	OBM	9.1-9.6	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 9-5/8" surface casing with brine solution. A 9.7 ppg - 10.2 ppg cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 160 to 180 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 4402 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.

AMENDED REPORT
APD ID 10400089314

RP 618.013003.06-45

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

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

First Take Point (FTP)

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

Last Take Point (LTP)

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

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

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

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

CONDITIONS

Action 330442

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 330442
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply.	4/5/2024