

Well Name: POKER LAKE UNIT 20 DTD	Well Location: T24S / R30E / SEC 20 / NENW /	County or Parish/State:
Well Number: 222H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM02860	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: 2775973

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 02/20/2024

Time Sundry Submitted: 08:32

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 & 2330' FWL of Section 20-T24S-R30E 910' FNL & 2330' FWL of Section 20-T24S-R30E FTP: 100' FSL & 1650' FEL of Section 17-T24S-R30E 100' FNL & 1672' FWL of Section 20-T24S-R30E LTP: 330' FNL & 1650' FEL of Section 32-T23S-R30E 2572' FNL & 1672' FWL of Section 5-T25S-R30E BHL: 200' FNL & 1650' FEL of Section 32-T23S-R30E 2622' FNL & 1672' FWL of Section 5-T25S-R30E Proposed total depth will change from 33191' MD; 11889' TVD (Wolfcamp) to 28243' MD; TVD 10039' (Bone Spring). Attachments: C-102, Drilling Plan, Directional Drilling Plan, MBS

NOI Attachments

Procedure Description

- 3_String_Bighole_Four_Miler_HBE0000833_20240220203203.pdf
- Well_Plan_Report___Poker_Lake_Unit_20_DTD_South_222H_20240220203129.pdf
- PLU_20_DTD_222H_Pad_B_BigHole_AA__2_14_2024__Drilling_Plan_20240220203038.pdf
- POKER_LAKE_UNIT_20_DTD_222H_C_102_signed_2_19_2024_20240220203013.pdf

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Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2775973_Poker_Lake_Unit_20_DTD_222H_COAs_20240404145812.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 08:32 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

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.

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

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

☐ 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)

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"/> 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.

(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 / 2330 FWL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.207749 / LONG: -103.904659 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 330 FSL / 1650 FEL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.2256 / LONG: -103.90022 (TVD: 11889 feet, MD: 17700 feet)

PPP: SWSE / 100 FSL / 1650 FEL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210701 / LONG: -103.900217 (TVD: 11889 feet, MD: 12400 feet)

PPP: SWSE / 330 FSL / 1650 FEL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.2402 / LONG: -103.90022 (TVD: 11889 feet, MD: 23000 feet)

BHL: NWNE / 200 FNL / 1650 FEL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268056 / LONG: -103.900223 (TVD: 11889 feet, MD: 33191 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 222H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2775973** 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	04NOV2017
APPRV		

DRAWING NO. HBE0000833

Well Plan Report - Poker Lake Unit 20 DTD South 222H

Measured Depth:	28243.03 ft
TVD RKB:	10039.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439573.50 ft
Easting:	632737.20 ft
RKB:	3275.00 ft
Ground Level:	3243.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan SectionsPoker Lake Unit 20 DTD South 222H

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		
1797.69	13.95	320.32	1790.82	65.06	-53.98	2.00	0.00	2.00		
5423.04	13.95	320.32	5309.18	737.84	-612.22	0.00	0.00	0.00		
6120.74	0.00	0.00	6000.00	802.90	-666.20	-2.00	0.00	2.00		
9443.54	0.00	0.00	9322.80	802.90	-666.20	0.00	0.00	0.00		
10568.54	90.00	179.68	10039.00	86.71	-662.18	8.00	0.00	8.00		
28192.49	90.00	179.68	10039.00	-17536.96	-563.13	0.00	0.00	0.00	LTP 12	
28243.03	90.00	179.68	10039.00	-17587.50	-562.85	0.00	0.00	0.00	BHL 12	

Position UncertaintyPoker Lake Unit 20 DTD South 222H

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	2.309	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	320.316	1199.980	4.410	0.000	5.066	0.000	2.688	0.000	0.000	5.149	4.314	121.161	MWD+IFR1+MS
1300.000	4.000	320.316	1299.838	5.286	0.000	5.396	0.000	2.747	0.000	0.000	5.703	4.961	99.302	MWD+IFR1+MS
1400.000	6.000	320.316	1399.452	6.052	0.000	5.730	0.000	2.813	0.000	0.000	6.369	5.392	85.170	MWD+IFR1+MS
1500.000	8.000	320.316	1498.702	6.743	0.000	6.066	0.000	2.885	0.000	0.000	7.038	5.753	78.642	MWD+IFR1+MS
1600.000	10.000	320.316	1597.465	7.378	0.000	6.406	0.000	2.968	0.000	0.000	7.677	6.095	75.281	MWD+IFR1+MS
1700.000	12.000	320.316	1695.623	7.971	0.000	6.748	0.000	3.062	0.000	0.000	8.285	6.432	73.319	MWD+IFR1+MS
1797.694	13.954	320.316	1790.817	8.502	0.000	7.085	0.000	3.166	0.000	0.000	8.838	6.761	72.147	MWD+IFR1+MS
1800.000	13.954	320.316	1793.055	8.508	0.000	7.092	0.000	3.161	0.000	0.000	8.846	6.769	72.125	MWD+IFR1+MS
1900.000	13.954	320.316	1890.104	8.786	0.000	7.424	0.000	3.242	0.000	0.000	9.118	7.106	72.435	MWD+IFR1+MS
2000.000	13.954	320.316	1987.153	9.088	0.000	7.779	0.000	3.330	0.000	0.000	9.422	7.452	73.074	MWD+IFR1+MS
2100.000	13.954	320.316	2084.202	9.396	0.000	8.136	0.000	3.421	0.000	0.000	9.732	7.802	73.698	MWD+IFR1+MS
2200.000	13.954	320.316	2181.251	9.711	0.000	8.497	0.000	3.515	0.000	0.000	10.048	8.154	74.307	MWD+IFR1+MS
2300.000	13.954	320.316	2278.300	10.032	0.000	8.859	0.000	3.613	0.000	0.000	10.369	8.510	74.901	MWD+IFR1+MS
2400.000	13.954	320.316	2375.350	10.358	0.000	9.224	0.000	3.713	0.000	0.000	10.695	8.867	75.480	MWD+IFR1+MS
2500.000	13.954	320.316	2472.399	10.689	0.000	9.591	0.000	3.816	0.000	0.000	11.026	9.226	76.044	MWD+IFR1+MS
2600.000	13.954	320.316	2569.448	11.024	0.000	9.960	0.000	3.922	0.000	0.000	11.360	9.587	76.594	MWD+IFR1+MS
2700.000	13.954	320.316	2666.497	11.363	0.000	10.329	0.000	4.030	0.000	0.000	11.699	9.949	77.129	MWD+IFR1+MS
2800.000	13.954	320.316	2763.546	11.706	0.000	10.701	0.000	4.140	0.000	0.000	12.040	10.313	77.649	MWD+IFR1+MS
2900.000	13.954	320.316	2860.595	12.053	0.000	11.073	0.000	4.253	0.000	0.000	12.385	10.679	78.156	MWD+IFR1+MS

3000.000	13.954	320.316	2957.644	12.402	0.000	11.447	0.000	4.368	0.000	0.000	12.733	11.045	78.649	MWD+IFR1+MS
3100.000	13.954	320.316	3054.693	12.754	0.000	11.821	0.000	4.484	0.000	0.000	13.083	11.412	79.129	MWD+IFR1+MS
3200.000	13.954	320.316	3151.742	13.109	0.000	12.197	0.000	4.603	0.000	0.000	13.435	11.781	79.595	MWD+IFR1+MS
3300.000	13.954	320.316	3248.791	13.466	0.000	12.573	0.000	4.723	0.000	0.000	13.790	12.150	80.048	MWD+IFR1+MS
3400.000	13.954	320.316	3345.840	13.825	0.000	12.950	0.000	4.845	0.000	0.000	14.146	12.520	80.489	MWD+IFR1+MS
3500.000	13.954	320.316	3442.889	14.187	0.000	13.328	0.000	4.969	0.000	0.000	14.505	12.890	80.918	MWD+IFR1+MS
3600.000	13.954	320.316	3539.938	14.550	0.000	13.706	0.000	5.095	0.000	0.000	14.865	13.262	81.335	MWD+IFR1+MS
3700.000	13.954	320.316	3636.987	14.915	0.000	14.085	0.000	5.222	0.000	0.000	15.227	13.634	81.740	MWD+IFR1+MS
3800.000	13.954	320.316	3734.036	15.281	0.000	14.464	0.000	5.351	0.000	0.000	15.591	14.006	82.133	MWD+IFR1+MS
3900.000	13.954	320.316	3831.085	15.649	0.000	14.844	0.000	5.482	0.000	0.000	15.955	14.379	82.516	MWD+IFR1+MS
4000.000	13.954	320.316	3928.134	16.019	0.000	15.224	0.000	5.614	0.000	0.000	16.321	14.753	82.887	MWD+IFR1+MS
4100.000	13.954	320.316	4025.183	16.389	0.000	15.605	0.000	5.747	0.000	0.000	16.689	15.127	83.249	MWD+IFR1+MS
4200.000	13.954	320.316	4122.232	16.761	0.000	15.986	0.000	5.883	0.000	0.000	17.057	15.502	83.600	MWD+IFR1+MS
4300.000	13.954	320.316	4219.281	17.134	0.000	16.368	0.000	6.019	0.000	0.000	17.427	15.877	83.941	MWD+IFR1+MS
4400.000	13.954	320.316	4316.330	17.509	0.000	16.749	0.000	6.158	0.000	0.000	17.797	16.252	84.273	MWD+IFR1+MS
4500.000	13.954	320.316	4413.379	17.884	0.000	17.132	0.000	6.298	0.000	0.000	18.168	16.628	84.595	MWD+IFR1+MS
4600.000	13.954	320.316	4510.428	18.260	0.000	17.514	0.000	6.439	0.000	0.000	18.541	17.004	84.908	MWD+IFR1+MS
4700.000	13.954	320.316	4607.477	18.637	0.000	17.897	0.000	6.583	0.000	0.000	18.914	17.380	85.213	MWD+IFR1+MS
4800.000	13.954	320.316	4704.526	19.015	0.000	18.280	0.000	6.727	0.000	0.000	19.287	17.757	85.509	MWD+IFR1+MS
4900.000	13.954	320.316	4801.575	19.393	0.000	18.663	0.000	6.874	0.000	0.000	19.662	18.134	85.796	MWD+IFR1+MS
5000.000	13.954	320.316	4898.624	19.772	0.000	19.046	0.000	7.022	0.000	0.000	20.037	18.511	86.075	MWD+IFR1+MS
5100.000	13.954	320.316	4995.673	20.152	0.000	19.430	0.000	7.171	0.000	0.000	20.413	18.889	86.347	MWD+IFR1+MS
5200.000	13.954	320.316	5092.722	20.533	0.000	19.814	0.000	7.322	0.000	0.000	20.790	19.267	86.611	MWD+IFR1+MS
5300.000	13.954	320.316	5189.771	20.914	0.000	20.198	0.000	7.475	0.000	0.000	21.167	19.645	86.867	MWD+IFR1+MS
5400.000	13.954	320.316	5286.820	21.296	0.000	20.582	0.000	7.630	0.000	0.000	21.544	20.023	87.117	MWD+IFR1+MS
5423.043	13.954	320.316	5309.183	21.382	0.000	20.669	0.000	7.665	0.000	0.000	21.628	20.110	87.151	MWD+IFR1+MS
5500.000	12.415	320.316	5384.109	21.705	0.000	20.957	0.000	7.787	0.000	0.000	21.917	20.401	87.101	MWD+IFR1+MS
5600.000	10.415	320.316	5482.126	22.177	0.000	21.331	0.000	7.949	0.000	0.000	22.357	20.786	85.929	MWD+IFR1+MS
5700.000	8.415	320.316	5580.774	22.639	0.000	21.701	0.000	8.105	0.000	0.000	22.815	21.166	84.523	MWD+IFR1+MS
5800.000	6.415	320.316	5679.933	23.065	0.000	22.063	0.000	8.252	0.000	0.000	23.265	21.538	83.255	MWD+IFR1+MS
5900.000	4.415	320.316	5779.482	23.454	0.000	22.417	0.000	8.392	0.000	0.000	23.708	21.901	82.117	MWD+IFR1+MS
6000.000	2.415	320.316	5879.299	23.806	0.000	22.765	0.000	8.525	0.000	0.000	24.142	22.255	81.102	MWD+IFR1+MS
6100.000	0.415	320.316	5979.264	24.121	0.000	23.104	0.000	8.653	0.000	0.000	24.566	22.601	80.201	MWD+IFR1+MS

6120.737	0.000	0.000	6000.000	24.577	0.000	22.729	0.000	8.680	0.000	0.000	24.632	22.669	80.213	MWD+IFR1+MS
6200.000	0.000	0.000	6079.263	24.826	0.000	22.990	0.000	8.780	0.000	0.000	24.878	22.933	80.371	MWD+IFR1+MS
6300.000	0.000	0.000	6179.263	25.142	0.000	23.325	0.000	8.908	0.000	0.000	25.191	23.272	80.662	MWD+IFR1+MS
6400.000	0.000	0.000	6279.263	25.461	0.000	23.662	0.000	9.039	0.000	0.000	25.506	23.614	80.994	MWD+IFR1+MS
6500.000	0.000	0.000	6379.263	25.782	0.000	24.000	0.000	9.173	0.000	0.000	25.823	23.956	81.326	MWD+IFR1+MS
6600.000	0.000	0.000	6479.263	26.103	0.000	24.339	0.000	9.310	0.000	0.000	26.140	24.299	81.658	MWD+IFR1+MS
6700.000	0.000	0.000	6579.263	26.425	0.000	24.678	0.000	9.449	0.000	0.000	26.459	24.641	81.991	MWD+IFR1+MS
6800.000	0.000	0.000	6679.263	26.748	0.000	25.017	0.000	9.591	0.000	0.000	26.779	24.984	82.323	MWD+IFR1+MS
6900.000	0.000	0.000	6779.263	27.072	0.000	25.358	0.000	9.736	0.000	0.000	27.100	25.328	82.656	MWD+IFR1+MS
7000.000	0.000	0.000	6879.263	27.396	0.000	25.698	0.000	9.883	0.000	0.000	27.422	25.671	82.988	MWD+IFR1+MS
7100.000	0.000	0.000	6979.263	27.722	0.000	26.039	0.000	10.034	0.000	0.000	27.745	26.015	83.320	MWD+IFR1+MS
7200.000	0.000	0.000	7079.263	28.048	0.000	26.381	0.000	10.187	0.000	0.000	28.069	26.359	83.652	MWD+IFR1+MS
7300.000	0.000	0.000	7179.263	28.376	0.000	26.723	0.000	10.343	0.000	0.000	28.394	26.704	83.983	MWD+IFR1+MS
7400.000	0.000	0.000	7279.263	28.703	0.000	27.065	0.000	10.502	0.000	0.000	28.719	27.048	84.313	MWD+IFR1+MS
7500.000	0.000	0.000	7379.263	29.032	0.000	27.408	0.000	10.664	0.000	0.000	29.046	27.393	84.643	MWD+IFR1+MS
7600.000	0.000	0.000	7479.263	29.361	0.000	27.751	0.000	10.829	0.000	0.000	29.374	27.739	84.973	MWD+IFR1+MS
7700.000	0.000	0.000	7579.263	29.691	0.000	28.095	0.000	10.997	0.000	0.000	29.702	28.084	85.301	MWD+IFR1+MS
7800.000	0.000	0.000	7679.263	30.022	0.000	28.439	0.000	11.168	0.000	0.000	30.031	28.429	85.629	MWD+IFR1+MS
7900.000	0.000	0.000	7779.263	30.353	0.000	28.783	0.000	11.342	0.000	0.000	30.361	28.775	85.955	MWD+IFR1+MS
8000.000	0.000	0.000	7879.263	30.685	0.000	29.128	0.000	11.518	0.000	0.000	30.692	29.121	86.281	MWD+IFR1+MS
8100.000	0.000	0.000	7979.263	31.018	0.000	29.473	0.000	11.698	0.000	0.000	31.023	29.468	86.606	MWD+IFR1+MS
8200.000	0.000	0.000	8079.263	31.351	0.000	29.818	0.000	11.881	0.000	0.000	31.355	29.814	86.929	MWD+IFR1+MS
8300.000	0.000	0.000	8179.263	31.684	0.000	30.164	0.000	12.067	0.000	0.000	31.688	30.160	87.251	MWD+IFR1+MS
8400.000	0.000	0.000	8279.263	32.019	0.000	30.510	0.000	12.256	0.000	0.000	32.021	30.507	87.572	MWD+IFR1+MS
8500.000	0.000	0.000	8379.263	32.353	0.000	30.856	0.000	12.448	0.000	0.000	32.355	30.854	87.891	MWD+IFR1+MS
8600.000	0.000	0.000	8479.263	32.688	0.000	31.203	0.000	12.642	0.000	0.000	32.690	31.201	88.209	MWD+IFR1+MS
8700.000	0.000	0.000	8579.263	33.024	0.000	31.550	0.000	12.840	0.000	0.000	33.025	31.549	88.525	MWD+IFR1+MS
8800.000	0.000	0.000	8679.263	33.360	0.000	31.897	0.000	13.042	0.000	0.000	33.361	31.896	88.840	MWD+IFR1+MS
8900.000	0.000	0.000	8779.263	33.697	0.000	32.244	0.000	13.246	0.000	0.000	33.697	32.243	89.153	MWD+IFR1+MS
9000.000	0.000	0.000	8879.263	34.034	0.000	32.591	0.000	13.453	0.000	0.000	34.034	32.591	89.464	MWD+IFR1+MS
9100.000	0.000	0.000	8979.263	34.371	0.000	32.939	0.000	13.663	0.000	0.000	34.371	32.939	89.774	MWD+IFR1+MS
9200.000	0.000	0.000	9079.263	34.709	0.000	33.287	0.000	13.877	0.000	0.000	34.709	33.287	90.081	MWD+IFR1+MS
9300.000	0.000	0.000	9179.263	35.048	0.000	33.635	0.000	14.093	0.000	0.000	35.048	33.635	90.387	MWD+IFR1+MS

9400.000	0.000	0.000	9279.263	35.386	0.000	33.984	0.000	14.313	0.000	0.000	35.387	33.983	90.691	MWD+IFR1+MS
9443.537	0.000	0.000	9322.800	35.532	0.000	34.134	0.000	14.410	0.000	0.000	35.532	34.133	90.751	MWD+IFR1+MS
9500.000	4.517	179.678	9379.205	35.412	0.000	34.317	-0.000	14.534	0.000	0.000	35.736	34.317	90.813	MWD+IFR1+MS
9600.000	12.517	179.678	9478.022	35.421	0.000	34.616	-0.000	14.796	0.000	0.000	36.722	34.613	91.846	MWD+IFR1+MS
9700.000	20.517	179.678	9573.817	35.349	0.000	34.895	-0.000	15.226	0.000	0.000	38.028	34.886	92.572	MWD+IFR1+MS
9800.000	28.517	179.678	9664.727	34.777	0.000	35.149	-0.000	15.886	0.000	0.000	39.159	35.135	92.987	MWD+IFR1+MS
9900.000	36.517	179.678	9748.982	33.786	0.000	35.376	-0.000	16.816	0.000	0.000	40.098	35.356	93.293	MWD+IFR1+MS
10000.000	44.517	179.678	9824.941	32.489	0.000	35.575	-0.000	18.019	0.000	0.000	40.841	35.549	93.546	MWD+IFR1+MS
10100.000	52.517	179.678	9891.127	31.028	0.000	35.745	-0.000	19.463	0.000	0.000	41.392	35.714	93.759	MWD+IFR1+MS
10200.000	60.517	179.678	9946.251	29.580	0.000	35.887	-0.000	21.095	0.000	0.000	41.767	35.852	93.929	MWD+IFR1+MS
10300.000	68.517	179.678	9989.241	28.352	0.000	36.000	-0.000	22.852	0.000	0.000	41.991	35.963	94.039	MWD+IFR1+MS
10400.000	76.517	179.678	10019.258	27.561	0.000	36.085	-0.000	24.670	0.000	0.000	42.098	36.046	94.062	MWD+IFR1+MS
10500.000	84.517	179.678	10035.720	27.393	0.000	36.140	-0.000	26.485	0.000	0.000	42.128	36.104	93.961	MWD+IFR1+MS
10568.537	90.000	179.678	10038.997	27.145	0.000	36.159	-0.000	27.145	0.000	0.000	42.128	36.126	93.787	MWD+IFR1+MS
10600.000	90.000	179.678	10038.997	27.223	0.000	36.164	-0.000	27.223	0.000	0.000	42.127	36.132	93.691	MWD+IFR1+MS
10700.000	90.000	179.678	10038.997	27.425	0.000	36.196	-0.000	27.425	0.000	0.000	42.125	36.169	93.395	MWD+IFR1+MS
10800.000	90.000	179.678	10038.997	27.651	0.000	36.246	-0.000	27.651	0.000	0.000	42.124	36.224	93.105	MWD+IFR1+MS
10900.000	90.000	179.678	10038.997	27.897	0.000	36.313	-0.000	27.897	0.000	0.000	42.124	36.294	92.818	MWD+IFR1+MS
11000.000	90.000	179.678	10038.997	28.164	0.000	36.396	-0.000	28.164	0.000	0.000	42.125	36.380	92.532	MWD+IFR1+MS
11100.000	90.000	179.678	10038.997	28.449	0.000	36.494	-0.000	28.449	0.000	0.000	42.127	36.482	92.244	MWD+IFR1+MS
11200.000	90.000	179.678	10038.997	28.753	0.000	36.609	-0.000	28.753	0.000	0.000	42.129	36.599	91.952	MWD+IFR1+MS
11300.000	90.000	179.678	10038.997	29.075	0.000	36.739	-0.000	29.075	0.000	0.000	42.132	36.732	91.654	MWD+IFR1+MS
11400.000	90.000	179.678	10038.997	29.414	0.000	36.884	-0.000	29.414	0.000	0.000	42.137	36.879	91.347	MWD+IFR1+MS
11500.000	90.000	179.678	10038.997	29.771	0.000	37.044	-0.000	29.771	0.000	0.000	42.142	37.041	91.028	MWD+IFR1+MS
11600.000	90.000	179.678	10038.997	30.143	0.000	37.220	-0.000	30.143	0.000	0.000	42.148	37.218	90.694	MWD+IFR1+MS
11700.000	90.000	179.678	10038.997	30.531	0.000	37.411	-0.000	30.531	0.000	0.000	42.154	37.410	90.339	MWD+IFR1+MS
11800.000	90.000	179.678	10038.997	30.934	0.000	37.616	-0.000	30.934	0.000	0.000	42.162	37.616	89.958	MWD+IFR1+MS
11900.000	90.000	179.678	10038.997	31.352	0.000	37.835	-0.000	31.352	0.000	0.000	42.171	37.835	89.544	MWD+IFR1+MS
12000.000	90.000	179.678	10038.997	31.783	0.000	38.069	-0.000	31.783	0.000	0.000	42.180	38.068	89.089	MWD+IFR1+MS
12100.000	90.000	179.678	10038.997	32.228	0.000	38.316	-0.000	32.228	0.000	0.000	42.191	38.315	88.580	MWD+IFR1+MS
12200.000	90.000	179.678	10038.997	32.686	0.000	38.577	-0.000	32.686	0.000	0.000	42.203	38.574	88.004	MWD+IFR1+MS
12300.000	90.000	179.678	10038.997	33.156	0.000	38.852	-0.000	33.156	0.000	0.000	42.216	38.846	87.339	MWD+IFR1+MS
12400.000	90.000	179.678	10038.997	33.637	0.000	39.139	-0.000	33.637	0.000	0.000	42.231	39.130	86.556	MWD+IFR1+MS

12500.000	90.000	179.678	10038.997	34.130	0.000	39.440	-0.000	34.130	0.000	0.000	42.248	39.425	85.613	MWD+IFR1+MS
12600.000	90.000	179.678	10038.997	34.634	0.000	39.752	-0.000	34.634	0.000	0.000	42.267	39.730	84.447	MWD+IFR1+MS
12700.000	90.000	179.678	10038.997	35.148	0.000	40.077	-0.000	35.148	0.000	0.000	42.290	40.046	82.960	MWD+IFR1+MS
12800.000	90.000	179.678	10038.997	35.672	0.000	40.414	-0.000	35.672	0.000	0.000	42.317	40.369	80.993	MWD+IFR1+MS
12900.000	90.000	179.678	10038.997	36.205	0.000	40.762	-0.000	36.205	0.000	0.000	42.351	40.696	78.276	MWD+IFR1+MS
13000.000	90.000	179.678	10038.997	36.747	0.000	41.122	-0.000	36.747	0.000	0.000	42.397	41.025	74.338	MWD+IFR1+MS
13100.000	90.000	179.678	10038.997	37.298	0.000	41.493	-0.000	37.298	0.000	0.000	42.464	41.343	68.376	MWD+IFR1+MS
13200.000	90.000	179.678	10038.997	37.857	0.000	41.874	-0.000	37.857	0.000	0.000	42.570	41.634	59.361	MWD+IFR1+MS
13300.000	90.000	179.678	10038.997	38.424	0.000	42.266	-0.000	38.424	0.000	0.000	42.745	41.867	47.422	MWD+IFR1+MS
13400.000	90.000	179.678	10038.997	38.999	0.000	42.668	-0.000	38.999	0.000	0.000	43.004	42.026	35.706	MWD+IFR1+MS
13500.000	90.000	179.678	10038.997	39.581	0.000	43.080	-0.000	39.581	0.000	0.000	43.333	42.126	27.074	MWD+IFR1+MS
13600.000	90.000	179.678	10038.997	40.169	0.000	43.501	-0.000	40.169	0.000	0.000	43.706	42.192	21.399	MWD+IFR1+MS
13700.000	90.000	179.678	10038.997	40.765	0.000	43.932	-0.000	40.765	0.000	0.000	44.106	42.240	17.644	MWD+IFR1+MS
13800.000	90.000	179.678	10038.997	41.366	0.000	44.372	-0.000	41.366	0.000	0.000	44.526	42.278	15.048	MWD+IFR1+MS
13900.000	90.000	179.678	10038.997	41.974	0.000	44.820	-0.000	41.974	0.000	0.000	44.961	42.311	13.168	MWD+IFR1+MS
14000.000	90.000	179.678	10038.997	42.588	0.000	45.278	-0.000	42.588	0.000	0.000	45.407	42.341	11.751	MWD+IFR1+MS
14100.000	90.000	179.678	10038.997	43.207	0.000	45.743	-0.000	43.207	0.000	0.000	45.865	42.369	10.646	MWD+IFR1+MS
14200.000	90.000	179.678	10038.997	43.831	0.000	46.216	-0.000	43.831	0.000	0.000	46.332	42.395	9.761	MWD+IFR1+MS
14300.000	90.000	179.678	10038.997	44.460	0.000	46.697	-0.000	44.460	0.000	0.000	46.808	42.421	9.034	MWD+IFR1+MS
14400.000	90.000	179.678	10038.997	45.095	0.000	47.186	-0.000	45.095	0.000	0.000	47.292	42.447	8.427	MWD+IFR1+MS
14500.000	90.000	179.678	10038.997	45.734	0.000	47.681	-0.000	45.734	0.000	0.000	47.784	42.473	7.911	MWD+IFR1+MS
14600.000	90.000	179.678	10038.997	46.377	0.000	48.184	-0.000	46.377	0.000	0.000	48.284	42.498	7.467	MWD+IFR1+MS
14700.000	90.000	179.678	10038.997	47.025	0.000	48.694	-0.000	47.025	0.000	0.000	48.792	42.524	7.079	MWD+IFR1+MS
14800.000	90.000	179.678	10038.997	47.677	0.000	49.211	-0.000	47.677	0.000	0.000	49.306	42.550	6.738	MWD+IFR1+MS
14900.000	90.000	179.678	10038.997	48.333	0.000	49.733	-0.000	48.333	0.000	0.000	49.826	42.576	6.435	MWD+IFR1+MS
15000.000	90.000	179.678	10038.997	48.992	0.000	50.262	-0.000	48.992	0.000	0.000	50.354	42.602	6.163	MWD+IFR1+MS
15100.000	90.000	179.678	10038.997	49.655	0.000	50.797	-0.000	49.655	0.000	0.000	50.887	42.629	5.918	MWD+IFR1+MS
15200.000	90.000	179.678	10038.997	50.322	0.000	51.338	-0.000	50.322	0.000	0.000	51.427	42.656	5.695	MWD+IFR1+MS
15300.000	90.000	179.678	10038.997	50.992	0.000	51.885	-0.000	50.992	0.000	0.000	51.972	42.684	5.492	MWD+IFR1+MS
15400.000	90.000	179.678	10038.997	51.666	0.000	52.437	-0.000	51.666	0.000	0.000	52.522	42.712	5.306	MWD+IFR1+MS
15500.000	90.000	179.678	10038.997	52.342	0.000	52.994	-0.000	52.342	0.000	0.000	53.079	42.741	5.134	MWD+IFR1+MS
15600.000	90.000	179.678	10038.997	53.021	0.000	53.557	-0.000	53.021	0.000	0.000	53.640	42.770	4.976	MWD+IFR1+MS
15700.000	90.000	179.678	10038.997	53.704	0.000	54.124	-0.000	53.704	0.000	0.000	54.206	42.799	4.828	MWD+IFR1+MS

15800.000	90.000	179.678	10038.997	54.389	0.000	54.696	-0.000	54.389	0.000	0.000	54.778	42.829	4.690	MWD+IFR1+MS
15900.000	90.000	179.678	10038.997	55.077	0.000	55.273	-0.000	55.077	0.000	0.000	55.354	42.859	4.562	MWD+IFR1+MS
16000.000	90.000	179.678	10038.997	55.767	0.000	55.855	-0.000	55.767	0.000	0.000	55.934	42.890	4.441	MWD+IFR1+MS
16100.000	90.000	179.678	10038.997	56.460	0.000	56.441	-0.000	56.460	0.000	0.000	56.520	42.921	4.328	MWD+IFR1+MS
16200.000	90.000	179.678	10038.997	57.155	0.000	57.031	-0.000	57.155	0.000	0.000	57.109	42.953	4.221	MWD+IFR1+MS
16300.000	90.000	179.678	10038.997	57.852	0.000	57.625	-0.000	57.852	0.000	0.000	57.702	42.985	4.120	MWD+IFR1+MS
16400.000	90.000	179.678	10038.997	58.552	0.000	58.224	-0.000	58.552	0.000	0.000	58.300	43.018	4.024	MWD+IFR1+MS
16500.000	90.000	179.678	10038.997	59.254	0.000	58.826	-0.000	59.254	0.000	0.000	58.901	43.051	3.934	MWD+IFR1+MS
16600.000	90.000	179.678	10038.997	59.957	0.000	59.432	-0.000	59.957	0.000	0.000	59.507	43.085	3.848	MWD+IFR1+MS
16700.000	90.000	179.678	10038.997	60.663	0.000	60.041	-0.000	60.663	0.000	0.000	60.115	43.119	3.766	MWD+IFR1+MS
16800.000	90.000	179.678	10038.997	61.371	0.000	60.654	-0.000	61.371	0.000	0.000	60.728	43.154	3.687	MWD+IFR1+MS
16900.000	90.000	179.678	10038.997	62.080	0.000	61.271	-0.000	62.080	0.000	0.000	61.344	43.189	3.613	MWD+IFR1+MS
17000.000	90.000	179.678	10038.997	62.792	0.000	61.891	-0.000	62.792	0.000	0.000	61.963	43.225	3.541	MWD+IFR1+MS
17100.000	90.000	179.678	10038.997	63.505	0.000	62.514	-0.000	63.505	0.000	0.000	62.586	43.261	3.473	MWD+IFR1+MS
17200.000	90.000	179.678	10038.997	64.220	0.000	63.140	-0.000	64.220	0.000	0.000	63.211	43.298	3.407	MWD+IFR1+MS
17300.000	90.000	179.678	10038.997	64.936	0.000	63.769	-0.000	64.936	0.000	0.000	63.840	43.335	3.344	MWD+IFR1+MS
17400.000	90.000	179.678	10038.997	65.654	0.000	64.402	-0.000	65.654	0.000	0.000	64.472	43.373	3.284	MWD+IFR1+MS
17500.000	90.000	179.678	10038.997	66.374	0.000	65.037	-0.000	66.374	0.000	0.000	65.106	43.411	3.226	MWD+IFR1+MS
17600.000	90.000	179.678	10038.997	67.095	0.000	65.675	-0.000	67.095	0.000	0.000	65.743	43.450	3.170	MWD+IFR1+MS
17700.000	90.000	179.678	10038.997	67.817	0.000	66.315	-0.000	67.817	0.000	0.000	66.383	43.489	3.116	MWD+IFR1+MS
17800.000	90.000	179.678	10038.997	68.541	0.000	66.958	-0.000	68.541	0.000	0.000	67.026	43.529	3.064	MWD+IFR1+MS
17900.000	90.000	179.678	10038.997	69.266	0.000	67.604	-0.000	69.266	0.000	0.000	67.671	43.569	3.014	MWD+IFR1+MS
18000.000	90.000	179.678	10038.997	69.992	0.000	68.252	-0.000	69.992	0.000	0.000	68.319	43.610	2.965	MWD+IFR1+MS
18100.000	90.000	179.678	10038.997	70.720	0.000	68.903	-0.000	70.720	0.000	0.000	68.969	43.651	2.918	MWD+IFR1+MS
18200.000	90.000	179.678	10038.997	71.448	0.000	69.556	-0.000	71.448	0.000	0.000	69.622	43.692	2.873	MWD+IFR1+MS
18300.000	90.000	179.678	10038.997	72.178	0.000	70.211	-0.000	72.178	0.000	0.000	70.276	43.735	2.829	MWD+IFR1+MS
18400.000	90.000	179.678	10038.997	72.910	0.000	70.869	-0.000	72.910	0.000	0.000	70.933	43.777	2.786	MWD+IFR1+MS
18500.000	90.000	179.678	10038.997	73.642	0.000	71.528	-0.000	73.642	0.000	0.000	71.593	43.820	2.745	MWD+IFR1+MS
18600.000	90.000	179.678	10038.997	74.375	0.000	72.190	-0.000	74.375	0.000	0.000	72.254	43.864	2.705	MWD+IFR1+MS
18700.000	90.000	179.678	10038.997	75.109	0.000	72.854	-0.000	75.109	0.000	0.000	72.917	43.908	2.666	MWD+IFR1+MS
18800.000	90.000	179.678	10038.997	75.845	0.000	73.520	-0.000	75.845	0.000	0.000	73.582	43.953	2.628	MWD+IFR1+MS
18900.000	90.000	179.678	10038.997	76.581	0.000	74.187	-0.000	76.581	0.000	0.000	74.250	43.998	2.591	MWD+IFR1+MS
19000.000	90.000	179.678	10038.997	77.318	0.000	74.857	-0.000	77.318	0.000	0.000	74.919	44.043	2.555	MWD+IFR1+MS

19100.000	90.000	179.678	10038.997	78.057	0.000	75.528	-0.000	78.057	0.000	0.000	75.590	44.089	2.520	MWD+IFR1+MS
19200.000	90.000	179.678	10038.997	78.796	0.000	76.201	-0.000	78.796	0.000	0.000	76.262	44.136	2.487	MWD+IFR1+MS
19300.000	90.000	179.678	10038.997	79.536	0.000	76.876	-0.000	79.536	0.000	0.000	76.937	44.183	2.454	MWD+IFR1+MS
19400.000	90.000	179.678	10038.997	80.276	0.000	77.553	-0.000	80.276	0.000	0.000	77.613	44.230	2.422	MWD+IFR1+MS
19500.000	90.000	179.678	10038.997	81.018	0.000	78.231	-0.000	81.018	0.000	0.000	78.291	44.278	2.390	MWD+IFR1+MS
19600.000	90.000	179.678	10038.997	81.761	0.000	78.911	-0.000	81.761	0.000	0.000	78.970	44.326	2.360	MWD+IFR1+MS
19700.000	90.000	179.678	10038.997	82.504	0.000	79.592	-0.000	82.504	0.000	0.000	79.651	44.375	2.330	MWD+IFR1+MS
19800.000	90.000	179.678	10038.997	83.248	0.000	80.275	-0.000	83.248	0.000	0.000	80.333	44.425	2.301	MWD+IFR1+MS
19900.000	90.000	179.678	10038.997	83.993	0.000	80.959	-0.000	83.993	0.000	0.000	81.017	44.474	2.273	MWD+IFR1+MS
20000.000	90.000	179.678	10038.997	84.738	0.000	81.645	-0.000	84.738	0.000	0.000	81.703	44.525	2.245	MWD+IFR1+MS
20100.000	90.000	179.678	10038.997	85.484	0.000	82.332	-0.000	85.484	0.000	0.000	82.390	44.576	2.218	MWD+IFR1+MS
20200.000	90.000	179.678	10038.997	86.231	0.000	83.021	-0.000	86.231	0.000	0.000	83.078	44.627	2.191	MWD+IFR1+MS
20300.000	90.000	179.678	10038.997	86.979	0.000	83.711	-0.000	86.979	0.000	0.000	83.767	44.678	2.166	MWD+IFR1+MS
20400.000	90.000	179.678	10038.997	87.727	0.000	84.402	-0.000	87.727	0.000	0.000	84.458	44.730	2.140	MWD+IFR1+MS
20500.000	90.000	179.678	10038.997	88.476	0.000	85.095	-0.000	88.476	0.000	0.000	85.150	44.783	2.116	MWD+IFR1+MS
20600.000	90.000	179.678	10038.997	89.225	0.000	85.788	-0.000	89.225	0.000	0.000	85.844	44.836	2.091	MWD+IFR1+MS
20700.000	90.000	179.678	10038.997	89.975	0.000	86.483	-0.000	89.975	0.000	0.000	86.538	44.890	2.068	MWD+IFR1+MS
20800.000	90.000	179.678	10038.997	90.726	0.000	87.179	-0.000	90.726	0.000	0.000	87.234	44.944	2.045	MWD+IFR1+MS
20900.000	90.000	179.678	10038.997	91.477	0.000	87.877	-0.000	91.477	0.000	0.000	87.931	44.998	2.022	MWD+IFR1+MS
21000.000	90.000	179.678	10038.997	92.229	0.000	88.575	-0.000	92.229	0.000	0.000	88.629	45.053	2.000	MWD+IFR1+MS
21100.000	90.000	179.678	10038.997	92.981	0.000	89.274	-0.000	92.981	0.000	0.000	89.328	45.108	1.978	MWD+IFR1+MS
21200.000	90.000	179.678	10038.997	93.734	0.000	89.975	-0.000	93.734	0.000	0.000	90.028	45.164	1.956	MWD+IFR1+MS
21300.000	90.000	179.678	10038.997	94.487	0.000	90.677	-0.000	94.487	0.000	0.000	90.730	45.220	1.936	MWD+IFR1+MS
21400.000	90.000	179.678	10038.997	95.241	0.000	91.379	-0.000	95.241	0.000	0.000	91.432	45.277	1.915	MWD+IFR1+MS
21500.000	90.000	179.678	10038.997	95.995	0.000	92.083	-0.000	95.995	0.000	0.000	92.135	45.334	1.895	MWD+IFR1+MS
21600.000	90.000	179.678	10038.997	96.750	0.000	92.788	-0.000	96.750	0.000	0.000	92.840	45.391	1.875	MWD+IFR1+MS
21700.000	90.000	179.678	10038.997	97.506	0.000	93.493	-0.000	97.506	0.000	0.000	93.545	45.449	1.856	MWD+IFR1+MS
21800.000	90.000	179.678	10038.997	98.261	0.000	94.200	-0.000	98.261	0.000	0.000	94.251	45.508	1.837	MWD+IFR1+MS
21900.000	90.000	179.678	10038.997	99.018	0.000	94.907	-0.000	99.018	0.000	0.000	94.958	45.566	1.818	MWD+IFR1+MS
22000.000	90.000	179.678	10038.997	99.774	0.000	95.616	-0.000	99.774	0.000	0.000	95.666	45.626	1.800	MWD+IFR1+MS
22100.000	90.000	179.678	10038.997	100.531	0.000	96.325	-0.000	100.531	0.000	0.000	96.375	45.685	1.782	MWD+IFR1+MS
22200.000	90.000	179.678	10038.997	101.289	0.000	97.035	-0.000	101.289	0.000	0.000	97.085	45.745	1.764	MWD+IFR1+MS
22300.000	90.000	179.678	10038.997	102.047	0.000	97.746	-0.000	102.047	0.000	0.000	97.796	45.806	1.747	MWD+IFR1+MS

22400.000	90.000	179.678	10038.997	102.805	0.000	98.458	-0.000	102.805	0.000	0.000	98.507	45.867	1.730	MWD+IFR1+MS
22500.000	90.000	179.678	10038.997	103.564	0.000	99.170	-0.000	103.564	0.000	0.000	99.219	45.928	1.713	MWD+IFR1+MS
22600.000	90.000	179.678	10038.997	104.323	0.000	99.884	-0.000	104.323	0.000	0.000	99.932	45.990	1.697	MWD+IFR1+MS
22700.000	90.000	179.678	10038.997	105.083	0.000	100.598	-0.000	105.083	0.000	0.000	100.646	46.052	1.680	MWD+IFR1+MS
22800.000	90.000	179.678	10038.997	105.842	0.000	101.312	-0.000	105.842	0.000	0.000	101.361	46.115	1.665	MWD+IFR1+MS
22900.000	90.000	179.678	10038.997	106.603	0.000	102.028	-0.000	106.603	0.000	0.000	102.076	46.178	1.649	MWD+IFR1+MS
23000.000	90.000	179.678	10038.997	107.363	0.000	102.744	-0.000	107.363	0.000	0.000	102.792	46.242	1.634	MWD+IFR1+MS
23100.000	90.000	179.678	10038.997	108.124	0.000	103.461	-0.000	108.124	0.000	0.000	103.509	46.306	1.618	MWD+IFR1+MS
23200.000	90.000	179.678	10038.997	108.885	0.000	104.179	-0.000	108.885	0.000	0.000	104.226	46.370	1.603	MWD+IFR1+MS
23300.000	90.000	179.678	10038.997	109.647	0.000	104.897	-0.000	109.647	0.000	0.000	104.944	46.435	1.589	MWD+IFR1+MS
23400.000	90.000	179.678	10038.997	110.409	0.000	105.617	-0.000	110.409	0.000	0.000	105.663	46.500	1.574	MWD+IFR1+MS
23500.000	90.000	179.678	10038.997	111.171	0.000	106.336	-0.000	111.171	0.000	0.000	106.383	46.565	1.560	MWD+IFR1+MS
23600.000	90.000	179.678	10038.997	111.934	0.000	107.057	-0.000	111.934	0.000	0.000	107.103	46.631	1.546	MWD+IFR1+MS
23700.000	90.000	179.678	10038.997	112.697	0.000	107.777	-0.000	112.697	0.000	0.000	107.823	46.698	1.532	MWD+IFR1+MS
23800.000	90.000	179.678	10038.997	113.460	0.000	108.499	-0.000	113.460	0.000	0.000	108.545	46.764	1.519	MWD+IFR1+MS
23900.000	90.000	179.678	10038.997	114.223	0.000	109.221	-0.000	114.223	0.000	0.000	109.267	46.832	1.506	MWD+IFR1+MS
24000.000	90.000	179.678	10038.997	114.987	0.000	109.944	-0.000	114.987	0.000	0.000	109.989	46.899	1.492	MWD+IFR1+MS
24100.000	90.000	179.678	10038.997	115.751	0.000	110.667	-0.000	115.751	0.000	0.000	110.712	46.967	1.479	MWD+IFR1+MS
24200.000	90.000	179.678	10038.997	116.515	0.000	111.391	-0.000	116.515	0.000	0.000	111.436	47.035	1.467	MWD+IFR1+MS
24300.000	90.000	179.678	10038.997	117.280	0.000	112.116	-0.000	117.280	0.000	0.000	112.160	47.104	1.454	MWD+IFR1+MS
24400.000	90.000	179.678	10038.997	118.045	0.000	112.841	-0.000	118.045	0.000	0.000	112.885	47.173	1.442	MWD+IFR1+MS
24500.000	90.000	179.678	10038.997	118.810	0.000	113.566	-0.000	118.810	0.000	0.000	113.610	47.243	1.430	MWD+IFR1+MS
24600.000	90.000	179.678	10038.997	119.575	0.000	114.292	-0.000	119.575	0.000	0.000	114.336	47.313	1.418	MWD+IFR1+MS
24700.000	90.000	179.678	10038.997	120.341	0.000	115.019	-0.000	120.341	0.000	0.000	115.062	47.383	1.406	MWD+IFR1+MS
24800.000	90.000	179.678	10038.997	121.106	0.000	115.746	-0.000	121.106	0.000	0.000	115.789	47.454	1.394	MWD+IFR1+MS
24900.000	90.000	179.678	10038.997	121.873	0.000	116.473	-0.000	121.873	0.000	0.000	116.516	47.525	1.382	MWD+IFR1+MS
25000.000	90.000	179.678	10038.997	122.639	0.000	117.201	-0.000	122.639	0.000	0.000	117.244	47.596	1.371	MWD+IFR1+MS
25100.000	90.000	179.678	10038.997	123.405	0.000	117.930	-0.000	123.405	0.000	0.000	117.972	47.668	1.360	MWD+IFR1+MS
25200.000	90.000	179.678	10038.997	124.172	0.000	118.659	-0.000	124.172	0.000	0.000	118.701	47.740	1.349	MWD+IFR1+MS
25300.000	90.000	179.678	10038.997	124.939	0.000	119.388	-0.000	124.939	0.000	0.000	119.430	47.813	1.338	MWD+IFR1+MS
25400.000	90.000	179.678	10038.997	125.706	0.000	120.118	-0.000	125.706	0.000	0.000	120.160	47.886	1.327	MWD+IFR1+MS
25500.000	90.000	179.678	10038.997	126.474	0.000	120.849	-0.000	126.474	0.000	0.000	120.890	47.959	1.317	MWD+IFR1+MS
25600.000	90.000	179.678	10038.997	127.242	0.000	121.579	-0.000	127.242	0.000	0.000	121.621	48.033	1.306	MWD+IFR1+MS

25700.000	90.000	179.678	10038.997	128.009	0.000	122.311	-0.000	128.009	0.000	0.000	122.352	48.107	1.296	MWD+IFR1+MS
25800.000	90.000	179.678	10038.997	128.777	0.000	123.042	-0.000	128.777	0.000	0.000	123.083	48.181	1.286	MWD+IFR1+MS
25900.000	90.000	179.678	10038.997	129.546	0.000	123.774	-0.000	129.546	0.000	0.000	123.815	48.256	1.275	MWD+IFR1+MS
26000.000	90.000	179.678	10038.997	130.314	0.000	124.507	-0.000	130.314	0.000	0.000	124.547	48.331	1.265	MWD+IFR1+MS
26100.000	90.000	179.678	10038.997	131.083	0.000	125.239	-0.000	131.083	0.000	0.000	125.280	48.407	1.256	MWD+IFR1+MS
26200.000	90.000	179.678	10038.997	131.852	0.000	125.973	-0.000	131.852	0.000	0.000	126.013	48.483	1.246	MWD+IFR1+MS
26300.000	90.000	179.678	10038.997	132.621	0.000	126.706	-0.000	132.621	0.000	0.000	126.746	48.559	1.236	MWD+IFR1+MS
26400.000	90.000	179.678	10038.997	133.390	0.000	127.440	-0.000	133.390	0.000	0.000	127.480	48.636	1.227	MWD+IFR1+MS
26500.000	90.000	179.678	10038.997	134.159	0.000	128.175	-0.000	134.159	0.000	0.000	128.214	48.713	1.218	MWD+IFR1+MS
26600.000	90.000	179.678	10038.997	134.929	0.000	128.909	-0.000	134.929	0.000	0.000	128.949	48.790	1.208	MWD+IFR1+MS
26700.000	90.000	179.678	10038.997	135.699	0.000	129.644	-0.000	135.699	0.000	0.000	129.684	48.868	1.199	MWD+IFR1+MS
26800.000	90.000	179.678	10038.997	136.469	0.000	130.380	-0.000	136.469	0.000	0.000	130.419	48.946	1.190	MWD+IFR1+MS
26900.000	90.000	179.678	10038.997	137.239	0.000	131.116	-0.000	137.239	0.000	0.000	131.154	49.024	1.181	MWD+IFR1+MS
27000.000	90.000	179.678	10038.997	138.009	0.000	131.852	-0.000	138.009	0.000	0.000	131.890	49.103	1.173	MWD+IFR1+MS
27100.000	90.000	179.678	10038.997	138.779	0.000	132.588	-0.000	138.779	0.000	0.000	132.627	49.182	1.164	MWD+IFR1+MS
27200.000	90.000	179.678	10038.997	139.550	0.000	133.325	-0.000	139.550	0.000	0.000	133.363	49.261	1.155	MWD+IFR1+MS
27300.000	90.000	179.678	10038.997	140.321	0.000	134.062	-0.000	140.321	0.000	0.000	134.100	49.341	1.147	MWD+IFR1+MS
27400.000	90.000	179.678	10038.997	141.091	0.000	134.799	-0.000	141.091	0.000	0.000	134.837	49.421	1.139	MWD+IFR1+MS
27500.000	90.000	179.678	10038.997	141.863	0.000	135.537	-0.000	141.863	0.000	0.000	135.575	49.502	1.130	MWD+IFR1+MS
27600.000	90.000	179.678	10038.997	142.634	0.000	136.275	-0.000	142.634	0.000	0.000	136.313	49.582	1.122	MWD+IFR1+MS
27700.000	90.000	179.678	10038.997	143.405	0.000	137.013	-0.000	143.405	0.000	0.000	137.051	49.664	1.114	MWD+IFR1+MS
27800.000	90.000	179.678	10038.997	144.177	0.000	137.752	-0.000	144.177	0.000	0.000	137.789	49.745	1.106	MWD+IFR1+MS
27900.000	90.000	179.678	10038.997	144.948	0.000	138.491	-0.000	144.948	0.000	0.000	138.528	49.827	1.098	MWD+IFR1+MS
28000.000	90.000	179.678	10038.997	145.720	0.000	139.230	-0.000	145.720	0.000	0.000	139.267	49.909	1.090	MWD+IFR1+MS
28100.000	90.000	179.678	10038.997	146.492	0.000	139.970	-0.000	146.492	0.000	0.000	140.006	49.991	1.083	MWD+IFR1+MS
28192.491	90.000	179.678	10038.997	147.206	0.000	140.654	-0.000	147.206	0.000	0.000	140.690	50.068	1.076	MWD+IFR1+MS
28200.000	90.000	179.678	10038.997	147.264	0.000	140.709	-0.000	147.264	0.000	0.000	140.746	50.074	1.075	MWD+IFR1+MS
28243.031	90.000	179.678	10038.997	147.595	0.000	141.027	-0.000	147.595	0.000	0.000	141.063	50.110	1.072	MWD+IFR1+MS

Plan Targets

Poker Lake Unit 20 DTD South 222H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 12	10296.75	440376.40	632071.00	6764.00	RECTANGLE

SHL 12	11404.31	439573.41	632737.08	6525.85	RECTANGLE
LTP 12	28193.03	422036.00	632174.00	6764.00	RECTANGLE
BHL 12	28243.03	421986.00	632174.30	6764.00	RECTANGLE

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

XTO Energy Inc.
PLU 20 Dog Town Draw 222H
Projected TD: 28243.03' MD / 10039' TVD
SHL: 910' FNL & 2330' FWL , Section 20, T24S, R30E
BHL: 2622' FNL & 1672' 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	807'	Water
Top of Salt	1210'	Water
Base of Salt	3403'	Water
Delaware	3597'	Water
Brushy Canyon	6095'	Water/Oil/Gas
Bone Spring	7391'	Water
1st Bone Spring	8377'	Water/Oil/Gas
2nd Bone Spring	9195'	Water/Oil/Gas
3rd Bone Spring	9889'	Water/Oil/Gas
Target/Land Curve	10039'	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 @ 907' (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 9243.54' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 28243.03 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8943.54 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 907'	13.375	54.5	J-55	BTC	New	1.25	2.85	18.39
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	2.54	2.31	3.42
12.25	4000' – 9243.54'	9.625	40	HC L-80	BTC	New	1.85	1.89	4.37
8.5	0' – 9143.54'	6	26	P-110	Semi-Premium	New	1.17	2.80	1.71
8.5	9143.54' - 28243.03'	6	26	P-110	Semi-Premium	New	1.17	2.55	1.92

- 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 +/- 907'

Lead: 450 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 +/- 9243.54'

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

TOC: Brushy Canyon @ 6095

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: 2150 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 (6095') 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 +/- 28243.03'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 8943.54 feet

Tail: 3200 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 9443.54 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 3116 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' - 907'	17.5	FW/Native	8.4-8.9	35-40	NC
907' - 9243.54'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
9243.54' - 28243.03'	8.5	OBM	10.2-10.7	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 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5325 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.

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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 10400089317

WELL LOCATION AND ACREAGE DEDICATION PLAT

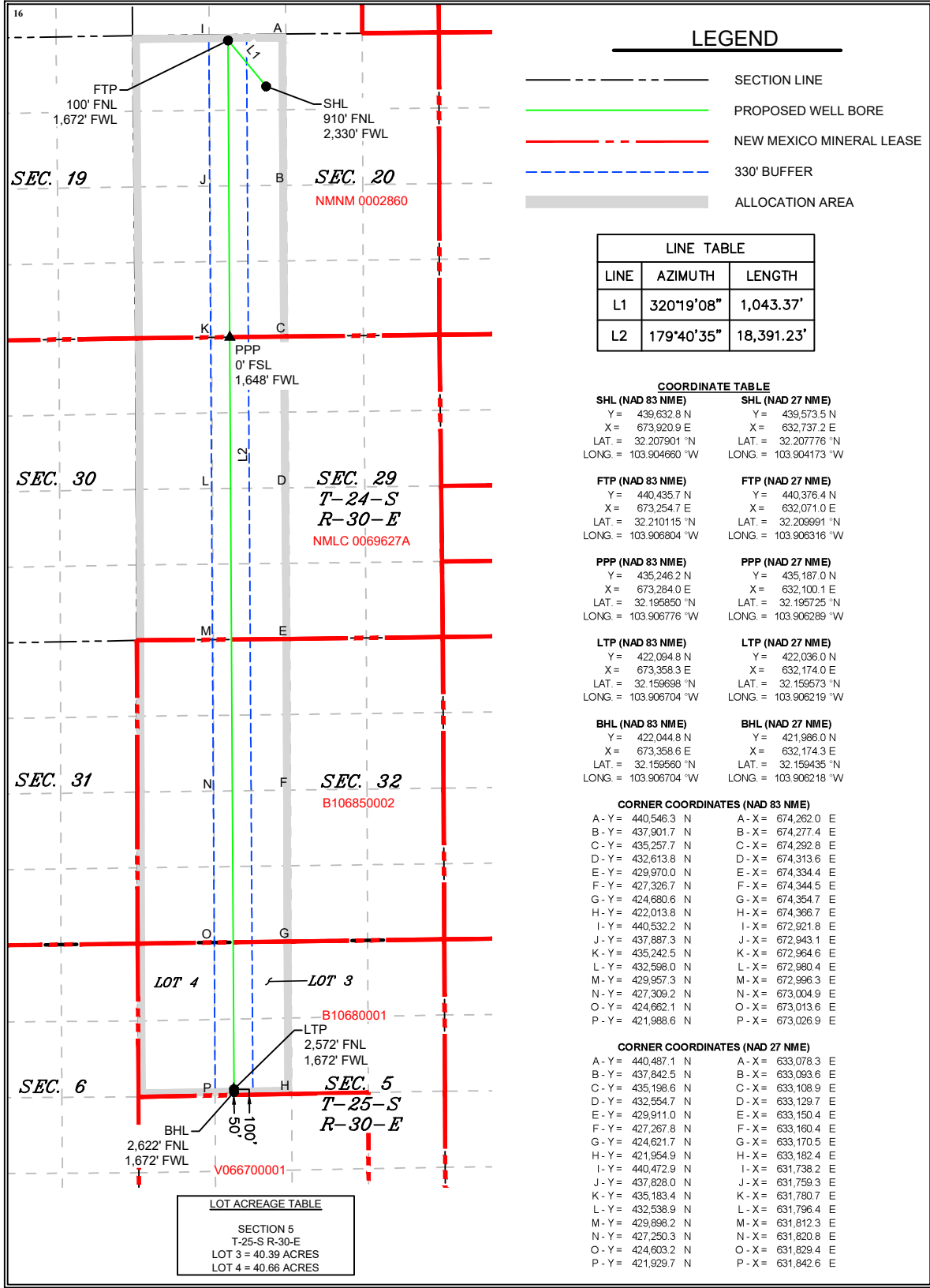
¹ API Number 30-015-	² Pool Code	³ Pool Name Undesignated; Bone Springs
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 20 DTD	⁶ Well Number 222H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC	⁹ Elevation 3,243'

¹⁰ Surface Location									
UL or lot no. C	Section 20	Township 24S	Range 30E	Lot Idn	Feet from the 910	North/South line NORTH	Feet from the 2,330	East/West line WEST	County EDDY

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. F	Section 5	Township 25S	Range 30E	Lot Idn	Feet from the 2,622	North/South line NORTH	Feet from the 1,672	East/West line WEST	County EDDY

¹² Dedicated Acres 1,121.05	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



17 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.

2-19-2024
Rusty Klein
Signature Date

RUSTY KLEIN
Printed Name

ranell.klein@exxonmobil.com
E-mail Address

18 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.

02/09/2024
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

RP 618.013003.06-44

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 330440

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 330440
	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