U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

06/27/2024

Well Name: POKER LAKE UNIT 20 DTD

Well Location: T24S / R30E / SEC 20 / NENW / 32.207741 / -103.906146

County or Parish/State: EDDY / NM

Well Number: 219H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM02860

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number: NMNM71016X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2779000

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/11/2024

Time Sundry Submitted: 07:05

Date proposed operation will begin: 04/01/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make changes to the approved APD as follows: SHL, FTP, LTP, BHL and drilling plan. Casing sizes are not changing but casing and cement program are being updated. FROM: TO: SHL: 965' FNL & 1870' FWL OF SECTION 20-T24S-R30E 815' FNL & 2360' FWL OF SECTION 20-T24S-R30E FTP: 100' FSL & 1870' FWL OF SECTION 17-T24S-R30E 100' FNL & 2181' FWL OF SECTION 20-T24S-R30E LTP: 330' FNL & 1870' FWL OF SECTION 32-T23S-R30E 2339' FNL & 2181' FWL OF SECTION 5-T25S-R30E BHL: 200' FNL & 1870' FWL OF SECTION 32-T23S-R30E 2439' FNL & 2181' FWL OF SECTION 5-T25S-R30E The proposed total depth is changing from 33048’ MD; 11842’ TVD (Wolfcamp) to 28926’ MD; 10969’ TVD (Wolfcamp). Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

NOI Attachments

Procedure Description

Wild_Well_Control_Plan_WWCP_20240311070525.pdf

BOP_Variance_new_Language_BOP_BTV_20240311070455.pdf

3_String_Bighole_Four_Miler_HBE0000833_MBS_20240311070434.pdf

Well_Plan_Report____Poker_Lake_Unit_20_DTD_South_219H_20240311070414.pdf

PLU_20_DTD_219H_Pad_B_Drilling_Plan__2_14_2024__20240311070356.pdf

POKER_LAKE_UNIT_20_DTD_219H_C_102_signed_3_10_2024_20240311070321.pdf

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Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2779000_Poker_Lake_Unit_20_DTD_219H_COAs_20240404150615.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: MAR 11, 2024 07:05 AM

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: CODY LAYTON

BLM POC Title: Assistant Field Manager Lands & Minerals

BLM POC Phone: 5752345959

BLM POC Email Address: clayton@blm.gov

Disposition: Approved

Disposition Date: 06/26/2024

Signature: Cody R. Layton

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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

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

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☐ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be 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 OFICE 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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 / 1870 FWL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.207741 / LONG: -103.906146 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 330 FSL / 1870 FEL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.22541 / LONG: -103.90618 (TVD: 11842 feet, MD: 17500 feet)

PPP: SESW / 100 FSL / 1870 FWL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210669 / LONG: -103.906164 (TVD: 11842 feet, MD: 12200 feet)

PPP: SESW / 330 FSL / 1870 FEL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.23997 / LONG: -103.90618 (TVD: 11842 feet, MD: 22800 feet)

BHL: NENW / 200 FNL / 1870 FWL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268028 / LONG: -103.90616 (TVD: 11842 feet, MD: 33048 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 219H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2779000** on 04/04/2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

H_2S	○ No	○ Yes		
Potash / WIPP	○ None	○ Secretary	○ R-111-P	☐ WIPP
Cave / Karst	○ Low	○ Medium	○ High	○ Critical
Wellhead	○ Conventional	○ Multibowl	○ Both	○ Diverter
Cementing	☐ Primary Squeeze	☑ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☑ Break Testing	☐ Water Disposal	☐ COM	☑ Unit
Variance	☑ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☑ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ **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 intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. **Wait on cement (WOC) for Water Basin:** After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
    b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
    c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
    d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear

chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.
f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

C. **DRILLING MUD:** Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. **WASTE MATERIAL AND FLUIDS:** All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

ii. Pit gain
iii. Time

h. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
   a. Sound alarm (alert crew)
   b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
   c. If impossible to pull string clear of the stack:
   d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
   e. Space out drill string with tooljoint just beneath the upper variable bore ram
   f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
   g. Confirm shut-in
   h. Notify toolpusher/company representative
   i. Read and record the following:
      i. SIDPP & SICP
      ii. Pit gain
      iii. Time
   j. Regroup and identify forward plan

Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

XTO Energy requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

Background

Onshore Oil and Gas Order CFR Title 43 Part 3170, Drilling Operations, Sections III.A.2.i.iv.B states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. CFR Title 43 Part 3170 states, "Some situation may exist either on a well-by- well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this order. This situation can be resolved by requesting a variance…". XTO Energy feels the break testing the BOPE is such a situation. Therefore, as per CFR Title 43 Part 3170, XTO Energy submits this request for the variance.

Supporting Documentation

CFR Title 43 Part 3170 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time there have been significant changes in drilling technology. BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since CFR Title 43 Part 3170 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.

Figure 1: Winch System attached to BOP Stack

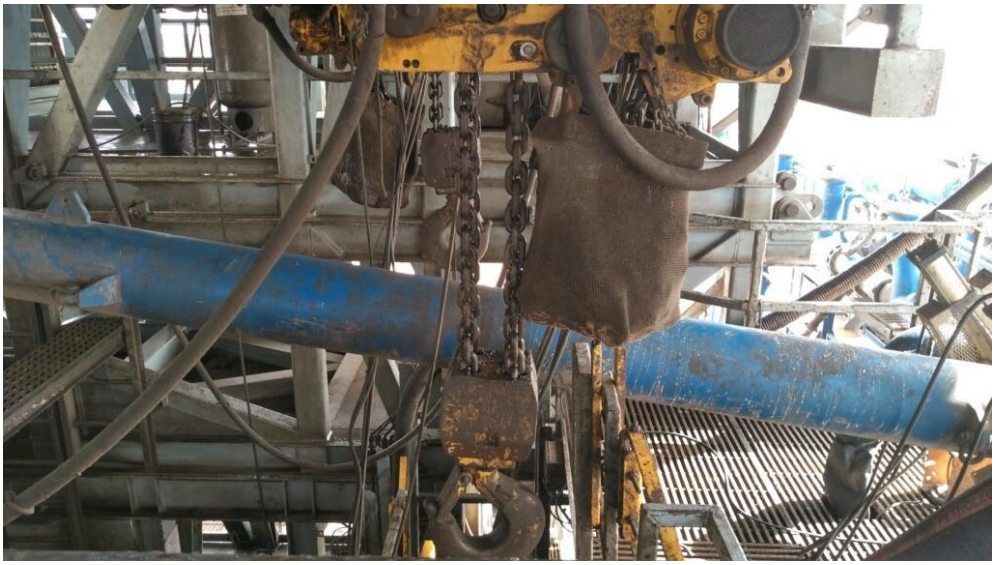


Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. CFR Title 43 Part 3170recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

62 API STANDARD 53

Table C.4—Initial Pressure Testing, Surface BOP Stacks

Component to be Pressure Tested	Pressure Test—Low Pressure[ac] psig (MPa)	Pressure Test—High Pressure[ac]	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer[b]	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers[bd]	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

[a] Pressure test evaluation periods shall be a minimum of five minutes.
No visible leaks.
The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

[b] Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

[c] For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

[d] For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

[e] Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

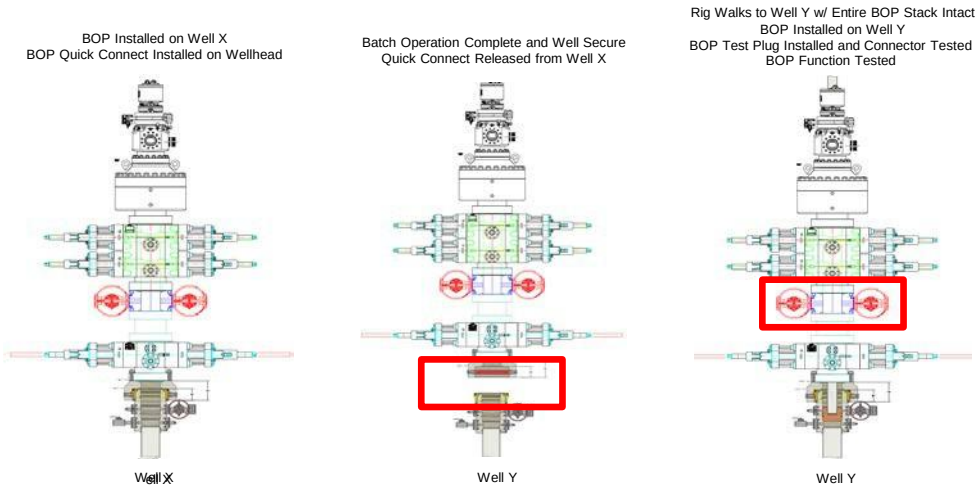
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

Procedures

1. XTO Energy will use this document for our break testing plan for New Mexico Delaware basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
    a. A full BOP test will be conducted on the first well on the pad.
    b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
        i. Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
        ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
    c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
    d. A full BOP test will be required prior to drilling any production hole.
3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
    a. Between the HCV valve and choke line connection
    b. Between the BOP quick connect and the wellhead
4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
6. The connections mentioned in 3a and 3b will then be reconnected.
7. Install test plug into the wellhead using test joint or drill pipe.
8. A shell test is performed against the upper pipe rams testing the two breaks.
9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



Summary

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.

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, 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.

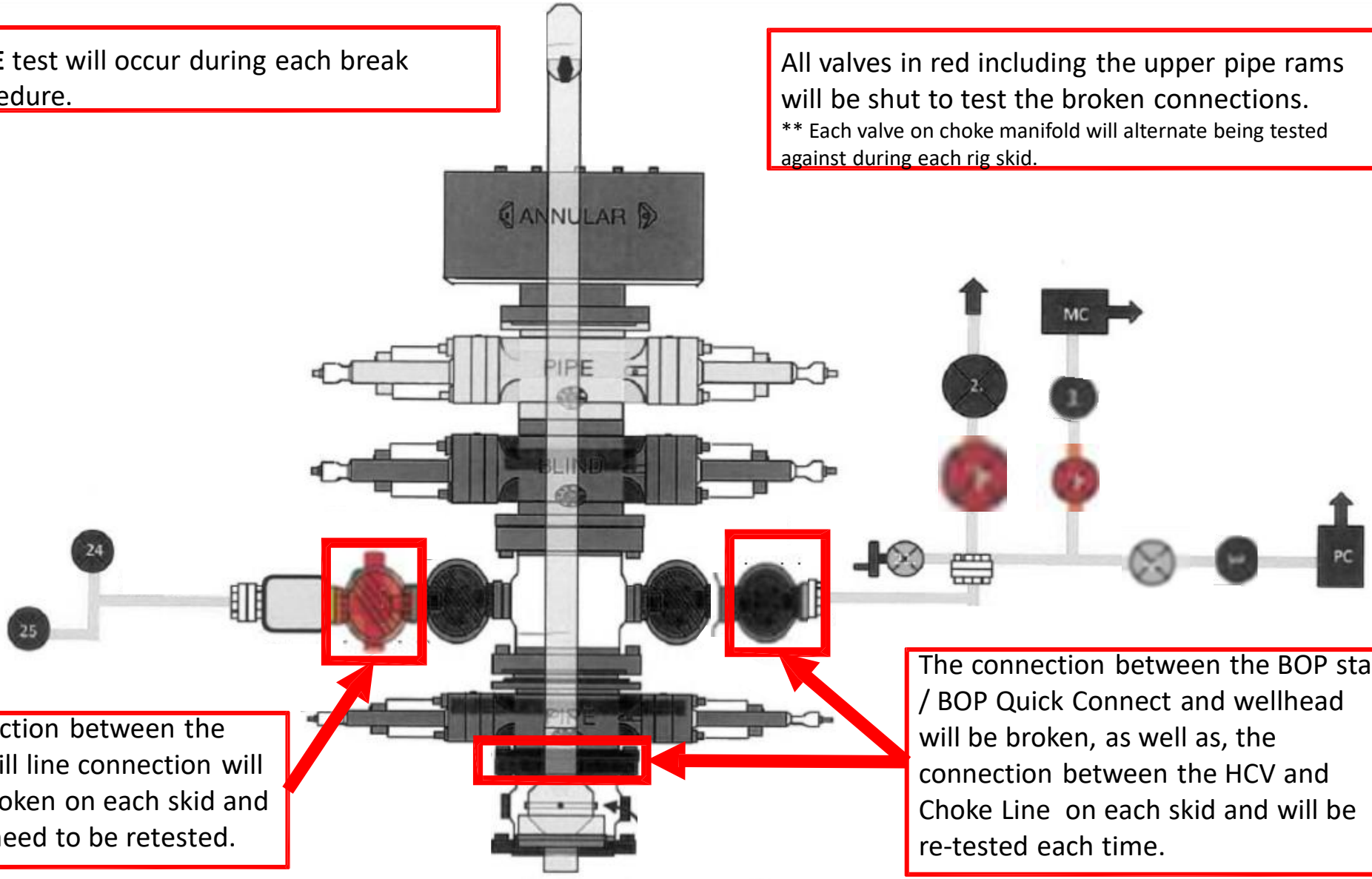
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

4. Full BOP test will be required prior to drilling the production hole.

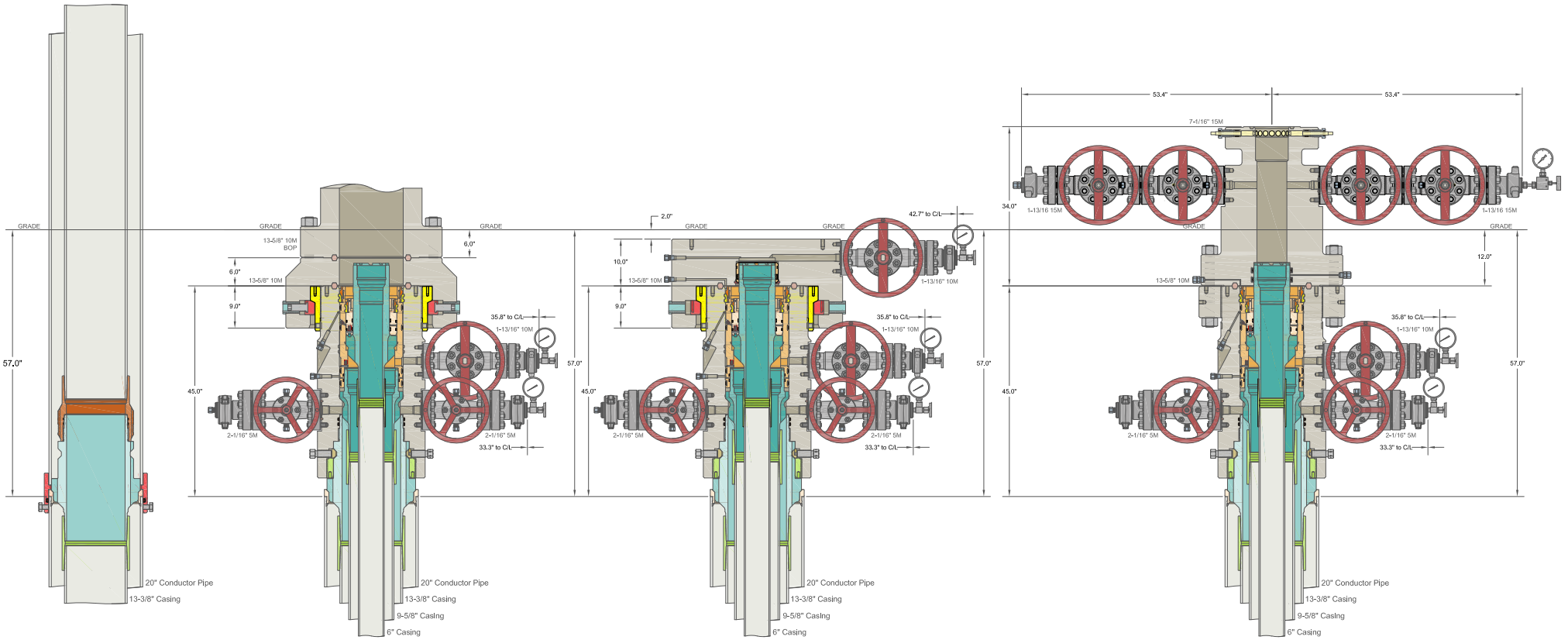
Only **ONE** test will occur during each break test procedure.

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.



The connection between the HCV and kill line connection will **NOT** be broken on each skid and does not need to be retested.

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

(20") x 13-3/8" x 9-5/8" x 6" MBU-3T-CFL-R-DBLO-SF Wellhead
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head
And Drilling & Skid Configurations

DRAWN	DLE	04NOV22
APPRV		

DRAWING NO. HBE0000833

Well Plan Report - Poker Lake Unit 20 DTD South 219H

Measured Depth:	28926.00 ft
TVD RKB:	10969.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439669.00 ft
Easting:	632766.20 ft
RKB:	3278.00 ft
Ground Level:	3246.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan Sections Poker Lake Unit 20 DTD South 219H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1572.47	9.45	345.36	1570.33	37.61	-9.82	2.00	0.00	2.00	
5586.27	9.45	345.36	5529.67	675.19	-176.38	0.00	0.00	0.00	
6058.74	0.00	0.00	6000.00	712.80	-186.20	-2.00	0.00	2.00	
10311.54	0.00	0.00	10252.80	712.80	-186.20	0.00	0.00	0.00	
11436.54	90.00	179.68	10969.00	-3.39	-182.18	8.00	0.00	8.00	
28831.24	90.00	179.68	10969.00	-17397.81	-84.42	0.00	0.00	0.00	LTP 10
28926.83	90.00	179.68	10969.00	-17493.40	-83.88	0.00	0.00	0.00	BHL 10

Position Uncertainty Poker Lake Unit 20 DTD South 219H

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

Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	of Bias (ft)	Error (ft)	Error (ft)	Azimuth (°)	Used
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	112.260	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	122.728	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	125.475	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	1.343	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	127.421	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	127.870	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	128.192	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.333	0.000	3.138	0.000	2.484	0.000	0.000	3.642	2.774	128.446	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.501	0.000	2.529	0.000	0.000	4.014	3.132	128.582	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.057	0.000	3.865	0.000	2.579	0.000	0.000	4.384	3.491	128.759	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.418	0.000	4.227	0.000	2.632	0.000	0.000	4.752	3.849	128.868	MWD+IFR1+MS
1200.000	1.999	345.300	1199.980	4.551	0.000	4.808	0.000	2.688	0.000	0.000	5.238	4.252	122.487	MWD+IFR1+MS
1300.000	4.000	345.300	1299.838	5.135	0.000	5.153	0.000	2.747	0.000	0.000	5.941	4.721	110.228	MWD+IFR1+MS
1400.000	6.000	345.300	1399.452	5.558	0.000	5.498	0.000	2.812	0.000	0.000	6.635	5.109	103.995	MWD+IFR1+MS
1500.000	7.999	345.300	1498.702	5.849	0.000	5.845	0.000	2.885	0.000	0.000	7.295	5.471	100.556	MWD+IFR1+MS
1572.400	9.449	345.300	1570.332	5.889	0.000	6.087	0.000	2.936	0.000	0.000	7.631	5.721	99.586	MWD+IFR1+MS
1600.000	9.449	345.300	1597.488	5.955	0.000	6.175	0.000	2.952	0.000	0.000	7.709	5.815	99.548	MWD+IFR1+MS
1700.000	9.449	345.300	1696.131	6.191	0.000	6.510	0.000	3.025	0.000	0.000	7.995	6.158	99.738	MWD+IFR1+MS
1800.000	9.449	345.300	1794.774	6.439	0.000	6.863	0.000	3.101	0.000	0.000	8.308	6.509	100.230	MWD+IFR1+MS
1900.000	9.449	345.300	1893.417	6.693	0.000	7.219	0.000	3.181	0.000	0.000	8.628	6.861	100.691	MWD+IFR1+MS
2000.000	9.449	345.300	1992.060	6.951	0.000	7.575	0.000	3.263	0.000	0.000	8.951	7.215	101.128	MWD+IFR1+MS
2100.000	9.449	345.300	2090.703	7.212	0.000	7.933	0.000	3.348	0.000	0.000	9.278	7.569	101.544	MWD+IFR1+MS
2200.000	9.449	345.300	2189.346	7.476	0.000	8.292	0.000	3.435	0.000	0.000	9.608	7.926	101.941	MWD+IFR1+MS
2300.000	9.449	345.300	2287.989	7.743	0.000	8.651	0.000	3.524	0.000	0.000	9.943	8.283	102.312	MWD+IFR1+MS
2400.000	9.449	345.300	2386.632	8.011	0.000	9.011	0.000	3.615	0.000	0.000	10.276	8.640	102.692	MWD+IFR1+MS
2500.000	9.449	345.300	2485.275	8.284	0.000	9.372	0.000	3.708	0.000	0.000	10.616	8.999	103.012	MWD+IFR1+MS
2600.000	9.449	345.300	2583.918	8.557	0.000	9.734	0.000	3.803	0.000	0.000	10.956	9.358	103.350	MWD+IFR1+MS
2700.000	9.449	345.300	2682.562	8.836	0.000	10.097	0.000	3.900	0.000	0.000	11.302	9.719	103.621	MWD+IFR1+MS
2800.000	9.449	345.300	2781.205	9.113	0.000	10.457	0.000	3.999	0.000	0.000	11.648	10.076	103.883	MWD+IFR1+MS
2900.000	9.449	345.300	2879.848	9.394	0.000	10.823	0.000	4.099	0.000	0.000	11.995	10.441	104.170	MWD+IFR1+MS

3000.000	9.449	345.300	2978.491	9.673	0.000	11.186	0.000	4.200	0.000	0.000	12.342	10.802	104.449	MWD+IFR1+MS
3100.000	9.449	345.300	3077.134	9.955	0.000	11.551	0.000	4.303	0.000	0.000	12.690	11.165	104.715	MWD+IFR1+MS
3200.000	9.449	345.300	3175.777	10.241	0.000	11.914	0.000	4.409	0.000	0.000	13.045	11.525	104.894	MWD+IFR1+MS
3300.000	9.449	345.300	3274.420	10.523	0.000	12.277	0.000	4.516	0.000	0.000	13.394	11.887	105.138	MWD+IFR1+MS
3400.000	9.449	345.300	3373.063	10.809	0.000	12.643	0.000	4.624	0.000	0.000	13.749	12.250	105.338	MWD+IFR1+MS
3500.000	9.449	345.300	3471.706	11.098	0.000	13.009	0.000	4.733	0.000	0.000	14.105	12.616	105.519	MWD+IFR1+MS
3600.000	9.449	345.300	3570.349	11.385	0.000	13.376	0.000	4.845	0.000	0.000	14.460	12.981	105.736	MWD+IFR1+MS
3700.000	9.449	345.300	3668.992	11.673	0.000	13.742	0.000	4.957	0.000	0.000	14.816	13.345	105.921	MWD+IFR1+MS
3800.000	9.449	345.300	3767.635	11.963	0.000	14.108	0.000	5.071	0.000	0.000	15.174	13.710	106.086	MWD+IFR1+MS
3900.000	9.449	345.300	3866.279	12.252	0.000	14.472	0.000	5.187	0.000	0.000	15.530	14.072	106.245	MWD+IFR1+MS
4000.000	9.449	345.300	3964.922	12.544	0.000	14.840	0.000	5.304	0.000	0.000	15.890	14.439	106.397	MWD+IFR1+MS
4100.000	9.449	345.300	4063.565	12.835	0.000	15.207	0.000	5.423	0.000	0.000	16.249	14.804	106.555	MWD+IFR1+MS
4200.000	9.449	345.300	4162.208	13.127	0.000	15.574	0.000	5.543	0.000	0.000	16.610	15.170	106.696	MWD+IFR1+MS
4300.000	9.449	345.300	4260.851	13.418	0.000	15.939	0.000	5.665	0.000	0.000	16.968	15.534	106.831	MWD+IFR1+MS
4400.000	9.449	345.300	4359.494	13.712	0.000	16.308	0.000	5.788	0.000	0.000	17.331	15.901	106.972	MWD+IFR1+MS
4500.000	9.449	345.300	4458.137	14.005	0.000	16.675	0.000	5.914	0.000	0.000	17.691	16.267	107.098	MWD+IFR1+MS
4600.000	9.449	345.300	4556.780	14.299	0.000	17.040	0.000	6.040	0.000	0.000	18.053	16.631	107.187	MWD+IFR1+MS
4700.000	9.449	345.300	4655.423	14.593	0.000	17.409	0.000	6.168	0.000	0.000	18.416	16.999	107.314	MWD+IFR1+MS
4800.000	9.449	345.300	4754.066	14.889	0.000	17.775	0.000	6.298	0.000	0.000	18.780	17.365	107.395	MWD+IFR1+MS
4900.000	9.449	345.300	4852.709	15.183	0.000	18.143	0.000	6.430	0.000	0.000	19.142	17.731	107.505	MWD+IFR1+MS
5000.000	9.449	345.300	4951.353	15.478	0.000	18.511	0.000	6.564	0.000	0.000	19.505	18.098	107.620	MWD+IFR1+MS
5100.000	9.449	345.300	5049.996	15.774	0.000	18.878	0.000	6.699	0.000	0.000	19.869	18.464	107.692	MWD+IFR1+MS
5200.000	9.449	345.300	5148.639	16.071	0.000	19.246	0.000	6.836	0.000	0.000	20.234	18.831	107.770	MWD+IFR1+MS
5300.000	9.449	345.300	5247.282	16.366	0.000	19.614	0.000	6.975	0.000	0.000	20.597	19.198	107.867	MWD+IFR1+MS
5400.000	9.449	345.300	5345.925	16.664	0.000	19.982	0.000	7.115	0.000	0.000	20.964	19.566	107.931	MWD+IFR1+MS
5500.000	9.449	345.300	5444.568	16.961	0.000	20.350	0.000	7.258	0.000	0.000	21.328	19.932	108.001	MWD+IFR1+MS
5586.200	9.449	345.300	5529.668	17.216	0.000	20.665	0.000	7.382	0.000	0.000	21.640	20.249	108.032	MWD+IFR1+MS
5600.000	9.173	345.300	5543.216	17.392	0.000	20.714	0.000	7.403	0.000	0.000	21.688	20.298	108.003	MWD+IFR1+MS
5700.000	7.174	345.300	5642.195	18.679	0.000	21.074	0.000	7.550	0.000	0.000	22.072	20.667	107.430	MWD+IFR1+MS
5800.000	5.174	345.300	5741.610	20.012	0.000	21.436	0.000	7.697	0.000	0.000	22.534	21.038	105.904	MWD+IFR1+MS
5900.000	3.174	345.300	5841.340	21.317	0.000	21.792	0.000	7.840	0.000	0.000	22.987	21.401	104.616	MWD+IFR1+MS
6000.000	1.174	345.300	5941.263	22.595	0.000	22.144	0.000	7.978	0.000	0.000	23.433	21.759	103.506	MWD+IFR1+MS
6058.700	0.000	0.000	6000.000	23.565	0.000	22.057	0.000	8.058	0.000	0.000	23.652	21.963	103.356	MWD+IFR1+MS

6100.000	0.000	0.000	6041.258	23.700	0.000	22.199	0.000	8.114	0.000	0.000	23.787	22.106	103.379	MWD+IFR1+MS
6200.000	0.000	0.000	6141.258	24.029	0.000	22.546	0.000	8.250	0.000	0.000	24.117	22.452	103.491	MWD+IFR1+MS
6300.000	0.000	0.000	6241.258	24.362	0.000	22.898	0.000	8.390	0.000	0.000	24.452	22.801	103.742	MWD+IFR1+MS
6400.000	0.000	0.000	6341.258	24.696	0.000	23.249	0.000	8.532	0.000	0.000	24.789	23.150	103.974	MWD+IFR1+MS
6500.000	0.000	0.000	6441.258	25.030	0.000	23.601	0.000	8.676	0.000	0.000	25.125	23.500	104.213	MWD+IFR1+MS
6600.000	0.000	0.000	6541.258	25.365	0.000	23.952	0.000	8.823	0.000	0.000	25.463	23.849	104.439	MWD+IFR1+MS
6700.000	0.000	0.000	6641.258	25.702	0.000	24.304	0.000	8.973	0.000	0.000	25.802	24.199	104.654	MWD+IFR1+MS
6800.000	0.000	0.000	6741.258	26.038	0.000	24.656	0.000	9.125	0.000	0.000	26.140	24.548	104.873	MWD+IFR1+MS
6900.000	0.000	0.000	6841.258	26.376	0.000	25.008	0.000	9.280	0.000	0.000	26.480	24.898	105.083	MWD+IFR1+MS
7000.000	0.000	0.000	6941.258	26.713	0.000	25.361	0.000	9.437	0.000	0.000	26.820	25.249	105.314	MWD+IFR1+MS
7100.000	0.000	0.000	7041.258	27.052	0.000	25.714	0.000	9.598	0.000	0.000	27.161	25.599	105.524	MWD+IFR1+MS
7200.000	0.000	0.000	7141.258	27.390	0.000	26.067	0.000	9.761	0.000	0.000	27.501	25.950	105.743	MWD+IFR1+MS
7300.000	0.000	0.000	7241.258	27.729	0.000	26.420	0.000	9.927	0.000	0.000	27.842	26.300	105.947	MWD+IFR1+MS
7400.000	0.000	0.000	7341.258	28.070	0.000	26.773	0.000	10.095	0.000	0.000	28.185	26.651	106.142	MWD+IFR1+MS
7500.000	0.000	0.000	7441.258	28.410	0.000	27.127	0.000	10.266	0.000	0.000	28.527	27.003	106.359	MWD+IFR1+MS
7600.000	0.000	0.000	7541.258	28.751	0.000	27.481	0.000	10.440	0.000	0.000	28.871	27.355	106.549	MWD+IFR1+MS
7700.000	0.000	0.000	7641.258	29.091	0.000	27.833	0.000	10.616	0.000	0.000	29.213	27.705	106.741	MWD+IFR1+MS
7800.000	0.000	0.000	7741.258	29.433	0.000	28.187	0.000	10.794	0.000	0.000	29.557	28.056	106.931	MWD+IFR1+MS
7900.000	0.000	0.000	7841.258	29.774	0.000	28.541	0.000	10.977	0.000	0.000	29.901	28.409	107.132	MWD+IFR1+MS
8000.000	0.000	0.000	7941.258	30.116	0.000	28.895	0.000	11.162	0.000	0.000	30.245	28.760	107.317	MWD+IFR1+MS
8100.000	0.000	0.000	8041.258	30.458	0.000	29.249	0.000	11.353	0.000	0.000	30.589	29.112	107.512	MWD+IFR1+MS
8200.000	0.000	0.000	8141.258	30.803	0.000	29.604	0.000	11.541	0.000	0.000	30.935	29.465	107.692	MWD+IFR1+MS
8300.000	0.000	0.000	8241.258	31.145	0.000	29.958	0.000	11.739	0.000	0.000	31.280	29.817	107.882	MWD+IFR1+MS
8400.000	0.000	0.000	8341.258	31.490	0.000	30.312	0.000	11.933	0.000	0.000	31.627	30.169	108.038	MWD+IFR1+MS
8500.000	0.000	0.000	8441.258	31.828	0.000	30.668	0.000	12.133	0.000	0.000	31.967	30.522	108.299	MWD+IFR1+MS
8600.000	0.000	0.000	8541.258	32.171	0.000	31.021	0.000	12.337	0.000	0.000	32.313	30.873	108.469	MWD+IFR1+MS
8700.000	0.000	0.000	8641.258	32.512	0.000	31.377	0.000	12.542	0.000	0.000	32.656	31.227	108.712	MWD+IFR1+MS
8800.000	0.000	0.000	8741.258	32.863	0.000	31.718	0.000	12.751	0.000	0.000	33.007	31.568	108.627	MWD+IFR1+MS
8900.000	0.000	0.000	8841.258	33.211	0.000	32.078	0.000	12.965	0.000	0.000	33.358	31.926	108.827	MWD+IFR1+MS
9000.000	0.000	0.000	8941.258	33.556	0.000	32.435	0.000	13.180	0.000	0.000	33.704	32.280	109.020	MWD+IFR1+MS
9100.000	0.000	0.000	9041.258	33.897	0.000	32.787	0.000	13.398	0.000	0.000	34.048	32.631	109.216	MWD+IFR1+MS
9200.000	0.000	0.000	9141.258	34.249	0.000	33.151	0.000	13.616	0.000	0.000	34.402	32.993	109.405	MWD+IFR1+MS
9300.000	0.000	0.000	9241.258	34.583	0.000	33.496	0.000	13.842	0.000	0.000	34.738	33.336	109.597	MWD+IFR1+MS

9400.000	0.000	0.000	9341.258	34.928	0.000	33.853	0.000	14.068	0.000	0.000	35.086	33.690	109.787	MWD+IFR1+MS
9500.000	0.000	0.000	9441.258	35.285	0.000	34.205	0.000	14.297	0.000	0.000	35.442	34.042	109.781	MWD+IFR1+MS
9600.000	0.000	0.000	9541.258	35.623	0.000	34.569	0.000	14.529	0.000	0.000	35.784	34.402	110.155	MWD+IFR1+MS
9700.000	0.000	0.000	9641.258	35.972	0.000	34.914	0.000	14.765	0.000	0.000	36.134	34.747	110.145	MWD+IFR1+MS
9800.000	0.000	0.000	9741.258	36.318	0.000	35.270	0.000	15.003	0.000	0.000	36.482	35.101	110.326	MWD+IFR1+MS
9900.000	0.000	0.000	9841.258	36.674	0.000	35.637	0.000	15.248	0.000	0.000	36.840	35.466	110.501	MWD+IFR1+MS
10000.000	0.000	0.000	9941.258	37.014	0.000	35.986	0.000	15.492	0.000	0.000	37.181	35.813	110.678	MWD+IFR1+MS
10100.000	0.000	0.000	10041.258	37.363	0.000	36.346	0.000	15.738	0.000	0.000	37.533	36.170	110.854	MWD+IFR1+MS
10200.000	0.000	0.000	10141.258	37.709	0.000	36.701	0.000	15.991	0.000	0.000	37.881	36.524	111.023	MWD+IFR1+MS
10300.000	0.000	0.000	10241.258	38.066	0.000	37.054	0.000	16.245	0.000	0.000	38.238	36.876	111.006	MWD+IFR1+MS
10311.000	0.000	0.000	10252.800	38.105	0.000	37.094	0.000	16.273	0.000	0.000	38.277	36.917	111.006	MWD+IFR1+MS
10400.000	7.076	179.600	10341.034	42.783	0.000	37.396	-0.000	16.502	0.000	0.000	38.707	37.226	109.234	MWD+IFR1+MS
10500.000	15.070	179.600	10439.091	47.832	0.000	37.690	-0.000	16.832	0.000	0.000	39.889	37.561	103.010	MWD+IFR1+MS
10600.000	23.070	179.600	10533.523	51.727	0.000	37.969	-0.000	17.323	0.000	0.000	41.062	37.854	100.306	MWD+IFR1+MS
10700.000	31.070	179.600	10622.490	54.203	0.000	38.219	-0.000	18.028	0.000	0.000	42.081	38.107	99.025	MWD+IFR1+MS
10800.000	39.070	179.600	10704.262	55.175	0.000	38.455	-0.000	18.976	0.000	0.000	42.929	38.341	98.391	MWD+IFR1+MS
10900.000	47.070	179.600	10777.247	54.608	0.000	38.650	-0.000	20.164	0.000	0.000	43.591	38.533	98.081	MWD+IFR1+MS
11000.000	55.070	179.600	10840.024	52.540	0.000	38.818	-0.000	21.562	0.000	0.000	44.064	38.696	98.000	MWD+IFR1+MS
11100.000	63.070	179.600	10891.371	49.095	0.000	38.960	-0.000	23.119	0.000	0.000	44.385	38.833	98.032	MWD+IFR1+MS
11200.000	71.060	179.600	10930.289	44.401	0.000	39.076	-0.000	24.785	0.000	0.000	44.569	38.943	98.138	MWD+IFR1+MS
11300.000	79.060	179.600	10956.021	38.567	0.000	39.153	-0.000	26.497	0.000	0.000	44.651	39.017	98.243	MWD+IFR1+MS
11400.000	87.060	179.600	10968.065	31.647	0.000	39.204	-0.000	28.196	0.000	0.000	44.674	39.067	98.289	MWD+IFR1+MS
11436.000	90.000	179.600	10968.997	28.344	0.000	39.217	-0.000	28.344	0.000	0.000	44.673	39.081	98.279	MWD+IFR1+MS
11500.000	90.000	179.600	10968.997	28.468	0.000	39.229	-0.000	28.468	0.000	0.000	44.672	39.095	98.243	MWD+IFR1+MS
11600.000	90.000	179.600	10968.997	28.644	0.000	39.268	-0.000	28.644	0.000	0.000	44.682	39.135	98.194	MWD+IFR1+MS
11700.000	90.000	179.600	10968.997	28.841	0.000	39.318	-0.000	28.841	0.000	0.000	44.680	39.188	98.179	MWD+IFR1+MS
11800.000	90.000	179.600	10968.997	29.059	0.000	39.394	-0.000	29.059	0.000	0.000	44.679	39.265	98.201	MWD+IFR1+MS
11900.000	90.000	179.600	10968.997	29.295	0.000	39.483	-0.000	29.295	0.000	0.000	44.690	39.355	98.225	MWD+IFR1+MS
12000.000	90.000	179.600	10968.997	29.552	0.000	39.571	-0.000	29.552	0.000	0.000	44.689	39.445	98.268	MWD+IFR1+MS
12100.000	90.000	179.600	10968.997	29.826	0.000	39.697	-0.000	29.826	0.000	0.000	44.700	39.571	98.351	MWD+IFR1+MS
12200.000	90.000	179.600	10968.997	30.118	0.000	39.823	-0.000	30.118	0.000	0.000	44.700	39.697	98.457	MWD+IFR1+MS
12300.000	90.000	179.600	10968.997	30.427	0.000	39.961	-0.000	30.427	0.000	0.000	44.712	39.835	98.571	MWD+IFR1+MS
12400.000	90.000	179.600	10968.997	30.754	0.000	40.123	-0.000	30.754	0.000	0.000	44.724	39.997	98.733	MWD+IFR1+MS

12500.000	90.000	179.600	10968.997	31.097	0.000	40.297	-0.000	31.097	0.000	0.000	44.736	40.170	98.930	MWD+IFR1+MS
12600.000	90.000	179.600	10968.997	31.456	0.000	40.483	-0.000	31.456	0.000	0.000	44.738	40.355	99.188	MWD+IFR1+MS
12700.000	90.000	179.600	10968.997	31.828	0.000	40.680	-0.000	31.828	0.000	0.000	44.752	40.550	99.468	MWD+IFR1+MS
12800.000	90.000	179.600	10968.997	32.218	0.000	40.888	-0.000	32.218	0.000	0.000	44.765	40.756	99.802	MWD+IFR1+MS
12900.000	90.000	179.600	10968.997	32.619	0.000	41.107	-0.000	32.619	0.000	0.000	44.780	40.973	100.197	MWD+IFR1+MS
13000.000	90.000	179.600	10968.997	33.030	0.000	41.350	-0.000	33.030	0.000	0.000	44.795	41.211	100.704	MWD+IFR1+MS
13100.000	90.000	179.600	10968.997	33.466	0.000	41.603	-0.000	33.466	0.000	0.000	44.812	41.459	101.313	MWD+IFR1+MS
13200.000	90.000	179.600	10968.997	33.912	0.000	41.866	-0.000	33.912	0.000	0.000	44.830	41.716	102.052	MWD+IFR1+MS
13300.000	90.000	179.600	10968.997	34.366	0.000	42.140	-0.000	34.366	0.000	0.000	44.861	41.982	102.907	MWD+IFR1+MS
13400.000	90.000	179.600	10968.997	34.828	0.000	42.424	-0.000	34.828	0.000	0.000	44.883	42.256	104.026	MWD+IFR1+MS
13500.000	90.000	179.600	10968.997	35.299	0.000	42.729	-0.000	35.299	0.000	0.000	44.909	42.547	105.513	MWD+IFR1+MS
13600.000	90.000	179.600	10968.997	35.791	0.000	43.043	-0.000	35.791	0.000	0.000	44.939	42.842	107.442	MWD+IFR1+MS
13700.000	90.000	179.600	10968.997	36.290	0.000	43.356	-0.000	36.290	0.000	0.000	44.986	43.131	109.784	MWD+IFR1+MS
13800.000	90.000	179.600	10968.997	36.797	0.000	43.689	-0.000	36.797	0.000	0.000	45.034	43.427	113.210	MWD+IFR1+MS
13900.000	90.000	179.600	10968.997	37.323	0.000	44.042	-0.000	37.323	0.000	0.000	45.111	43.726	117.941	MWD+IFR1+MS
14000.000	90.000	179.600	10968.997	37.855	0.000	44.393	-0.000	37.855	0.000	0.000	45.205	43.994	124.416	MWD+IFR1+MS
14100.000	90.000	179.600	10968.997	38.393	0.000	44.751	-0.000	38.393	0.000	0.000	45.349	44.232	132.418	MWD+IFR1+MS
14200.000	90.000	179.600	10968.997	38.936	0.000	45.130	-0.000	38.936	0.000	0.000	45.553	44.429	-38.428	MWD+IFR1+MS
14300.000	90.000	179.600	10968.997	39.484	0.000	45.516	-0.000	39.484	0.000	0.000	45.814	44.565	-29.834	MWD+IFR1+MS
14400.000	90.000	179.600	10968.997	40.050	0.000	45.909	-0.000	40.050	0.000	0.000	46.128	44.668	-23.319	MWD+IFR1+MS
14500.000	90.000	179.600	10968.997	40.620	0.000	46.310	-0.000	40.620	0.000	0.000	46.476	44.744	-18.548	MWD+IFR1+MS
14600.000	90.000	179.600	10968.997	41.195	0.000	46.730	-0.000	41.195	0.000	0.000	46.858	44.804	-15.017	MWD+IFR1+MS
14700.000	90.000	179.600	10968.997	41.773	0.000	47.145	-0.000	41.773	0.000	0.000	47.247	44.852	-12.493	MWD+IFR1+MS
14800.000	90.000	179.600	10968.997	42.356	0.000	47.578	-0.000	42.356	0.000	0.000	47.661	44.893	-10.546	MWD+IFR1+MS
14900.000	90.000	179.600	10968.997	42.953	0.000	48.017	-0.000	42.953	0.000	0.000	48.086	44.930	-9.049	MWD+IFR1+MS
15000.000	90.000	179.600	10968.997	43.555	0.000	48.463	-0.000	43.555	0.000	0.000	48.520	44.964	-7.869	MWD+IFR1+MS
15100.000	90.000	179.600	10968.997	44.170	0.000	48.914	-0.000	44.170	0.000	0.000	48.963	44.995	-6.921	MWD+IFR1+MS
15200.000	90.000	179.600	10968.997	44.777	0.000	49.382	-0.000	44.777	0.000	0.000	49.424	45.025	-6.130	MWD+IFR1+MS
15300.000	90.000	179.600	10968.997	45.398	0.000	49.846	-0.000	45.398	0.000	0.000	49.882	45.053	-5.487	MWD+IFR1+MS
15400.000	90.000	179.600	10968.997	46.022	0.000	50.325	-0.000	46.022	0.000	0.000	50.356	45.081	-4.936	MWD+IFR1+MS
15500.000	90.000	179.600	10968.997	46.648	0.000	50.809	-0.000	46.648	0.000	0.000	50.836	45.118	-4.476	MWD+IFR1+MS
15600.000	90.000	179.600	10968.997	47.276	0.000	51.299	-0.000	47.276	0.000	0.000	51.323	45.144	-4.073	MWD+IFR1+MS
15700.000	90.000	179.600	10968.997	47.917	0.000	51.793	-0.000	47.917	0.000	0.000	51.814	45.180	-3.730	MWD+IFR1+MS

15800.000	90.000	179.600	10968.997	48.559	0.000	52.302	-0.000	48.559	0.000	0.000	52.321	45.205	-3.420	MWD+IFR1+MS
15900.000	90.000	179.600	10968.997	49.204	0.000	52.816	-0.000	49.204	0.000	0.000	52.832	45.241	-3.152	MWD+IFR1+MS
16000.000	90.000	179.600	10968.997	49.850	0.000	53.325	-0.000	49.850	0.000	0.000	53.339	45.265	-2.916	MWD+IFR1+MS
16100.000	90.000	179.600	10968.997	50.507	0.000	53.847	-0.000	50.507	0.000	0.000	53.860	45.300	-2.706	MWD+IFR1+MS
16200.000	90.000	179.600	10968.997	51.157	0.000	54.374	-0.000	51.157	0.000	0.000	54.385	45.335	-2.517	MWD+IFR1+MS
16300.000	90.000	179.600	10968.997	51.817	0.000	54.914	-0.000	51.817	0.000	0.000	54.924	45.359	-2.343	MWD+IFR1+MS
16400.000	90.000	179.600	10968.997	52.488	0.000	55.448	-0.000	52.488	0.000	0.000	55.457	45.393	-2.190	MWD+IFR1+MS
16500.000	90.000	179.600	10968.997	53.151	0.000	55.995	-0.000	53.151	0.000	0.000	56.003	45.427	-2.051	MWD+IFR1+MS
16600.000	90.000	179.600	10968.997	53.824	0.000	56.546	-0.000	53.824	0.000	0.000	56.553	45.461	-1.924	MWD+IFR1+MS
16700.000	90.000	179.600	10968.997	54.498	0.000	57.100	-0.000	54.498	0.000	0.000	57.107	45.495	-1.808	MWD+IFR1+MS
16800.000	90.000	179.600	10968.997	55.172	0.000	57.658	-0.000	55.172	0.000	0.000	57.664	45.529	-1.702	MWD+IFR1+MS
16900.000	90.000	179.600	10968.997	55.848	0.000	58.219	-0.000	55.848	0.000	0.000	58.224	45.563	-1.606	MWD+IFR1+MS
17000.000	90.000	179.600	10968.997	56.533	0.000	58.792	-0.000	56.533	0.000	0.000	58.796	45.596	-1.516	MWD+IFR1+MS
17100.000	90.000	179.600	10968.997	57.219	0.000	59.367	-0.000	57.219	0.000	0.000	59.371	45.630	-1.433	MWD+IFR1+MS
17200.000	90.000	179.600	10968.997	57.905	0.000	59.937	-0.000	57.905	0.000	0.000	59.940	45.674	-1.358	MWD+IFR1+MS
17300.000	90.000	179.600	10968.997	58.592	0.000	60.518	-0.000	58.592	0.000	0.000	60.521	45.708	-1.288	MWD+IFR1+MS
17400.000	90.000	179.600	10968.997	59.287	0.000	61.110	-0.000	59.287	0.000	0.000	61.113	45.741	-1.221	MWD+IFR1+MS
17500.000	90.000	179.600	10968.997	59.983	0.000	61.696	-0.000	59.983	0.000	0.000	61.698	45.785	-1.161	MWD+IFR1+MS
17600.000	90.000	179.600	10968.997	60.679	0.000	62.293	-0.000	60.679	0.000	0.000	62.295	45.819	-1.104	MWD+IFR1+MS
17700.000	90.000	179.600	10968.997	61.376	0.000	62.884	-0.000	61.376	0.000	0.000	62.886	45.863	-1.053	MWD+IFR1+MS
17800.000	90.000	179.600	10968.997	62.081	0.000	63.485	-0.000	62.081	0.000	0.000	63.487	45.896	-1.003	MWD+IFR1+MS
17900.000	90.000	179.600	10968.997	62.777	0.000	64.089	-0.000	62.777	0.000	0.000	64.090	45.940	-0.957	MWD+IFR1+MS
18000.000	90.000	179.600	10968.997	63.482	0.000	64.702	-0.000	63.482	0.000	0.000	64.703	45.973	-0.914	MWD+IFR1+MS
18100.000	90.000	179.600	10968.997	64.187	0.000	65.310	-0.000	64.187	0.000	0.000	65.311	46.016	-0.874	MWD+IFR1+MS
18200.000	90.000	179.600	10968.997	64.900	0.000	65.927	-0.000	64.900	0.000	0.000	65.928	46.060	-0.836	MWD+IFR1+MS
18300.000	90.000	179.600	10968.997	65.612	0.000	66.538	-0.000	65.612	0.000	0.000	66.539	46.104	-0.801	MWD+IFR1+MS
18400.000	90.000	179.600	10968.997	66.317	0.000	67.159	-0.000	66.317	0.000	0.000	67.160	46.147	-0.767	MWD+IFR1+MS
18500.000	90.000	179.600	10968.997	67.037	0.000	67.781	-0.000	67.037	0.000	0.000	67.782	46.180	-0.735	MWD+IFR1+MS
18600.000	90.000	179.600	10968.997	67.750	0.000	68.413	-0.000	67.750	0.000	0.000	68.413	46.224	-0.706	MWD+IFR1+MS
18700.000	90.000	179.600	10968.997	68.469	0.000	69.038	-0.000	68.469	0.000	0.000	69.039	46.267	-0.678	MWD+IFR1+MS
18800.000	90.000	179.600	10968.997	69.181	0.000	69.673	-0.000	69.181	0.000	0.000	69.673	46.310	-0.651	MWD+IFR1+MS
18900.000	90.000	179.600	10968.997	69.900	0.000	70.309	-0.000	69.900	0.000	0.000	70.309	46.364	-0.626	MWD+IFR1+MS
19000.000	90.000	179.600	10968.997	70.626	0.000	70.946	-0.000	70.626	0.000	0.000	70.946	46.408	-0.603	MWD+IFR1+MS

19100.000	90.000	179.600	10968.997	71.344	0.000	71.584	-0.000	71.344	0.000	0.000	71.584	46.451	-0.580	MWD+IFR1+MS
19200.000	90.000	179.600	10968.997	72.069	0.000	72.224	-0.000	72.069	0.000	0.000	72.224	46.494	-0.559	MWD+IFR1+MS
19300.000	90.000	179.600	10968.997	72.794	0.000	72.865	-0.000	72.794	0.000	0.000	72.865	46.548	-0.540	MWD+IFR1+MS
19400.000	90.000	179.600	10968.997	73.519	0.000	73.514	-0.000	73.519	0.000	0.000	73.514	46.591	-0.520	MWD+IFR1+MS
19500.000	90.000	179.600	10968.997	74.250	0.000	74.164	-0.000	74.250	0.000	0.000	74.164	46.634	-0.502	MWD+IFR1+MS
19600.000	90.000	179.600	10968.997	74.973	0.000	74.815	-0.000	74.973	0.000	0.000	74.815	46.688	-0.485	MWD+IFR1+MS
19700.000	90.000	179.600	10968.997	75.703	0.000	75.467	-0.000	75.703	0.000	0.000	75.467	46.741	-0.469	MWD+IFR1+MS
19800.000	90.000	179.600	10968.997	76.433	0.000	76.126	-0.000	76.433	0.000	0.000	76.126	46.784	-0.453	MWD+IFR1+MS
19900.000	90.000	179.600	10968.997	77.169	0.000	76.780	-0.000	77.169	0.000	0.000	76.780	46.838	-0.439	MWD+IFR1+MS
20000.000	90.000	179.600	10968.997	77.897	0.000	77.442	-0.000	77.897	0.000	0.000	77.442	46.881	-0.425	MWD+IFR1+MS
20100.000	90.000	179.600	10968.997	78.632	0.000	78.104	-0.000	78.632	0.000	0.000	78.104	46.934	-0.411	MWD+IFR1+MS
20200.000	90.000	179.600	10968.997	79.366	0.000	78.767	-0.000	79.366	0.000	0.000	78.767	46.987	-0.399	MWD+IFR1+MS
20300.000	90.000	179.600	10968.997	80.100	0.000	79.430	-0.000	80.100	0.000	0.000	79.430	47.041	-0.387	MWD+IFR1+MS
20400.000	90.000	179.600	10968.997	80.839	0.000	80.095	-0.000	80.839	0.000	0.000	80.095	47.094	-0.375	MWD+IFR1+MS
20500.000	90.000	179.600	10968.997	81.578	0.000	80.766	-0.000	81.578	0.000	0.000	80.766	47.147	-0.364	MWD+IFR1+MS
20600.000	90.000	179.600	10968.997	82.316	0.000	81.438	-0.000	82.316	0.000	0.000	81.438	47.200	-0.354	MWD+IFR1+MS
20700.000	90.000	179.600	10968.997	83.054	0.000	82.105	-0.000	83.054	0.000	0.000	82.105	47.253	-0.344	MWD+IFR1+MS
20800.000	90.000	179.600	10968.997	83.791	0.000	82.778	-0.000	83.791	0.000	0.000	82.778	47.306	-0.334	MWD+IFR1+MS
20900.000	90.000	179.600	10968.997	84.534	0.000	83.457	-0.000	84.534	0.000	0.000	83.457	47.359	-0.325	MWD+IFR1+MS
21000.000	90.000	179.600	10968.997	85.276	0.000	84.132	-0.000	85.276	0.000	0.000	84.132	47.412	-0.316	MWD+IFR1+MS
21100.000	90.000	179.600	10968.997	86.017	0.000	84.812	-0.000	86.017	0.000	0.000	84.812	47.475	-0.308	MWD+IFR1+MS
21200.000	90.000	179.600	10968.997	86.758	0.000	85.488	-0.000	86.758	0.000	0.000	85.488	47.527	-0.300	MWD+IFR1+MS
21300.000	90.000	179.600	10968.997	87.504	0.000	86.169	-0.000	87.504	0.000	0.000	86.169	47.580	-0.293	MWD+IFR1+MS
21400.000	90.000	179.600	10968.997	88.250	0.000	86.857	-0.000	88.250	0.000	0.000	86.857	47.643	-0.285	MWD+IFR1+MS
21500.000	90.000	179.600	10968.997	88.994	0.000	87.539	-0.000	88.994	0.000	0.000	87.539	47.696	-0.278	MWD+IFR1+MS
21600.000	90.000	179.600	10968.997	89.739	0.000	88.222	-0.000	89.739	0.000	0.000	88.222	47.759	-0.272	MWD+IFR1+MS
21700.000	90.000	179.600	10968.997	90.488	0.000	88.911	-0.000	90.488	0.000	0.000	88.911	47.821	-0.265	MWD+IFR1+MS
21800.000	90.000	179.600	10968.997	91.236	0.000	89.600	-0.000	91.236	0.000	0.000	89.600	47.874	-0.259	MWD+IFR1+MS
21900.000	90.000	179.600	10968.997	91.984	0.000	90.289	-0.000	91.984	0.000	0.000	90.289	47.936	-0.253	MWD+IFR1+MS
22000.000	90.000	179.600	10968.997	92.731	0.000	90.978	-0.000	92.731	0.000	0.000	90.979	47.999	-0.248	MWD+IFR1+MS
22100.000	90.000	179.600	10968.997	93.477	0.000	91.668	-0.000	93.477	0.000	0.000	91.668	48.051	-0.242	MWD+IFR1+MS
22200.000	90.000	179.600	10968.997	94.228	0.000	92.364	-0.000	94.228	0.000	0.000	92.364	48.113	-0.237	MWD+IFR1+MS
22300.000	90.000	179.600	10968.997	94.979	0.000	93.054	-0.000	94.979	0.000	0.000	93.054	48.176	-0.232	MWD+IFR1+MS

22400.000	90.000	179.600	10968.997	95.729	0.000	93.750	-0.000	95.729	0.000	0.000	93.750	48.238	-0.227	MWD+IFR1+MS
22500.000	90.000	179.600	10968.997	96.478	0.000	94.446	-0.000	96.478	0.000	0.000	94.446	48.300	-0.223	MWD+IFR1+MS
22600.000	90.000	179.600	10968.997	97.232	0.000	95.142	-0.000	97.232	0.000	0.000	95.143	48.362	-0.218	MWD+IFR1+MS
22700.000	90.000	179.600	10968.997	97.985	0.000	95.844	-0.000	97.985	0.000	0.000	95.844	48.424	-0.214	MWD+IFR1+MS
22800.000	90.000	179.600	10968.997	98.737	0.000	96.540	-0.000	98.737	0.000	0.000	96.541	48.496	-0.210	MWD+IFR1+MS
22900.000	90.000	179.600	10968.997	99.489	0.000	97.242	-0.000	99.489	0.000	0.000	97.242	48.558	-0.206	MWD+IFR1+MS
23000.000	90.000	179.600	10968.997	100.200	0.000	97.944	-0.000	100.200	0.000	0.000	97.944	48.620	-0.203	MWD+IFR1+MS
23100.000	90.000	179.600	10968.997	100.995	0.000	98.646	-0.000	100.995	0.000	0.000	98.646	48.682	-0.199	MWD+IFR1+MS
23200.000	90.000	179.600	10968.997	101.735	0.000	99.348	-0.000	101.735	0.000	0.000	99.348	48.754	-0.196	MWD+IFR1+MS
23300.000	90.000	179.600	10968.997	102.470	0.000	100.050	-0.000	102.470	0.000	0.000	100.050	48.815	-0.192	MWD+IFR1+MS
23400.000	90.000	179.600	10968.997	103.247	0.000	100.747	-0.000	103.247	0.000	0.000	100.748	48.887	-0.189	MWD+IFR1+MS
23500.000	90.000	179.600	10968.997	104.019	0.000	101.440	-0.000	104.019	0.000	0.000	101.440	48.948	-0.186	MWD+IFR1+MS
23600.000	90.000	179.600	10968.997	104.738	0.000	102.127	-0.000	104.738	0.000	0.000	102.128	49.020	-0.184	MWD+IFR1+MS
23700.000	90.000	179.600	10968.997	105.499	0.000	102.859	-0.000	105.499	0.000	0.000	102.860	49.091	-0.181	MWD+IFR1+MS
23800.000	90.000	179.600	10968.997	106.254	0.000	103.585	-0.000	106.254	0.000	0.000	103.586	49.152	-0.178	MWD+IFR1+MS
23900.000	90.000	179.600	10968.997	107.005	0.000	104.259	-0.000	107.005	0.000	0.000	104.260	49.223	-0.176	MWD+IFR1+MS
24000.000	90.000	179.600	10968.997	107.796	0.000	104.976	-0.000	107.796	0.000	0.000	104.977	49.294	-0.173	MWD+IFR1+MS
24100.000	90.000	179.600	10968.997	108.536	0.000	105.688	-0.000	108.536	0.000	0.000	105.689	49.365	-0.171	MWD+IFR1+MS
24200.000	90.000	179.600	10968.997	109.316	0.000	106.395	-0.000	109.316	0.000	0.000	106.396	49.436	-0.169	MWD+IFR1+MS
24300.000	90.000	179.600	10968.997	110.045	0.000	107.098	-0.000	110.045	0.000	0.000	107.098	49.507	-0.166	MWD+IFR1+MS
24400.000	90.000	179.600	10968.997	110.815	0.000	107.842	-0.000	110.815	0.000	0.000	107.843	49.577	-0.164	MWD+IFR1+MS
24500.000	90.000	179.600	10968.997	111.580	0.000	108.535	-0.000	111.580	0.000	0.000	108.536	49.648	-0.162	MWD+IFR1+MS
24600.000	90.000	179.600	10968.997	112.339	0.000	109.270	-0.000	112.339	0.000	0.000	109.271	49.718	-0.160	MWD+IFR1+MS
24700.000	90.000	179.600	10968.997	113.093	0.000	109.954	-0.000	113.093	0.000	0.000	109.955	49.789	-0.159	MWD+IFR1+MS
24800.000	90.000	179.600	10968.997	113.842	0.000	110.679	-0.000	113.842	0.000	0.000	110.680	49.859	-0.157	MWD+IFR1+MS
24900.000	90.000	179.600	10968.997	114.630	0.000	111.400	-0.000	114.630	0.000	0.000	111.401	49.929	-0.155	MWD+IFR1+MS
25000.000	90.000	179.600	10968.997	115.369	0.000	112.116	-0.000	115.369	0.000	0.000	112.116	50.009	-0.154	MWD+IFR1+MS
25100.000	90.000	179.600	10968.997	116.146	0.000	112.827	-0.000	116.146	0.000	0.000	112.828	50.079	-0.152	MWD+IFR1+MS
25200.000	90.000	179.600	10968.997	116.919	0.000	113.578	-0.000	116.919	0.000	0.000	113.578	50.159	-0.150	MWD+IFR1+MS
25300.000	90.000	179.600	10968.997	117.686	0.000	114.280	-0.000	117.686	0.000	0.000	114.281	50.229	-0.149	MWD+IFR1+MS
25400.000	90.000	179.600	10968.997	118.448	0.000	114.978	-0.000	118.448	0.000	0.000	114.979	50.308	-0.148	MWD+IFR1+MS
25500.000	90.000	179.600	10968.997	119.206	0.000	115.715	-0.000	119.206	0.000	0.000	115.715	50.378	-0.146	MWD+IFR1+MS
25600.000	90.000	179.600	10968.997	119.958	0.000	116.447	-0.000	119.958	0.000	0.000	116.448	50.457	-0.145	MWD+IFR1+MS

25700.000	90.000	179.600	10968.997	120.706	0.000	117.174	-0.000	120.706	0.000	0.000	117.175	50.536	-0.144	MWD+IFR1+MS
25800.000	90.000	179.600	10968.997	121.491	0.000	117.898	-0.000	121.491	0.000	0.000	117.899	50.606	-0.143	MWD+IFR1+MS
25900.000	90.000	179.600	10968.997	122.270	0.000	118.616	-0.000	122.270	0.000	0.000	118.617	50.685	-0.142	MWD+IFR1+MS
26000.000	90.000	179.600	10968.997	123.004	0.000	119.331	-0.000	123.004	0.000	0.000	119.332	50.763	-0.141	MWD+IFR1+MS
26100.000	90.000	179.600	10968.997	123.774	0.000	120.041	-0.000	123.774	0.000	0.000	120.042	50.842	-0.140	MWD+IFR1+MS
26200.000	90.000	179.600	10968.997	124.539	0.000	120.788	-0.000	124.539	0.000	0.000	120.789	50.921	-0.139	MWD+IFR1+MS
26300.000	90.000	179.600	10968.997	125.300	0.000	121.490	-0.000	125.300	0.000	0.000	121.491	50.999	-0.138	MWD+IFR1+MS
26400.000	90.000	179.600	10968.997	126.095	0.000	122.229	-0.000	126.095	0.000	0.000	122.230	51.078	-0.137	MWD+IFR1+MS
26500.000	90.000	179.600	10968.997	126.846	0.000	122.963	-0.000	126.846	0.000	0.000	122.964	51.156	-0.136	MWD+IFR1+MS
26600.000	90.000	179.600	10968.997	127.593	0.000	123.692	-0.000	127.593	0.000	0.000	123.693	51.234	-0.135	MWD+IFR1+MS
26700.000	90.000	179.600	10968.997	128.374	0.000	124.418	-0.000	128.374	0.000	0.000	124.419	51.322	-0.135	MWD+IFR1+MS
26800.000	90.000	179.600	10968.997	129.151	0.000	125.139	-0.000	129.151	0.000	0.000	125.140	51.400	-0.134	MWD+IFR1+MS
26900.000	90.000	179.600	10968.997	129.923	0.000	125.856	-0.000	129.923	0.000	0.000	125.857	51.477	-0.133	MWD+IFR1+MS
27000.000	90.000	179.600	10968.997	130.690	0.000	126.569	-0.000	130.690	0.000	0.000	126.570	51.565	-0.133	MWD+IFR1+MS
27100.000	90.000	179.600	10968.997	131.453	0.000	127.318	-0.000	131.453	0.000	0.000	127.319	51.642	-0.132	MWD+IFR1+MS
27200.000	90.000	179.600	10968.997	132.212	0.000	128.023	-0.000	132.212	0.000	0.000	128.024	51.720	-0.131	MWD+IFR1+MS
27300.000	90.000	179.600	10968.997	132.966	0.000	128.762	-0.000	132.966	0.000	0.000	128.764	51.807	-0.131	MWD+IFR1+MS
27400.000	90.000	179.600	10968.997	133.754	0.000	129.498	-0.000	133.754	0.000	0.000	129.499	51.893	-0.130	MWD+IFR1+MS
27500.000	90.000	179.600	10968.997	134.499	0.000	130.230	-0.000	134.499	0.000	0.000	130.231	51.970	-0.130	MWD+IFR1+MS
27600.000	90.000	179.600	10968.997	135.277	0.000	130.957	-0.000	135.277	0.000	0.000	130.958	52.057	-0.129	MWD+IFR1+MS
27700.000	90.000	179.600	10968.997	136.051	0.000	131.680	-0.000	136.051	0.000	0.000	131.682	52.143	-0.129	MWD+IFR1+MS
27800.000	90.000	179.600	10968.997	136.821	0.000	132.438	-0.000	136.821	0.000	0.000	132.439	52.230	-0.128	MWD+IFR1+MS
27900.000	90.000	179.600	10968.997	137.586	0.000	133.153	-0.000	137.586	0.000	0.000	133.154	52.306	-0.128	MWD+IFR1+MS
28000.000	90.000	179.600	10968.997	138.347	0.000	133.902	-0.000	138.347	0.000	0.000	133.903	52.392	-0.128	MWD+IFR1+MS
28100.000	90.000	179.600	10968.997	139.140	0.000	134.610	-0.000	139.140	0.000	0.000	134.611	52.478	-0.127	MWD+IFR1+MS
28200.000	90.000	179.600	10968.997	139.893	0.000	135.350	-0.000	139.893	0.000	0.000	135.352	52.564	-0.127	MWD+IFR1+MS
28300.000	90.000	179.600	10968.997	140.677	0.000	136.087	-0.000	140.677	0.000	0.000	136.088	52.649	-0.127	MWD+IFR1+MS
28400.000	90.000	179.600	10968.997	141.421	0.000	136.820	-0.000	141.421	0.000	0.000	136.821	52.734	-0.126	MWD+IFR1+MS
28500.000	90.000	179.600	10968.997	142.197	0.000	137.549	-0.000	142.197	0.000	0.000	137.550	52.829	-0.126	MWD+IFR1+MS
28600.000	90.000	179.600	10968.997	142.969	0.000	138.274	-0.000	142.969	0.000	0.000	138.275	52.914	-0.126	MWD+IFR1+MS
28700.000	90.000	179.600	10968.997	143.736	0.000	139.031	-0.000	143.736	0.000	0.000	139.033	52.999	-0.126	MWD+IFR1+MS
28800.000	90.000	179.600	10968.997	144.499	0.000	139.749	-0.000	144.499	0.000	0.000	139.750	53.084	-0.125	MWD+IFR1+MS
28831.000	90.000	179.600	10968.997	144.741	0.000	139.999	-0.000	144.741	0.000	0.000	140.000	53.112	-0.125	MWD+IFR1+MS

28900.000	90.000	179.600	10968.997	145.293	0.000	140.498	-0.000	145.293	0.000	0.000	140.499	53.178	-0.125	MWD+IFR1+MS
28926.000	90.000	179.600	10968.997	145.499	0.000	140.676	-0.000	145.499	0.000	0.000	140.677	53.197	-0.125	MWD+IFR1+MS

Plan Targets Poker Lake Unit 20 DTD South 219H

Target Name	**Measured Depth (ft)**	**Grid Northing (ft)**	**Grid Easting (ft)**	**TVD MSL (ft)**	**Target Shape**
FTP 10	11198.26	440381.80	632580.00	7691.00	RECTANGLE
SHL 9	12042.51	439669.20	632766.08	8269.53	RECTANGLE
LTP 10	28826.83	422275.60	632681.70	7691.00	RECTANGLE
BHL 10	28926.02	422175.60	632682.30	7691.00	RECTANGLE

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

XTO Energy Inc.
PLU 20 Dog Town Draw 219H
Projected TD: 28926.83' MD / 10969' TVD
SHL: 815' FNL & 2360' FWL , Section 20, T24S, R30E
BHL: 2439' FNL & 2181' 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	835'	Water
Top of Salt	1238'	Water
Base of Salt	3431'	Water
Delaware	3625'	Water
Brushy Canyon	6123'	Water/Oil/Gas
Bone Spring	7419'	Water
1st Bone Spring	8405'	Water/Oil/Gas
2nd Bone Spring	9223'	Water/Oil/Gas
3rd Bone Spring	10317'	Water/Oil/Gas
Wolfcamp	10708'	Water/Oil/Gas
Wolfcamp X	10729'	Water/Oil/Gas
Wolfcamp Y	10807'	Water/Oil/Gas
Wolfcamp A	10849'	Water/Oil/Gas
Target/Land Curve	10969'	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 @ 935' (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 10111.54' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 28926.83 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9811.54 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 935'	13.375	54.5	J-55	BTC	New	1.09	2.77	17.84
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	1.91	2.26	3.13
12.25	4000' – 10111.54'	9.625	40	HC L-80	BTC	New	1.39	1.66	3.75
8.5	0' – 10011.54'	6	26	P-110	Semi-Premium	New	1.17	2.27	1.62
8.5	10011.54' - 28926.83'	6	26	P-110	Semi-Premium	New	1.17	2.07	1.84

· 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

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 +/- 935'

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 +/- 10111.54'
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: 1150 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6123
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 (6123') 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 +/- 28926.83'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9811.54 feet
Tail: 3160 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10311.54 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 4146 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 nippling up on the 13.375, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling 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' - 935'	17.5	FW/Native	8.4-8.9	35-40	NC
935' - 10111.54'	12.25	FW / Cut Brine / Direct Emulsion	9-9.5	30-32	NC
10111.54' - 28926.83'	8.5	OBM	11.5-12	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 175 to 195 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6559 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.

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 Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☑ AMENDED REPORT
APD ID 10400089353

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015-	98220	Purple Sage; Wolfcamp (gas)

[4] Property Code	[5] Property Name	[6] Well Number
	POKER LAKE UNIT 20 DTD	219H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC	3,246'

[10] Surface Location

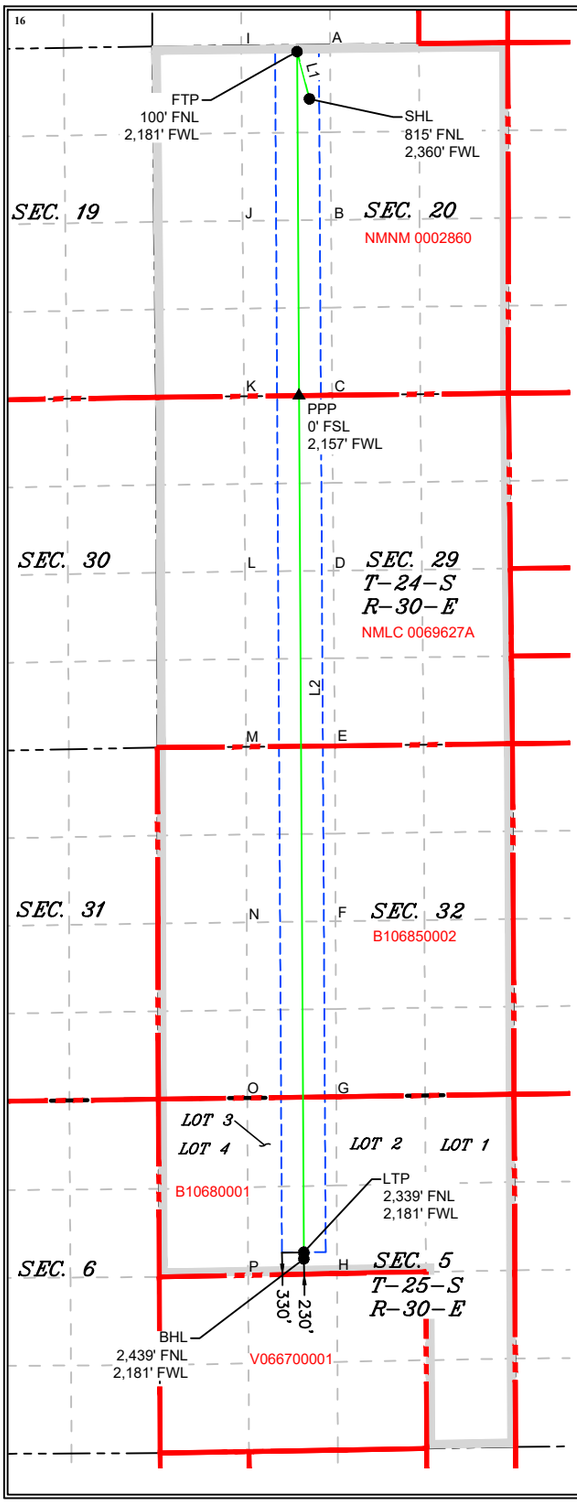
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	20	24S	30E		815	NORTH	2,360	WEST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	5	25S	30E		2,439	NORTH	2,181	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
2,321.00			

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.



LEGEND

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

LOT ACREAGE TABLE

SECTION 5
T-25-S R-30-E
LOT 1 = 39.84 ACRES
LOT 2 = 40.11 ACRES
LOT 3 = 40.39 ACRES
LOT 4 = 40.66 ACRES

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	345°21'08"	736.74'
L2	179°40'34"	18,207.00'

COORDINATE TABLE

	SHL (NAD 83 NME)	SHL (NAD 27 NME)
Y =	439,728.3 N	439,669.0 N
X =	673,949.9 E	632,766.2 E
LAT. =	32.208163 °N	32.208039 °N
LONG. =	103.904565 °W	103.904078 °W

	FTP (NAD 83 NME)	FTP (NAD 27 NME)
Y =	440,441.1 N	440,381.8 N
X =	673,763.6 E	632,580.0 E
LAT. =	32.210124 °N	32.210000 °N
LONG. =	103.905158 °W	103.904671 °W

	PPP (NAD 83 NME)	PPP (NAD 27 NME)
Y =	435,252.0 N	435,192.9 N
X =	673,793.0 E	632,609.1 E
LAT. =	32.195860 °N	32.195736 °N
LONG. =	103.905130 °W	103.904643 °W

	LTP (NAD 83 NME)	LTP (NAD 27 NME)
Y =	422,334.4 N	422,275.6 N
X =	673,866.0 E	632,681.7 E
LAT. =	32.160351 °N	32.160226 °N
LONG. =	103.905060 °W	103.904575 °W

	BHL (NAD 83 NME)	BHL (NAD 27 NME)
Y =	422,234.4 N	422,175.6 N
X =	673,866.5 E	632,682.3 E
LAT. =	32.160076 °N	32.159951 °N
LONG. =	103.905060 °W	103.904574 °W

CORNER COORDINATES (NAD 83 NME)

A - Y =	440,546.3 N	A - X =	674,262.0 E
B - Y =	437,901.7 N	B - X =	674,277.4 E
C - Y =	435,257.7 N	C - X =	674,292.8 E
D - Y =	432,613.8 N	D - X =	674,313.6 E
E - Y =	429,970.0 N	E - X =	674,334.4 E
F - Y =	427,326.7 N	F - X =	674,344.5 E
G - Y =	424,680.6 N	G - X =	674,354.7 E
H - Y =	422,013.8 N	H - X =	674,366.7 E
I - Y =	440,532.2 N	I - X =	672,921.8 E
J - Y =	437,887.3 N	J - X =	672,943.1 E
K - Y =	435,242.5 N	K - X =	672,964.6 E
L - Y =	432,598.0 N	L - X =	672,980.4 E
M - Y =	429,957.3 N	M - X =	672,996.3 E
N - Y =	427,309.2 N	N - X =	673,004.9 E
O - Y =	424,662.1 N	O - X =	673,013.6 E
P - Y =	421,988.6 N	P - X =	673,026.9 E

CORNER COORDINATES (NAD 27 NME)

A - Y =	440,487.1 N	A - X =	633,078.3 E
B - Y =	437,842.5 N	B - X =	633,093.6 E
C - Y =	435,198.6 N	C - X =	633,108.9 E
D - Y =	432,554.7 N	D - X =	633,129.7 E
E - Y =	429,911.0 N	E - X =	633,150.4 E
F - Y =	427,267.8 N	F - X =	633,160.4 E
G - Y =	424,621.7 N	G - X =	633,170.5 E
H - Y =	421,954.9 N	H - X =	633,182.4 E
I - Y =	440,472.9 N	I - X =	631,738.2 E
J - Y =	437,828.0 N	J - X =	631,759.3 E
K - Y =	435,183.4 N	K - X =	631,780.7 E
L - Y =	432,538.9 N	L - X =	631,796.4 E
M - Y =	429,898.2 N	M - X =	631,812.3 E
N - Y =	427,250.3 N	N - X =	631,820.8 E
O - Y =	424,603.2 N	O - X =	631,829.4 E
P - Y =	421,929.7 N	P - X =	631,842.6 E

[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.

Rusty Klein 3-10-24
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 618.013003.06-41

C:\618.013 XTO Energy - NM\003 Poker Lake Unit\06 - PLU 20 DTD - EDDY\Wells\41 - 219H\DWG\SOUTH 219H C-102.dwg

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 359219

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 359219
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	6/28/2024