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

Sundry Print Report

05/08/2024

Well Name: POKER LAKE UNIT 20 DTD

Well Location: T24S / R30E / SEC 20 / NENE / 32.209257 / -103.89675

County or Parish/State: EDDY / NM

Well Number: 422H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMLC068905

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: 2778058

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/05/2024

Time Sundry Submitted: 05:06

Date proposed operation will begin: 04/02/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, FTP, LTP, BHL, casing sizes, cement, proposed total depth, and formation (pool). FROM: TO: SHL: 432' FNL & 577' FEL of Section 20-T24S-R30E 432' FNL & 577' FEL of Section 20-T24S-R30E FTP: 100' FSL & 990' FEL of Section 17-T24S-R30E 100' FNL & 1199' FEL of Section 20-T24S-R30E LTP: 330' FNL & 990' FEL of Section 32-T23S-R30E 330' FSL & 1005' FEL of Section 5-T25S-R30E BHL: 200' FNL & 990' FEL of Section 32-T23S-R30E 230' FSL & 1005' FEL of Section 5-T25S-R30E Proposed total depth will change from 32219' MD; 11018' TVD (Wolfcamp) to 30915' MD; TVD 10166' (Bone Spring). See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Drilling Plan, MBS, BOP Variance, Well Control Plan

NOI Attachments

Procedure Description

Well_Plan_Report____Poker_Lake_Unit_20_DTD_South_422H_20240305170525.pdf

3_String_Bighole_Four_Miler_HBE0000833_MBS_20240305170519.pdf

PLU_20_DTD_422H_PAD_D_Drilling_Plan_20240305170518.pdf

POKER_LAKE_UNIT_20_DTD_422H_C_102_FINAL_20240305170519.pdf

BOP_Variance_new_Language_BOP_BTV_20240305170518.pdf

Well_Control_Plan_w_CFR_43_3172_20240305170516.pdf

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Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2778058_Poker_Lake_Unit_20_DTD_422H_COAs_20240404133947.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: JEAN COOPER

Signed on: MAR 05, 2024 05:05 PM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND **State:** TX

Phone: (432) 620-6700

Email address: JEAN.COOPER@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 04/25/2024

Signature: Chris Walls

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

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

Additional Remarks

Attachments: C-102, Drilling Plan, Directional Drilling Plan, MBS, BOP Variance, Well Control Plan

Location of Well

0. SHL: NENE / 432 FNL / 577 FEL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.209257 / LONG: -103.89675 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 330 FSL / 990 FEL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.22541 / LONG: -103.89806 (TVD: 11018 feet, MD: 16700 feet)

PPP: SESE / 100 FSL / 990 FEL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210712 / LONG: -103.898083 (TVD: 11018 feet, MD: 11400 feet)

PPP: NESE / 330 FSL / 990 FEL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.21447 / LONG: -103.89806 (TVD: 11018 feet, MD: 12800 feet)

PPP: SESE / 330 FSL / 990 FEL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.24008 / LONG: -103.89806 (TVD: 11018 feet, MD: 22000 feet)

BHL: NENE / 200 FNL / 990 FEL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268067 / LONG: -103.898088 (TVD: 11018 feet, MD: 32219 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 422H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2778058** 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.

Well Plan Report - Poker Lake Unit 20 DTD South 422H

Measured Depth:	30915.78 ft
TVD RKB:	10166.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	440076.70 ft
Easting:	635181.70 ft
RKB:	3327.00 ft
Ground Level:	3295.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan Sections Poker Lake Unit 20 DTD South 422H

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	
1390.68	5.81	307.32	1390.19	8.93	-11.72	2.00	0.00	2.00	
6436.26	5.81	307.32	6409.81	318.77	-418.18	0.00	0.00	0.00	
6726.95	0.00	0.00	6700.00	327.70	-429.90	-2.00	0.00	2.00	
9476.75	0.00	0.00	9449.80	327.70	-429.90	0.00	0.00	0.00	
10601.75	90.00	179.68	10166.00	-388.49	-425.90	8.00	0.00	8.00	
30865.86	90.00	179.68	10166.00	-20652.28	-312.72	0.00	0.00	0.00	LTP 25
30915.78	90.00	179.68	10166.00	-20702.20	-312.45	0.00	0.00	0.00	BHL 25

Position Uncertainty Poker Lake Unit 20 DTD South 422H

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	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.374	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.406	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.443	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.484	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.530	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.580	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.633	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	307.317	1199.980	4.345	0.000	5.097	0.000	2.689	0.000	0.000	5.103	4.340	122.076	MWD+IFR1+MS
1300.000	4.000	307.317	1299.838	5.228	0.000	5.426	0.000	2.749	0.000	0.000	5.548	5.106	95.146	MWD+IFR1+MS
1390.684	5.814	307.317	1390.186	5.855	0.000	5.723	0.000	2.806	0.000	0.000	6.079	5.501	74.907	MWD+IFR1+MS
1400.000	5.814	307.317	1399.454	5.883	0.000	5.751	0.000	2.810	0.000	0.000	6.108	5.531	74.840	MWD+IFR1+MS
1500.000	5.814	307.317	1498.939	6.189	0.000	6.068	0.000	2.876	0.000	0.000	6.418	5.842	75.438	MWD+IFR1+MS
1600.000	5.814	307.317	1598.425	6.520	0.000	6.408	0.000	2.945	0.000	0.000	6.770	6.158	76.389	MWD+IFR1+MS
1700.000	5.814	307.317	1697.911	6.855	0.000	6.752	0.000	3.016	0.000	0.000	7.124	6.480	77.154	MWD+IFR1+MS
1800.000	5.814	307.317	1797.396	7.192	0.000	7.097	0.000	3.090	0.000	0.000	7.479	6.805	77.781	MWD+IFR1+MS
1900.000	5.814	307.317	1896.882	7.533	0.000	7.444	0.000	3.166	0.000	0.000	7.835	7.134	78.302	MWD+IFR1+MS
2000.000	5.814	307.317	1996.367	7.875	0.000	7.792	0.000	3.245	0.000	0.000	8.192	7.465	78.741	MWD+IFR1+MS
2100.000	5.814	307.317	2095.853	8.220	0.000	8.142	0.000	3.325	0.000	0.000	8.550	7.800	79.114	MWD+IFR1+MS
2200.000	5.814	307.317	2195.339	8.566	0.000	8.492	0.000	3.407	0.000	0.000	8.908	8.136	79.436	MWD+IFR1+MS
2300.000	5.814	307.317	2294.824	8.914	0.000	8.844	0.000	3.491	0.000	0.000	9.267	8.475	79.714	MWD+IFR1+MS
2400.000	5.814	307.317	2394.310	9.263	0.000	9.197	0.000	3.576	0.000	0.000	9.627	8.815	79.958	MWD+IFR1+MS
2500.000	5.814	307.317	2493.796	9.614	0.000	9.550	0.000	3.664	0.000	0.000	9.987	9.158	80.171	MWD+IFR1+MS
2600.000	5.814	307.317	2593.281	9.965	0.000	9.904	0.000	3.752	0.000	0.000	10.347	9.501	80.360	MWD+IFR1+MS
2700.000	5.814	307.317	2692.767	10.318	0.000	10.259	0.000	3.843	0.000	0.000	10.707	9.846	80.528	MWD+IFR1+MS
2800.000	5.814	307.317	2792.253	10.671	0.000	10.614	0.000	3.934	0.000	0.000	11.068	10.192	80.677	MWD+IFR1+MS
2900.000	5.814	307.317	2891.738	11.025	0.000	10.970	0.000	4.027	0.000	0.000	11.429	10.539	80.811	MWD+IFR1+MS

3000.000	5.814	307.317	2991.224	11.380	0.000	11.326	0.000	4.122	0.000	0.000	11.791	10.887	80.930	MWD+IFR1+MS
3100.000	5.814	307.317	3090.710	11.736	0.000	11.683	0.000	4.218	0.000	0.000	12.152	11.236	81.038	MWD+IFR1+MS
3200.000	5.814	307.317	3190.195	12.092	0.000	12.040	0.000	4.316	0.000	0.000	12.514	11.586	81.136	MWD+IFR1+MS
3300.000	5.814	307.317	3289.681	12.449	0.000	12.397	0.000	4.414	0.000	0.000	12.876	11.936	81.224	MWD+IFR1+MS
3400.000	5.814	307.317	3389.167	12.806	0.000	12.755	0.000	4.515	0.000	0.000	13.238	12.288	81.303	MWD+IFR1+MS
3500.000	5.814	307.317	3488.652	13.164	0.000	13.113	0.000	4.616	0.000	0.000	13.600	12.639	81.376	MWD+IFR1+MS
3600.000	5.814	307.317	3588.138	13.522	0.000	13.471	0.000	4.720	0.000	0.000	13.963	12.992	81.441	MWD+IFR1+MS
3700.000	5.814	307.317	3687.624	13.880	0.000	13.830	0.000	4.824	0.000	0.000	14.325	13.345	81.501	MWD+IFR1+MS
3800.000	5.814	307.317	3787.109	14.239	0.000	14.188	0.000	4.930	0.000	0.000	14.688	13.698	81.555	MWD+IFR1+MS
3900.000	5.814	307.317	3886.595	14.598	0.000	14.547	0.000	5.038	0.000	0.000	15.051	14.052	81.604	MWD+IFR1+MS
4000.000	5.814	307.317	3986.081	14.958	0.000	14.907	0.000	5.147	0.000	0.000	15.414	14.406	81.649	MWD+IFR1+MS
4100.000	5.814	307.317	4085.566	15.317	0.000	15.266	0.000	5.257	0.000	0.000	15.777	14.761	81.690	MWD+IFR1+MS
4200.000	5.814	307.317	4185.052	15.678	0.000	15.625	0.000	5.369	0.000	0.000	16.140	15.115	81.727	MWD+IFR1+MS
4300.000	5.814	307.317	4284.538	16.038	0.000	15.985	0.000	5.483	0.000	0.000	16.503	15.471	81.760	MWD+IFR1+MS
4400.000	5.814	307.317	4384.023	16.398	0.000	16.345	0.000	5.598	0.000	0.000	16.866	15.826	81.791	MWD+IFR1+MS
4500.000	5.814	307.317	4483.509	16.759	0.000	16.705	0.000	5.715	0.000	0.000	17.229	16.182	81.818	MWD+IFR1+MS
4600.000	5.814	307.317	4582.994	17.120	0.000	17.065	0.000	5.834	0.000	0.000	17.593	16.538	81.843	MWD+IFR1+MS
4700.000	5.814	307.317	4682.480	17.481	0.000	17.425	0.000	5.954	0.000	0.000	17.956	16.895	81.865	MWD+IFR1+MS
4800.000	5.814	307.317	4781.966	17.843	0.000	17.785	0.000	6.076	0.000	0.000	18.320	17.251	81.886	MWD+IFR1+MS
4900.000	5.814	307.317	4881.451	18.204	0.000	18.146	0.000	6.200	0.000	0.000	18.683	17.608	81.903	MWD+IFR1+MS
5000.000	5.814	307.317	4980.937	18.566	0.000	18.506	0.000	6.326	0.000	0.000	19.047	17.965	81.919	MWD+IFR1+MS
5100.000	5.814	307.317	5080.423	18.928	0.000	18.867	0.000	6.453	0.000	0.000	19.410	18.323	81.933	MWD+IFR1+MS
5200.000	5.814	307.317	5179.908	19.290	0.000	19.228	0.000	6.583	0.000	0.000	19.774	18.680	81.946	MWD+IFR1+MS
5300.000	5.814	307.317	5279.394	19.652	0.000	19.589	0.000	6.714	0.000	0.000	20.138	19.038	81.956	MWD+IFR1+MS
5400.000	5.814	307.317	5378.880	20.014	0.000	19.949	0.000	6.847	0.000	0.000	20.502	19.396	81.965	MWD+IFR1+MS
5500.000	5.814	307.317	5478.365	20.376	0.000	20.310	0.000	6.982	0.000	0.000	20.865	19.753	81.973	MWD+IFR1+MS
5600.000	5.814	307.317	5577.851	20.739	0.000	20.671	0.000	7.120	0.000	0.000	21.229	20.112	81.979	MWD+IFR1+MS
5700.000	5.814	307.317	5677.337	21.102	0.000	21.032	0.000	7.259	0.000	0.000	21.593	20.470	81.984	MWD+IFR1+MS
5800.000	5.814	307.317	5776.822	21.464	0.000	21.394	0.000	7.400	0.000	0.000	21.957	20.828	81.988	MWD+IFR1+MS
5900.000	5.814	307.317	5876.308	21.827	0.000	21.755	0.000	7.544	0.000	0.000	22.321	21.187	81.990	MWD+IFR1+MS
6000.000	5.814	307.317	5975.794	22.190	0.000	22.116	0.000	7.689	0.000	0.000	22.685	21.545	81.992	MWD+IFR1+MS
6100.000	5.814	307.317	6075.279	22.553	0.000	22.478	0.000	7.837	0.000	0.000	23.049	21.904	81.992	MWD+IFR1+MS
6200.000	5.814	307.317	6174.765	22.916	0.000	22.839	0.000	7.987	0.000	0.000	23.413	22.263	81.992	MWD+IFR1+MS

6300.000	5.814	307.317	6274.251	23.279	0.000	23.200	0.000	8.139	0.000	0.000	23.777	22.622	81.990	MWD+IFR1+MS
6400.000	5.814	307.317	6373.736	23.642	0.000	23.562	0.000	8.293	0.000	0.000	24.141	22.981	81.988	MWD+IFR1+MS
6436.265	5.814	307.317	6409.814	23.772	0.000	23.691	0.000	8.350	0.000	0.000	24.269	23.112	81.984	MWD+IFR1+MS
6500.000	4.539	307.317	6473.288	24.007	0.000	23.916	0.000	8.450	0.000	0.000	24.497	23.341	81.851	MWD+IFR1+MS
6600.000	2.539	307.317	6573.093	24.418	0.000	24.272	0.000	8.608	0.000	0.000	24.902	23.717	80.181	MWD+IFR1+MS
6700.000	0.539	307.317	6673.052	24.832	0.000	24.627	0.000	8.765	0.000	0.000	25.333	24.094	77.925	MWD+IFR1+MS
6726.949	0.000	0.000	6700.000	25.373	0.000	24.244	0.000	8.807	0.000	0.000	25.427	24.189	77.905	MWD+IFR1+MS
6800.000	0.000	0.000	6773.051	25.621	0.000	24.497	0.000	8.921	0.000	0.000	25.673	24.443	78.059	MWD+IFR1+MS
6900.000	0.000	0.000	6873.051	25.962	0.000	24.848	0.000	9.080	0.000	0.000	26.010	24.798	78.372	MWD+IFR1+MS
7000.000	0.000	0.000	6973.051	26.305	0.000	25.201	0.000	9.241	0.000	0.000	26.349	25.154	78.764	MWD+IFR1+MS
7100.000	0.000	0.000	7073.051	26.648	0.000	25.554	0.000	9.405	0.000	0.000	26.689	25.511	79.157	MWD+IFR1+MS
7200.000	0.000	0.000	7173.051	26.992	0.000	25.907	0.000	9.572	0.000	0.000	27.029	25.868	79.550	MWD+IFR1+MS
7300.000	0.000	0.000	7273.051	27.336	0.000	26.260	0.000	9.741	0.000	0.000	27.370	26.224	79.944	MWD+IFR1+MS
7400.000	0.000	0.000	7373.051	27.680	0.000	26.613	0.000	9.913	0.000	0.000	27.711	26.581	80.338	MWD+IFR1+MS
7500.000	0.000	0.000	7473.051	28.025	0.000	26.967	0.000	10.088	0.000	0.000	28.053	26.937	80.732	MWD+IFR1+MS
7600.000	0.000	0.000	7573.051	28.370	0.000	27.320	0.000	10.265	0.000	0.000	28.396	27.294	81.126	MWD+IFR1+MS
7700.000	0.000	0.000	7673.051	28.715	0.000	27.674	0.000	10.445	0.000	0.000	28.739	27.650	81.521	MWD+IFR1+MS
7800.000	0.000	0.000	7773.051	29.061	0.000	28.028	0.000	10.628	0.000	0.000	29.082	28.006	81.915	MWD+IFR1+MS
7900.000	0.000	0.000	7873.051	29.407	0.000	28.382	0.000	10.813	0.000	0.000	29.426	28.363	82.308	MWD+IFR1+MS
8000.000	0.000	0.000	7973.051	29.754	0.000	28.736	0.000	11.002	0.000	0.000	29.770	28.719	82.701	MWD+IFR1+MS
8100.000	0.000	0.000	8073.051	30.100	0.000	29.090	0.000	11.193	0.000	0.000	30.115	29.075	83.093	MWD+IFR1+MS
8200.000	0.000	0.000	8173.051	30.447	0.000	29.445	0.000	11.387	0.000	0.000	30.460	29.431	83.485	MWD+IFR1+MS
8300.000	0.000	0.000	8273.051	30.794	0.000	29.799	0.000	11.584	0.000	0.000	30.806	29.787	83.875	MWD+IFR1+MS
8400.000	0.000	0.000	8373.051	31.142	0.000	30.153	0.000	11.784	0.000	0.000	31.152	30.143	84.264	MWD+IFR1+MS
8500.000	0.000	0.000	8473.051	31.490	0.000	30.508	0.000	11.986	0.000	0.000	31.498	30.499	84.652	MWD+IFR1+MS
8600.000	0.000	0.000	8573.051	31.837	0.000	30.863	0.000	12.192	0.000	0.000	31.845	30.855	85.039	MWD+IFR1+MS
8700.000	0.000	0.000	8673.051	32.186	0.000	31.218	0.000	12.400	0.000	0.000	32.192	31.211	85.424	MWD+IFR1+MS
8800.000	0.000	0.000	8773.051	32.534	0.000	31.572	0.000	12.611	0.000	0.000	32.539	31.567	85.807	MWD+IFR1+MS
8900.000	0.000	0.000	8873.051	32.883	0.000	31.927	0.000	12.825	0.000	0.000	32.887	31.923	86.189	MWD+IFR1+MS
9000.000	0.000	0.000	8973.051	33.231	0.000	32.282	0.000	13.043	0.000	0.000	33.235	32.279	86.568	MWD+IFR1+MS
9100.000	0.000	0.000	9073.051	33.580	0.000	32.637	0.000	13.262	0.000	0.000	33.583	32.635	86.946	MWD+IFR1+MS
9200.000	0.000	0.000	9173.051	33.930	0.000	32.993	0.000	13.485	0.000	0.000	33.932	32.990	87.322	MWD+IFR1+MS
9300.000	0.000	0.000	9273.051	34.279	0.000	33.348	0.000	13.711	0.000	0.000	34.280	33.346	87.695	MWD+IFR1+MS

9400.000	0.000	0.000	9373.051	34.629	0.000	33.703	0.000	13.940	0.000	0.000	34.630	33.702	88.066	MWD+IFR1+MS
9476.749	0.000	0.000	9449.800	34.895	0.000	33.974	0.000	14.118	0.000	0.000	34.896	33.973	88.249	MWD+IFR1+MS
9500.000	1.860	179.680	9473.047	34.921	0.000	34.052	-0.000	14.172	0.000	0.000	34.973	34.051	88.253	MWD+IFR1+MS
9600.000	9.860	179.680	9572.444	35.126	0.000	34.369	-0.000	14.423	0.000	0.000	35.732	34.369	90.051	MWD+IFR1+MS
9700.000	17.860	179.680	9669.453	35.522	0.000	34.674	-0.000	14.807	0.000	0.000	37.135	34.671	91.699	MWD+IFR1+MS
9800.000	25.860	179.680	9762.187	35.374	0.000	34.962	-0.000	15.399	0.000	0.000	38.374	34.954	92.342	MWD+IFR1+MS
9900.000	33.860	179.680	9848.841	34.740	0.000	35.229	-0.000	16.250	0.000	0.000	39.427	35.216	92.726	MWD+IFR1+MS
10000.000	41.860	179.680	9927.728	33.704	0.000	35.472	-0.000	17.371	0.000	0.000	40.282	35.455	93.006	MWD+IFR1+MS
10100.000	49.860	179.680	9997.313	32.379	0.000	35.691	-0.000	18.741	0.000	0.000	40.940	35.669	93.232	MWD+IFR1+MS
10200.000	57.860	179.680	10056.241	30.907	0.000	35.884	-0.000	20.311	0.000	0.000	41.411	35.859	93.416	MWD+IFR1+MS
10300.000	65.860	179.680	10103.365	29.467	0.000	36.051	-0.000	22.023	0.000	0.000	41.716	36.023	93.556	MWD+IFR1+MS
10400.000	73.860	179.680	10137.769	28.265	0.000	36.192	-0.000	23.811	0.000	0.000	41.882	36.162	93.633	MWD+IFR1+MS
10500.000	81.860	179.680	10158.782	27.516	0.000	36.304	-0.000	25.614	0.000	0.000	41.950	36.276	93.619	MWD+IFR1+MS
10601.749	90.000	179.680	10165.997	27.461	0.000	36.390	-0.000	27.461	0.000	0.000	41.962	36.364	93.473	MWD+IFR1+MS
10700.000	90.000	179.680	10165.997	28.047	0.000	36.465	-0.000	28.047	0.000	0.000	41.964	36.442	93.255	MWD+IFR1+MS
10800.000	90.000	179.680	10165.997	28.221	0.000	36.557	-0.000	28.221	0.000	0.000	41.966	36.537	93.035	MWD+IFR1+MS
10900.000	90.000	179.680	10165.997	28.416	0.000	36.666	-0.000	28.416	0.000	0.000	41.969	36.649	92.818	MWD+IFR1+MS
11000.000	90.000	179.680	10165.997	28.630	0.000	36.789	-0.000	28.630	0.000	0.000	41.972	36.775	92.599	MWD+IFR1+MS
11100.000	90.000	179.680	10165.997	28.864	0.000	36.929	-0.000	28.864	0.000	0.000	41.976	36.917	92.379	MWD+IFR1+MS
11200.000	90.000	179.680	10165.997	29.118	0.000	37.083	-0.000	29.118	0.000	0.000	41.981	37.073	92.154	MWD+IFR1+MS
11300.000	90.000	179.680	10165.997	29.391	0.000	37.253	-0.000	29.391	0.000	0.000	41.987	37.245	91.923	MWD+IFR1+MS
11400.000	90.000	179.680	10165.997	29.681	0.000	37.437	-0.000	29.681	0.000	0.000	41.993	37.431	91.682	MWD+IFR1+MS
11500.000	90.000	179.680	10165.997	29.990	0.000	37.637	-0.000	29.990	0.000	0.000	42.000	37.632	91.428	MWD+IFR1+MS
11600.000	90.000	179.680	10165.997	30.315	0.000	37.850	-0.000	30.315	0.000	0.000	42.008	37.847	91.157	MWD+IFR1+MS
11700.000	90.000	179.680	10165.997	30.657	0.000	38.078	-0.000	30.657	0.000	0.000	42.017	38.076	90.864	MWD+IFR1+MS
11800.000	90.000	179.680	10165.997	31.016	0.000	38.320	-0.000	31.016	0.000	0.000	42.026	38.319	90.542	MWD+IFR1+MS
11900.000	90.000	179.680	10165.997	31.389	0.000	38.575	-0.000	31.389	0.000	0.000	42.036	38.575	90.180	MWD+IFR1+MS
12000.000	90.000	179.680	10165.997	31.778	0.000	38.844	-0.000	31.778	0.000	0.000	42.047	38.844	89.767	MWD+IFR1+MS
12100.000	90.000	179.680	10165.997	32.181	0.000	39.126	-0.000	32.181	0.000	0.000	42.059	39.126	89.284	MWD+IFR1+MS
12200.000	90.000	179.680	10165.997	32.599	0.000	39.421	-0.000	32.599	0.000	0.000	42.072	39.420	88.702	MWD+IFR1+MS
12300.000	90.000	179.680	10165.997	33.029	0.000	39.728	-0.000	33.029	0.000	0.000	42.086	39.726	87.978	MWD+IFR1+MS
12400.000	90.000	179.680	10165.997	33.473	0.000	40.048	-0.000	33.473	0.000	0.000	42.102	40.044	87.042	MWD+IFR1+MS
12500.000	90.000	179.680	10165.997	33.928	0.000	40.380	-0.000	33.928	0.000	0.000	42.120	40.371	85.768	MWD+IFR1+MS

12600.000	90.000	179.680	10165.997	34.396	0.000	40.723	-0.000	34.396	0.000	0.000	42.141	40.708	83.915	MWD+IFR1+MS
12700.000	90.000	179.680	10165.997	34.875	0.000	41.078	-0.000	34.875	0.000	0.000	42.167	41.052	80.962	MWD+IFR1+MS
12800.000	90.000	179.680	10165.997	35.365	0.000	41.444	-0.000	35.365	0.000	0.000	42.205	41.396	75.615	MWD+IFR1+MS
12900.000	90.000	179.680	10165.997	35.865	0.000	41.821	-0.000	35.865	0.000	0.000	42.274	41.719	64.428	MWD+IFR1+MS
13000.000	90.000	179.680	10165.997	36.376	0.000	42.208	-0.000	36.376	0.000	0.000	42.436	41.961	43.626	MWD+IFR1+MS
13100.000	90.000	179.680	10165.997	36.896	0.000	42.605	-0.000	36.896	0.000	0.000	42.733	42.078	25.991	MWD+IFR1+MS
13200.000	90.000	179.680	10165.997	37.425	0.000	43.013	-0.000	37.425	0.000	0.000	43.103	42.133	17.533	MWD+IFR1+MS
13300.000	90.000	179.680	10165.997	37.964	0.000	43.430	-0.000	37.964	0.000	0.000	43.503	42.169	13.302	MWD+IFR1+MS
13400.000	90.000	179.680	10165.997	38.510	0.000	43.856	-0.000	38.510	0.000	0.000	43.920	42.197	10.851	MWD+IFR1+MS
13500.000	90.000	179.680	10165.997	39.065	0.000	44.292	-0.000	39.065	0.000	0.000	44.349	42.222	9.265	MWD+IFR1+MS
13600.000	90.000	179.680	10165.997	39.628	0.000	44.736	-0.000	39.628	0.000	0.000	44.790	42.246	8.155	MWD+IFR1+MS
13700.000	90.000	179.680	10165.997	40.198	0.000	45.189	-0.000	40.198	0.000	0.000	45.240	42.268	7.333	MWD+IFR1+MS
13800.000	90.000	179.680	10165.997	40.775	0.000	45.651	-0.000	40.775	0.000	0.000	45.700	42.291	6.697	MWD+IFR1+MS
13900.000	90.000	179.680	10165.997	41.359	0.000	46.120	-0.000	41.359	0.000	0.000	46.168	42.314	6.190	MWD+IFR1+MS
14000.000	90.000	179.680	10165.997	41.949	0.000	46.598	-0.000	41.949	0.000	0.000	46.644	42.337	5.773	MWD+IFR1+MS
14100.000	90.000	179.680	10165.997	42.546	0.000	47.083	-0.000	42.546	0.000	0.000	47.128	42.360	5.425	MWD+IFR1+MS
14200.000	90.000	179.680	10165.997	43.149	0.000	47.575	-0.000	43.149	0.000	0.000	47.620	42.384	5.128	MWD+IFR1+MS
14300.000	90.000	179.680	10165.997	43.757	0.000	48.074	-0.000	43.757	0.000	0.000	48.118	42.408	4.871	MWD+IFR1+MS
14400.000	90.000	179.680	10165.997	44.372	0.000	48.581	-0.000	44.372	0.000	0.000	48.624	42.433	4.646	MWD+IFR1+MS
14500.000	90.000	179.680	10165.997	44.991	0.000	49.094	-0.000	44.991	0.000	0.000	49.137	42.457	4.446	MWD+IFR1+MS
14600.000	90.000	179.680	10165.997	45.615	0.000	49.614	-0.000	45.615	0.000	0.000	49.656	42.483	4.268	MWD+IFR1+MS
14700.000	90.000	179.680	10165.997	46.245	0.000	50.140	-0.000	46.245	0.000	0.000	50.182	42.509	4.108	MWD+IFR1+MS
14800.000	90.000	179.680	10165.997	46.879	0.000	50.672	-0.000	46.879	0.000	0.000	50.714	42.535	3.962	MWD+IFR1+MS
14900.000	90.000	179.680	10165.997	47.518	0.000	51.210	-0.000	47.518	0.000	0.000	51.251	42.562	3.830	MWD+IFR1+MS
15000.000	90.000	179.680	10165.997	48.161	0.000	51.753	-0.000	48.161	0.000	0.000	51.795	42.589	3.708	MWD+IFR1+MS
15100.000	90.000	179.680	10165.997	48.808	0.000	52.303	-0.000	48.808	0.000	0.000	52.344	42.617	3.595	MWD+IFR1+MS
15200.000	90.000	179.680	10165.997	49.459	0.000	52.857	-0.000	49.459	0.000	0.000	52.898	42.646	3.491	MWD+IFR1+MS
15300.000	90.000	179.680	10165.997	50.114	0.000	53.417	-0.000	50.114	0.000	0.000	53.458	42.675	3.394	MWD+IFR1+MS
15400.000	90.000	179.680	10165.997	50.772	0.000	53.982	-0.000	50.772	0.000	0.000	54.022	42.704	3.303	MWD+IFR1+MS
15500.000	90.000	179.680	10165.997	51.434	0.000	54.552	-0.000	51.434	0.000	0.000	54.592	42.734	3.218	MWD+IFR1+MS
15600.000	90.000	179.680	10165.997	52.100	0.000	55.126	-0.000	52.100	0.000	0.000	55.166	42.765	3.138	MWD+IFR1+MS
15700.000	90.000	179.680	10165.997	52.769	0.000	55.705	-0.000	52.769	0.000	0.000	55.745	42.796	3.063	MWD+IFR1+MS
15800.000	90.000	179.680	10165.997	53.441	0.000	56.289	-0.000	53.441	0.000	0.000	56.329	42.827	2.992	MWD+IFR1+MS

15900.000	90.000	179.680	10165.997	54.116	0.000	56.877	-0.000	54.116	0.000	0.000	56.916	42.859	2.925	MWD+IFR1+MS
16000.000	90.000	179.680	10165.997	54.793	0.000	57.469	-0.000	54.793	0.000	0.000	57.508	42.892	2.861	MWD+IFR1+MS
16100.000	90.000	179.680	10165.997	55.474	0.000	58.065	-0.000	55.474	0.000	0.000	58.104	42.925	2.800	MWD+IFR1+MS
16200.000	90.000	179.680	10165.997	56.158	0.000	58.665	-0.000	56.158	0.000	0.000	58.704	42.959	2.742	MWD+IFR1+MS
16300.000	90.000	179.680	10165.997	56.844	0.000	59.269	-0.000	56.844	0.000	0.000	59.308	42.993	2.687	MWD+IFR1+MS
16400.000	90.000	179.680	10165.997	57.532	0.000	59.877	-0.000	57.532	0.000	0.000	59.915	43.028	2.634	MWD+IFR1+MS
16500.000	90.000	179.680	10165.997	58.223	0.000	60.488	-0.000	58.223	0.000	0.000	60.526	43.063	2.583	MWD+IFR1+MS
16600.000	90.000	179.680	10165.997	58.917	0.000	61.103	-0.000	58.917	0.000	0.000	61.141	43.098	2.535	MWD+IFR1+MS
16700.000	90.000	179.680	10165.997	59.612	0.000	61.721	-0.000	59.612	0.000	0.000	61.759	43.135	2.488	MWD+IFR1+MS
16800.000	90.000	179.680	10165.997	60.310	0.000	62.342	-0.000	60.310	0.000	0.000	62.380	43.171	2.443	MWD+IFR1+MS
16900.000	90.000	179.680	10165.997	61.010	0.000	62.966	-0.000	61.010	0.000	0.000	63.004	43.209	2.400	MWD+IFR1+MS
17000.000	90.000	179.680	10165.997	61.712	0.000	63.594	-0.000	61.712	0.000	0.000	63.631	43.246	2.359	MWD+IFR1+MS
17100.000	90.000	179.680	10165.997	62.416	0.000	64.225	-0.000	62.416	0.000	0.000	64.262	43.285	2.319	MWD+IFR1+MS
17200.000	90.000	179.680	10165.997	63.122	0.000	64.858	-0.000	63.122	0.000	0.000	64.895	43.323	2.280	MWD+IFR1+MS
17300.000	90.000	179.680	10165.997	63.830	0.000	65.494	-0.000	63.830	0.000	0.000	65.531	43.363	2.243	MWD+IFR1+MS
17400.000	90.000	179.680	10165.997	64.539	0.000	66.133	-0.000	64.539	0.000	0.000	66.170	43.403	2.207	MWD+IFR1+MS
17500.000	90.000	179.680	10165.997	65.250	0.000	66.775	-0.000	65.250	0.000	0.000	66.812	43.443	2.172	MWD+IFR1+MS
17600.000	90.000	179.680	10165.997	65.963	0.000	67.419	-0.000	65.963	0.000	0.000	67.456	43.484	2.138	MWD+IFR1+MS
17700.000	90.000	179.680	10165.997	66.678	0.000	68.066	-0.000	66.678	0.000	0.000	68.102	43.525	2.106	MWD+IFR1+MS
17800.000	90.000	179.680	10165.997	67.394	0.000	68.715	-0.000	67.394	0.000	0.000	68.751	43.567	2.074	MWD+IFR1+MS
17900.000	90.000	179.680	10165.997	68.111	0.000	69.367	-0.000	68.111	0.000	0.000	69.403	43.609	2.043	MWD+IFR1+MS
18000.000	90.000	179.680	10165.997	68.830	0.000	70.021	-0.000	68.830	0.000	0.000	70.056	43.652	2.013	MWD+IFR1+MS
18100.000	90.000	179.680	10165.997	69.551	0.000	70.677	-0.000	69.551	0.000	0.000	70.712	43.695	1.984	MWD+IFR1+MS
18200.000	90.000	179.680	10165.997	70.273	0.000	71.335	-0.000	70.273	0.000	0.000	71.371	43.739	1.956	MWD+IFR1+MS
18300.000	90.000	179.680	10165.997	70.996	0.000	71.996	-0.000	70.996	0.000	0.000	72.031	43.783	1.929	MWD+IFR1+MS
18400.000	90.000	179.680	10165.997	71.720	0.000	72.658	-0.000	71.720	0.000	0.000	72.693	43.828	1.902	MWD+IFR1+MS
18500.000	90.000	179.680	10165.997	72.446	0.000	73.323	-0.000	72.446	0.000	0.000	73.357	43.873	1.876	MWD+IFR1+MS
18600.000	90.000	179.680	10165.997	73.173	0.000	73.989	-0.000	73.173	0.000	0.000	74.024	43.919	1.851	MWD+IFR1+MS
18700.000	90.000	179.680	10165.997	73.901	0.000	74.658	-0.000	73.901	0.000	0.000	74.692	43.965	1.826	MWD+IFR1+MS
18800.000	90.000	179.680	10165.997	74.630	0.000	75.328	-0.000	74.630	0.000	0.000	75.362	44.012	1.802	MWD+IFR1+MS
18900.000	90.000	179.680	10165.997	75.361	0.000	76.000	-0.000	75.361	0.000	0.000	76.034	44.059	1.779	MWD+IFR1+MS
19000.000	90.000	179.680	10165.997	76.092	0.000	76.674	-0.000	76.092	0.000	0.000	76.707	44.107	1.756	MWD+IFR1+MS
19100.000	90.000	179.680	10165.997	76.825	0.000	77.349	-0.000	76.825	0.000	0.000	77.383	44.155	1.733	MWD+IFR1+MS

19200.000	90.000	179.680	10165.997	77.558	0.000	78.026	-0.000	77.558	0.000	0.000	78.060	44.204	1.712	MWD+IFR1+MS
19300.000	90.000	179.680	10165.997	78.293	0.000	78.705	-0.000	78.293	0.000	0.000	78.738	44.253	1.690	MWD+IFR1+MS
19400.000	90.000	179.680	10165.997	79.028	0.000	79.386	-0.000	79.028	0.000	0.000	79.419	44.303	1.669	MWD+IFR1+MS
19500.000	90.000	179.680	10165.997	79.765	0.000	80.067	-0.000	79.765	0.000	0.000	80.100	44.353	1.649	MWD+IFR1+MS
19600.000	90.000	179.680	10165.997	80.502	0.000	80.751	-0.000	80.502	0.000	0.000	80.783	44.403	1.629	MWD+IFR1+MS
19700.000	90.000	179.680	10165.997	81.240	0.000	81.436	-0.000	81.240	0.000	0.000	81.468	44.454	1.610	MWD+IFR1+MS
19800.000	90.000	179.680	10165.997	81.980	0.000	82.122	-0.000	81.980	0.000	0.000	82.154	44.506	1.591	MWD+IFR1+MS
19900.000	90.000	179.680	10165.997	82.720	0.000	82.810	-0.000	82.720	0.000	0.000	82.842	44.558	1.572	MWD+IFR1+MS
20000.000	90.000	179.680	10165.997	83.460	0.000	83.499	-0.000	83.460	0.000	0.000	83.531	44.610	1.554	MWD+IFR1+MS
20100.000	90.000	179.680	10165.997	84.202	0.000	84.189	-0.000	84.202	0.000	0.000	84.221	44.663	1.536	MWD+IFR1+MS
20200.000	90.000	179.680	10165.997	84.944	0.000	84.881	-0.000	84.944	0.000	0.000	84.912	44.717	1.518	MWD+IFR1+MS
20300.000	90.000	179.680	10165.997	85.687	0.000	85.574	-0.000	85.687	0.000	0.000	85.605	44.770	1.501	MWD+IFR1+MS
20400.000	90.000	179.680	10165.997	86.431	0.000	86.268	-0.000	86.431	0.000	0.000	86.299	44.825	1.484	MWD+IFR1+MS
20500.000	90.000	179.680	10165.997	87.176	0.000	86.963	-0.000	87.176	0.000	0.000	86.994	44.879	1.468	MWD+IFR1+MS
20600.000	90.000	179.680	10165.997	87.921	0.000	87.660	-0.000	87.921	0.000	0.000	87.690	44.935	1.452	MWD+IFR1+MS
20700.000	90.000	179.680	10165.997	88.667	0.000	88.357	-0.000	88.667	0.000	0.000	88.388	44.990	1.436	MWD+IFR1+MS
20800.000	90.000	179.680	10165.997	89.414	0.000	89.056	-0.000	89.414	0.000	0.000	89.087	45.046	1.420	MWD+IFR1+MS
20900.000	90.000	179.680	10165.997	90.161	0.000	89.756	-0.000	90.161	0.000	0.000	89.786	45.103	1.405	MWD+IFR1+MS
21000.000	90.000	179.680	10165.997	90.909	0.000	90.457	-0.000	90.909	0.000	0.000	90.487	45.160	1.390	MWD+IFR1+MS
21100.000	90.000	179.680	10165.997	91.657	0.000	91.159	-0.000	91.657	0.000	0.000	91.189	45.217	1.375	MWD+IFR1+MS
21200.000	90.000	179.680	10165.997	92.406	0.000	91.862	-0.000	92.406	0.000	0.000	91.892	45.275	1.361	MWD+IFR1+MS
21300.000	90.000	179.680	10165.997	93.156	0.000	92.566	-0.000	93.156	0.000	0.000	92.595	45.334	1.347	MWD+IFR1+MS
21400.000	90.000	179.680	10165.997	93.906	0.000	93.271	-0.000	93.906	0.000	0.000	93.300	45.393	1.333	MWD+IFR1+MS
21500.000	90.000	179.680	10165.997	94.657	0.000	93.976	-0.000	94.657	0.000	0.000	94.006	45.452	1.319	MWD+IFR1+MS
21600.000	90.000	179.680	10165.997	95.409	0.000	94.683	-0.000	95.409	0.000	0.000	94.713	45.511	1.306	MWD+IFR1+MS
21700.000	90.000	179.680	10165.997	96.160	0.000	95.391	-0.000	96.160	0.000	0.000	95.420	45.572	1.293	MWD+IFR1+MS
21800.000	90.000	179.680	10165.997	96.913	0.000	96.100	-0.000	96.913	0.000	0.000	96.129	45.632	1.280	MWD+IFR1+MS
21900.000	90.000	179.680	10165.997	97.666	0.000	96.809	-0.000	97.666	0.000	0.000	96.838	45.693	1.267	MWD+IFR1+MS
22000.000	90.000	179.680	10165.997	98.419	0.000	97.519	-0.000	98.419	0.000	0.000	97.548	45.755	1.254	MWD+IFR1+MS
22100.000	90.000	179.680	10165.997	99.173	0.000	98.231	-0.000	99.173	0.000	0.000	98.259	45.816	1.242	MWD+IFR1+MS
22200.000	90.000	179.680	10165.997	99.928	0.000	98.942	-0.000	99.928	0.000	0.000	98.971	45.879	1.230	MWD+IFR1+MS
22300.000	90.000	179.680	10165.997	100.682	0.000	99.655	-0.000	100.682	0.000	0.000	99.684	45.941	1.218	MWD+IFR1+MS
22400.000	90.000	179.680	10165.997	101.438	0.000	100.369	-0.000	101.438	0.000	0.000	100.397	46.004	1.206	MWD+IFR1+MS

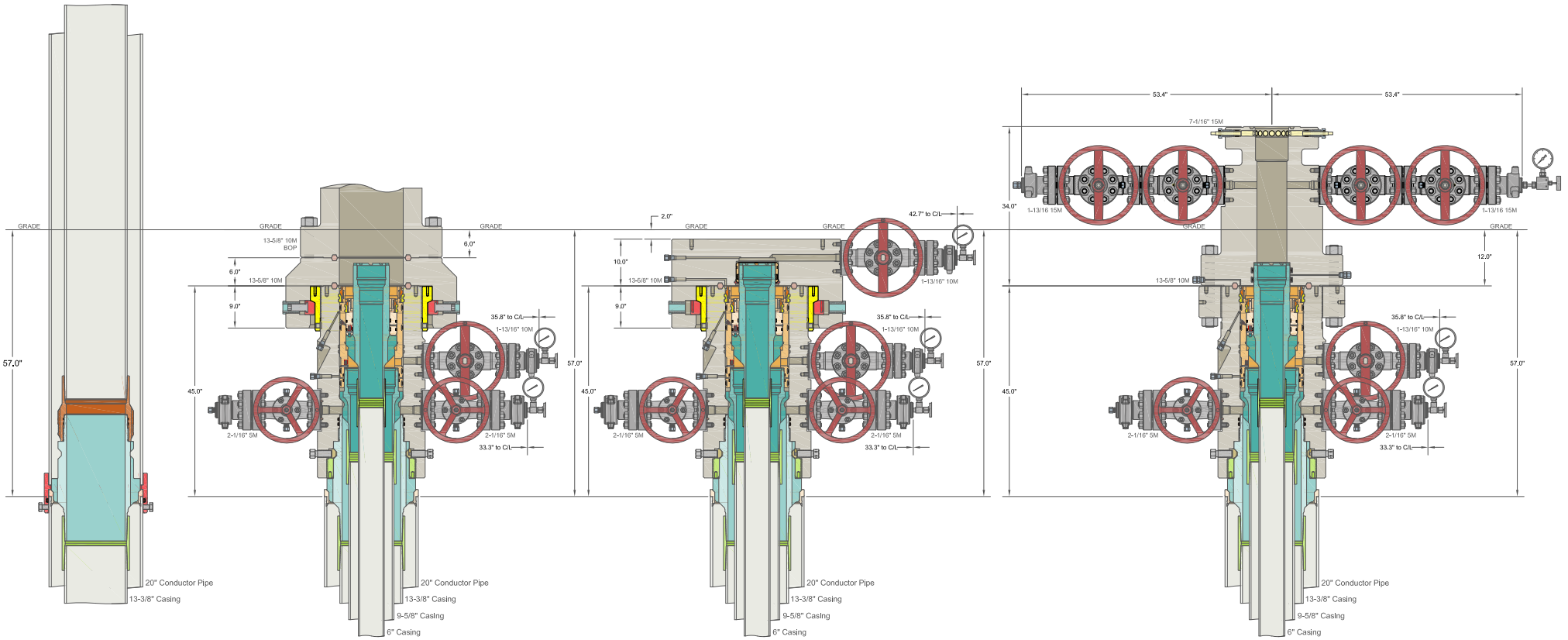
22500.000	90.000	179.680	10165.997	102.194	0.000	101.083	-0.000	102.194	0.000	0.000	101.111	46.068	1.195	MWD+IFR1+MS
22600.000	90.000	179.680	10165.997	102.950	0.000	101.798	-0.000	102.950	0.000	0.000	101.826	46.132	1.183	MWD+IFR1+MS
22700.000	90.000	179.680	10165.997	103.706	0.000	102.514	-0.000	103.706	0.000	0.000	102.542	46.196	1.172	MWD+IFR1+MS
22800.000	90.000	179.680	10165.997	104.463	0.000	103.230	-0.000	104.463	0.000	0.000	103.258	46.261	1.161	MWD+IFR1+MS
22900.000	90.000	179.680	10165.997	105.221	0.000	103.948	-0.000	105.221	0.000	0.000	103.975	46.326	1.150	MWD+IFR1+MS
23000.000	90.000	179.680	10165.997	105.979	0.000	104.665	-0.000	105.979	0.000	0.000	104.693	46.392	1.139	MWD+IFR1+MS
23100.000	90.000	179.680	10165.997	106.737	0.000	105.384	-0.000	106.737	0.000	0.000	105.411	46.458	1.129	MWD+IFR1+MS
23200.000	90.000	179.680	10165.997	107.496	0.000	106.103	-0.000	107.496	0.000	0.000	106.130	46.525	1.118	MWD+IFR1+MS
23300.000	90.000	179.680	10165.997	108.255	0.000	106.823	-0.000	108.255	0.000	0.000	106.850	46.591	1.108	MWD+IFR1+MS
23400.000	90.000	179.680	10165.997	109.014	0.000	107.544	-0.000	109.014	0.000	0.000	107.570	46.659	1.098	MWD+IFR1+MS
23500.000	90.000	179.680	10165.997	109.774	0.000	108.265	-0.000	109.774	0.000	0.000	108.291	46.726	1.088	MWD+IFR1+MS
23600.000	90.000	179.680	10165.997	110.534	0.000	108.986	-0.000	110.534	0.000	0.000	109.013	46.795	1.078	MWD+IFR1+MS
23700.000	90.000	179.680	10165.997	111.294	0.000	109.709	-0.000	111.294	0.000	0.000	109.735	46.863	1.069	MWD+IFR1+MS
23800.000	90.000	179.680	10165.997	112.055	0.000	110.431	-0.000	112.055	0.000	0.000	110.458	46.932	1.059	MWD+IFR1+MS
23900.000	90.000	179.680	10165.997	112.816	0.000	111.155	-0.000	112.816	0.000	0.000	111.181	47.001	1.050	MWD+IFR1+MS
24000.000	90.000	179.680	10165.997	113.577	0.000	111.879	-0.000	113.577	0.000	0.000	111.905	47.071	1.041	MWD+IFR1+MS
24100.000	90.000	179.680	10165.997	114.339	0.000	112.604	-0.000	114.339	0.000	0.000	112.629	47.141	1.032	MWD+IFR1+MS
24200.000	90.000	179.680	10165.997	115.101	0.000	113.329	-0.000	115.101	0.000	0.000	113.354	47.211	1.023	MWD+IFR1+MS
24300.000	90.000	179.680	10165.997	115.863	0.000	114.054	-0.000	115.863	0.000	0.000	114.080	47.282	1.014	MWD+IFR1+MS
24400.000	90.000	179.680	10165.997	116.626	0.000	114.780	-0.000	116.626	0.000	0.000	114.806	47.354	1.005	MWD+IFR1+MS
24500.000	90.000	179.680	10165.997	117.389	0.000	115.507	-0.000	117.389	0.000	0.000	115.532	47.425	0.996	MWD+IFR1+MS
24600.000	90.000	179.680	10165.997	118.152	0.000	116.234	-0.000	118.152	0.000	0.000	116.259	47.497	0.988	MWD+IFR1+MS
24700.000	90.000	179.680	10165.997	118.915	0.000	116.962	-0.000	118.915	0.000	0.000	116.987	47.570	0.979	MWD+IFR1+MS
24800.000	90.000	179.680	10165.997	119.679	0.000	117.690	-0.000	119.679	0.000	0.000	117.715	47.642	0.971	MWD+IFR1+MS
24900.000	90.000	179.680	10165.997	120.443	0.000	118.419	-0.000	120.443	0.000	0.000	118.443	47.716	0.963	MWD+IFR1+MS
25000.000	90.000	179.680	10165.997	121.208	0.000	119.148	-0.000	121.208	0.000	0.000	119.172	47.789	0.955	MWD+IFR1+MS
25100.000	90.000	179.680	10165.997	121.972	0.000	119.877	-0.000	121.972	0.000	0.000	119.902	47.863	0.947	MWD+IFR1+MS
25200.000	90.000	179.680	10165.997	122.737	0.000	120.607	-0.000	122.737	0.000	0.000	120.632	47.937	0.939	MWD+IFR1+MS
25300.000	90.000	179.680	10165.997	123.502	0.000	121.338	-0.000	123.502	0.000	0.000	121.362	48.012	0.931	MWD+IFR1+MS
25400.000	90.000	179.680	10165.997	124.267	0.000	122.068	-0.000	124.267	0.000	0.000	122.093	48.087	0.924	MWD+IFR1+MS
25500.000	90.000	179.680	10165.997	125.033	0.000	122.800	-0.000	125.033	0.000	0.000	122.824	48.162	0.916	MWD+IFR1+MS
25600.000	90.000	179.680	10165.997	125.799	0.000	123.531	-0.000	125.799	0.000	0.000	123.555	48.238	0.909	MWD+IFR1+MS
25700.000	90.000	179.680	10165.997	126.565	0.000	124.263	-0.000	126.565	0.000	0.000	124.287	48.314	0.901	MWD+IFR1+MS

25800.000	90.000	179.680	10165.997	127.331	0.000	124.996	-0.000	127.331	0.000	0.000	125.020	48.391	0.894	MWD+IFR1+MS
25900.000	90.000	179.680	10165.997	128.097	0.000	125.729	-0.000	128.097	0.000	0.000	125.753	48.468	0.887	MWD+IFR1+MS
26000.000	90.000	179.680	10165.997	128.864	0.000	126.462	-0.000	128.864	0.000	0.000	126.486	48.545	0.880	MWD+IFR1+MS
26100.000	90.000	179.680	10165.997	129.631	0.000	127.196	-0.000	129.631	0.000	0.000	127.219	48.623	0.872	MWD+IFR1+MS
26200.000	90.000	179.680	10165.997	130.398	0.000	127.930	-0.000	130.398	0.000	0.000	127.953	48.701	0.866	MWD+IFR1+MS
26300.000	90.000	179.680	10165.997	131.165	0.000	128.664	-0.000	131.165	0.000	0.000	128.687	48.779	0.859	MWD+IFR1+MS
26400.000	90.000	179.680	10165.997	131.933	0.000	129.399	-0.000	131.933	0.000	0.000	129.422	48.858	0.852	MWD+IFR1+MS
26500.000	90.000	179.680	10165.997	132.701	0.000	130.134	-0.000	132.701	0.000	0.000	130.157	48.937	0.845	MWD+IFR1+MS
26600.000	90.000	179.680	10165.997	133.469	0.000	130.869	-0.000	133.469	0.000	0.000	130.892	49.016	0.839	MWD+IFR1+MS
26700.000	90.000	179.680	10165.997	134.237	0.000	131.605	-0.000	134.237	0.000	0.000	131.628	49.096	0.832	MWD+IFR1+MS
26800.000	90.000	179.680	10165.997	135.005	0.000	132.341	-0.000	135.005	0.000	0.000	132.364	49.176	0.826	MWD+IFR1+MS
26900.000	90.000	179.680	10165.997	135.774	0.000	133.078	-0.000	135.774	0.000	0.000	133.101	49.256	0.819	MWD+IFR1+MS
27000.000	90.000	179.680	10165.997	136.542	0.000	133.815	-0.000	136.542	0.000	0.000	133.837	49.337	0.813	MWD+IFR1+MS
27100.000	90.000	179.680	10165.997	137.311	0.000	134.552	-0.000	137.311	0.000	0.000	134.574	49.418	0.807	MWD+IFR1+MS
27200.000	90.000	179.680	10165.997	138.080	0.000	135.289	-0.000	138.080	0.000	0.000	135.312	49.500	0.800	MWD+IFR1+MS
27300.000	90.000	179.680	10165.997	138.849	0.000	136.027	-0.000	138.849	0.000	0.000	136.049	49.581	0.794	MWD+IFR1+MS
27400.000	90.000	179.680	10165.997	139.619	0.000	136.765	-0.000	139.619	0.000	0.000	136.787	49.663	0.788	MWD+IFR1+MS
27500.000	90.000	179.680	10165.997	140.388	0.000	137.503	-0.000	140.388	0.000	0.000	137.525	49.746	0.782	MWD+IFR1+MS
27600.000	90.000	179.680	10165.997	141.158	0.000	138.242	-0.000	141.158	0.000	0.000	138.264	49.829	0.776	MWD+IFR1+MS
27700.000	90.000	179.680	10165.997	141.928	0.000	138.981	-0.000	141.928	0.000	0.000	139.003	49.912	0.770	MWD+IFR1+MS
27800.000	90.000	179.680	10165.997	142.698	0.000	139.720	-0.000	142.698	0.000	0.000	139.742	49.995	0.765	MWD+IFR1+MS
27900.000	90.000	179.680	10165.997	143.468	0.000	140.460	-0.000	143.468	0.000	0.000	140.481	50.079	0.759	MWD+IFR1+MS
28000.000	90.000	179.680	10165.997	144.239	0.000	141.199	-0.000	144.239	0.000	0.000	141.221	50.163	0.753	MWD+IFR1+MS
28100.000	90.000	179.680	10165.997	145.009	0.000	141.940	-0.000	145.009	0.000	0.000	141.961	50.248	0.748	MWD+IFR1+MS
28200.000	90.000	179.680	10165.997	145.780	0.000	142.680	-0.000	145.780	0.000	0.000	142.701	50.332	0.742	MWD+IFR1+MS
28300.000	90.000	179.680	10165.997	146.551	0.000	143.420	-0.000	146.551	0.000	0.000	143.442	50.417	0.737	MWD+IFR1+MS
28400.000	90.000	179.680	10165.997	147.322	0.000	144.161	-0.000	147.322	0.000	0.000	144.183	50.503	0.731	MWD+IFR1+MS
28500.000	90.000	179.680	10165.997	148.093	0.000	144.902	-0.000	148.093	0.000	0.000	144.924	50.588	0.726	MWD+IFR1+MS
28600.000	90.000	179.680	10165.997	148.864	0.000	145.644	-0.000	148.864	0.000	0.000	145.665	50.675	0.720	MWD+IFR1+MS
28700.000	90.000	179.680	10165.997	149.636	0.000	146.385	-0.000	149.636	0.000	0.000	146.406	50.761	0.715	MWD+IFR1+MS
28800.000	90.000	179.680	10165.997	150.407	0.000	147.127	-0.000	150.407	0.000	0.000	147.148	50.848	0.710	MWD+IFR1+MS
28900.000	90.000	179.680	10165.997	151.179	0.000	147.869	-0.000	151.179	0.000	0.000	147.890	50.935	0.705	MWD+IFR1+MS
29000.000	90.000	179.680	10165.997	151.951	0.000	148.612	-0.000	151.951	0.000	0.000	148.632	51.022	0.700	MWD+IFR1+MS

29100.000	90.000	179.680	10165.997	152.723	0.000	149.354	-0.000	152.723	0.000	0.000	149.375	51.109	0.695	MWD+IFR1+MS
29200.000	90.000	179.680	10165.997	153.495	0.000	150.097	-0.000	153.495	0.000	0.000	150.118	51.197	0.690	MWD+IFR1+MS
29300.000	90.000	179.680	10165.997	154.267	0.000	150.840	-0.000	154.267	0.000	0.000	150.861	51.286	0.685	MWD+IFR1+MS
29400.000	90.000	179.680	10165.997	155.039	0.000	151.583	-0.000	155.039	0.000	0.000	151.604	51.374	0.680	MWD+IFR1+MS
29500.000	90.000	179.680	10165.997	155.812	0.000	152.327	-0.000	155.812	0.000	0.000	152.347	51.463	0.675	MWD+IFR1+MS
29600.000	90.000	179.680	10165.997	156.584	0.000	153.071	-0.000	156.584	0.000	0.000	153.091	51.552	0.670	MWD+IFR1+MS
29700.000	90.000	179.680	10165.997	157.357	0.000	153.814	-0.000	157.357	0.000	0.000	153.835	51.641	0.665	MWD+IFR1+MS
29800.000	90.000	179.680	10165.997	158.130	0.000	154.559	-0.000	158.130	0.000	0.000	154.579	51.731	0.661	MWD+IFR1+MS
29900.000	90.000	179.680	10165.997	158.903	0.000	155.303	-0.000	158.903	0.000	0.000	155.323	51.821	0.656	MWD+IFR1+MS
30000.000	90.000	179.680	10165.997	159.676	0.000	156.047	-0.000	159.676	0.000	0.000	156.067	51.911	0.651	MWD+IFR1+MS
30100.000	90.000	179.680	10165.997	160.449	0.000	156.792	-0.000	160.449	0.000	0.000	156.812	52.002	0.647	MWD+IFR1+MS
30200.000	90.000	179.680	10165.997	161.222	0.000	157.537	-0.000	161.222	0.000	0.000	157.557	52.093	0.642	MWD+IFR1+MS
30300.000	90.000	179.680	10165.997	161.996	0.000	158.282	-0.000	161.996	0.000	0.000	158.302	52.184	0.638	MWD+IFR1+MS
30400.000	90.000	179.680	10165.997	162.769	0.000	159.028	-0.000	162.769	0.000	0.000	159.047	52.276	0.633	MWD+IFR1+MS
30500.000	90.000	179.680	10165.997	163.543	0.000	159.773	-0.000	163.543	0.000	0.000	159.793	52.367	0.629	MWD+IFR1+MS
30600.000	90.000	179.680	10165.997	164.317	0.000	160.519	-0.000	164.317	0.000	0.000	160.538	52.459	0.625	MWD+IFR1+MS
30700.000	90.000	179.680	10165.997	165.090	0.000	161.265	-0.000	165.090	0.000	0.000	161.284	52.552	0.620	MWD+IFR1+MS
30800.000	90.000	179.680	10165.997	165.864	0.000	162.011	-0.000	165.864	0.000	0.000	162.030	52.644	0.616	MWD+IFR1+MS
30865.862	90.000	179.680	10165.997	166.374	0.000	162.502	-0.000	166.374	0.000	0.000	162.521	52.706	0.613	MWD+IFR1+MS
30900.000	90.000	179.680	10165.997	166.638	0.000	162.756	-0.000	166.638	0.000	0.000	162.775	52.737	0.612	MWD+IFR1+MS
30915.780	90.000	179.680	10165.997	166.760	0.000	162.873	-0.000	166.760	0.000	0.000	162.893	52.752	0.611	MWD+IFR1+MS

Plan Targets Poker Lake Unit 20 DTD South 422H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 25	10300.31	440404.40	634751.80	6839.00	RECTANGLE
SHL 21	11036.77	440171.73	635150.61	7367.40	RECTANGLE
421H P1	28153.09	423608.60	634655.90	8279.52	CIRCLE
421H P2	29740.55	421980.70	634855.50	8279.52	CIRCLE
LTP 25	30865.78	419424.50	634868.90	6839.00	RECTANGLE
BHL 25	30915.78	419374.50	634869.20	6839.00	RECTANGLE



ALL DIMENSIONS APPROXIMA

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

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

XTO Energy Inc.
PLU 20 Dog Town Draw 422H
Projected TD: 30915.78' MD / 10166' TVD
SHL: 432' FNL & 577' FEL , Section 20, T24S, R30E
BHL: 50' FSL & 1005' FEL , 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	934'	Water
Top of Salt	1337'	Water
Base of Salt	3530'	Water
Delaware	3724'	Water
Brushy Canyon	6222'	Water/Oil/Gas
Bone Spring	7518'	Water
1st Bone Spring	8504'	Water/Oil/Gas
2nd Bone Spring	9322'	Water/Oil/Gas
3rd Bone Spring	10016'	Water/Oil/Gas
Target/Land Curve	10166'	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 @ 1034' (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 9276.75' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 30915.78 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8976.75 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1034'	13.375	54.5	J-55	BTC	New	1.24	2.50	16.13
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	2.51	2.31	3.41
12.25	4000' – 9276.75'	9.625	40	HC L-80	BTC	New	1.82	1.89	4.34
8.5	0' – 9176.75'	6	26	P-110	Semi-Premium	New	1.17	2.79	1.63
8.5	9176.75' - 30915.78'	6	26	P-110	Semi-Premium	New	1.17	2.52	1.82

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
· XTO requests to not utilize centralizers in the curve and lateral
· 9.625 Collapse analyzed using 50% evacuation based on regional experience.
· 6 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
. XTO requests the option to use **5.5"** BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

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

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

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

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1034'

Lead: 540 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 +/- 9276.75'
1st Stage
Optional Lead: 1050 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 880 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6222
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: 2190 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 (6222') 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 +/- 30915.78'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8976.75 feet
Tail: 3640 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9476.75 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 3156 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' - 1034'	17.5	FW/Native	8.4-8.9	35-40	NC
1034' - 9276.75'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
9276.75' - 30915.78'	8.5	OBM	10.2-10.7	50-60	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 9-5/8" surface casing with brine solution. A 9.7 ppg - 10.2 ppg cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5392 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

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API ID	[2] Pool Code	[3] Pool Name
10400089182	96526	FOURTYNINER; BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
	POKER LAKE UNIT 20 DTD	422H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC	3,295'

[10] Surface Location

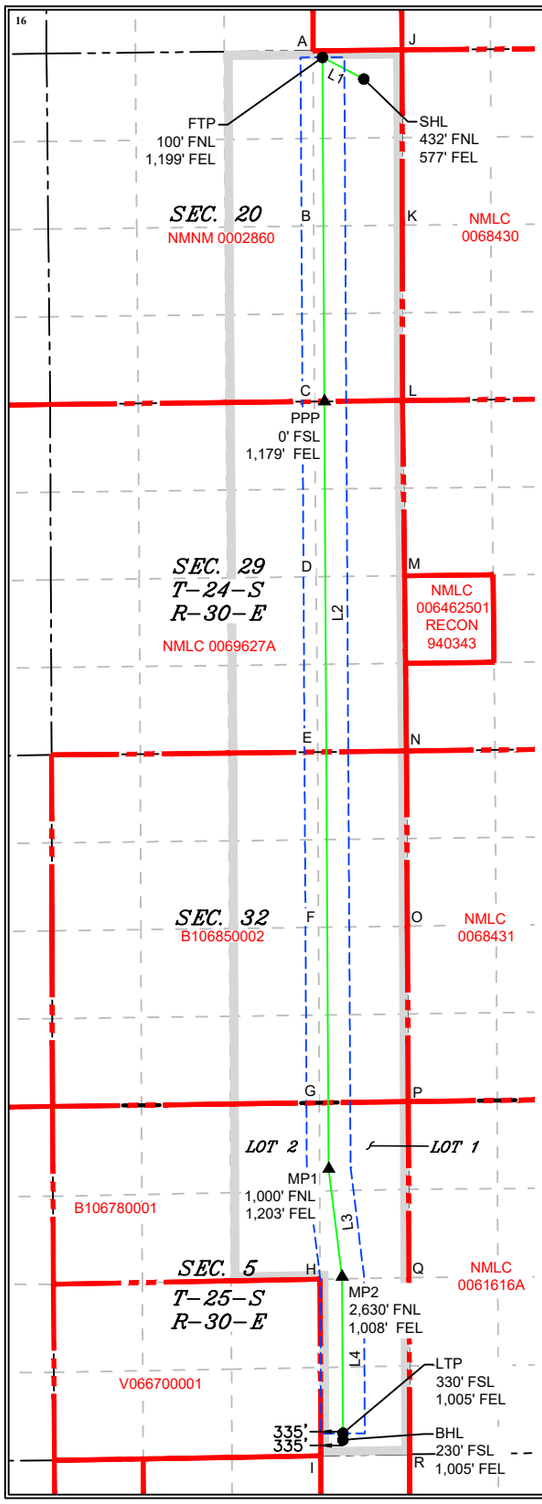
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	20	24S	30E		432	NORTH	577	EAST	EDDY

[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
P	5	25S	30E		230	SOUTH	1,005	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
1,199.95			

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

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	297°35'57"	702.87'
L2	179°40'30"	16,761.36'
L3	172°57'16"	1,639.84'
L4	179°40'42"	2,459.94'

COORDINATE TABLE

	SHL (NAD 83 NME)	SHL (NAD 27 NME)
Y =	440,136.0 N	440,076.7 N
X =	676,365.4 E	635,181.7 E
LAT. =	32.209257 °N	32.209133 °N
LONG. =	103.896750 °W	103.896263 °W

	FTP (NAD 83 NME)	FTP (NAD 27 NME)
Y =	440,461.6 N	440,402.4 N
X =	675,742.5 E	634,558.8 E
LAT. =	32.210159 °N	32.210035 °N
LONG. =	103.898760 °W	103.898272 °W

	PPP (NAD 83 NME)	PPP (NAD 27 NME)
Y =	435,274.5 N	435,215.4 N
X =	675,772.0 E	634,588.1 E
LAT. =	32.195900 °N	32.195776 °N
LONG. =	103.898732 °W	103.898246 °W

	MP1 (NAD 83 NME)	MP1 (NAD 27 NME)
Y =	423,700.6 N	423,641.7 N
X =	675,837.6 E	634,653.4 E
LAT. =	32.164084 °N	32.163960 °N
LONG. =	103.898671 °W	103.898186 °W

	MP2 (NAD 83 NME)	MP2 (NAD 27 NME)
Y =	422,073.1 N	422,014.3 N
X =	676,038.8 E	634,854.5 E
LAT. =	32.159608 °N	32.159484 °N
LONG. =	103.898042 °W	103.897557 °W

	LTP (NAD 83 NME)	LTP (NAD 27 NME)
Y =	419,713.2 N	419,654.5 N
X =	676,052.0 E	634,867.6 E
LAT. =	32.153121 °N	32.152997 °N
LONG. =	103.898030 °W	103.897546 °W

	BHL (NAD 83 NME)	BHL (NAD 27 NME)
Y =	419,613.2 N	419,554.4 N
X =	676,052.6 E	634,868.2 E
LAT. =	32.152846 °N	32.152722 °N
LONG. =	103.898030 °W	103.897545 °W

CORNER COORDINATES (NAD 83 NME)

A - Y =	440,560.2 N	A - X =	675,601.6 E
B - Y =	437,916.2 N	B - X =	675,611.7 E
C - Y =	435,272.8 N	C - X =	675,621.8 E
D - Y =	432,629.6 N	D - X =	675,647.0 E
E - Y =	429,987.0 N	E - X =	675,672.5 E
F - Y =	427,344.2 N	F - X =	675,684.2 E
G - Y =	424,698.7 N	G - X =	675,695.7 E
H - Y =	422,038.9 N	H - X =	675,706.9 E
I - Y =	419,377.0 N	I - X =	675,718.6 E
J - Y =	440,574.0 N	J - X =	676,941.2 E
K - Y =	437,930.7 N	K - X =	676,946.1 E
L - Y =	435,287.9 N	L - X =	676,950.7 E
M - Y =	432,645.4 N	M - X =	676,980.5 E
N - Y =	430,004.1 N	N - X =	677,010.5 E
O - Y =	427,361.7 N	O - X =	677,023.8 E
P - Y =	424,716.9 N	P - X =	677,036.7 E
Q - Y =	422,064.1 N	Q - X =	677,047.1 E
R - Y =	419,401.9 N	R - X =	677,058.4 E

CORNER COORDINATES (NAD 27 NME)

A - Y =	440,500.9 N	A - X =	634,417.9 E
B - Y =	437,857.0 N	B - X =	634,427.9 E
C - Y =	435,213.7 N	C - X =	634,437.9 E
D - Y =	432,570.5 N	D - X =	634,463.1 E
E - Y =	429,928.0 N	E - X =	634,488.4 E
F - Y =	427,285.3 N	F - X =	634,500.0 E
G - Y =	424,639.8 N	G - X =	634,511.5 E
H - Y =	421,980.1 N	H - X =	634,522.6 E
I - Y =	419,318.3 N	I - X =	634,534.2 E
J - Y =	440,514.7 N	J - X =	635,757.5 E
K - Y =	437,871.5 N	K - X =	635,762.3 E
L - Y =	435,228.8 N	L - X =	635,766.8 E
M - Y =	432,586.3 N	M - X =	635,796.5 E
N - Y =	429,945.0 N	N - X =	635,826.4 E
O - Y =	427,302.8 N	O - X =	635,839.6 E
P - Y =	424,658.0 N	P - X =	635,852.5 E
Q - Y =	422,005.3 N	Q - X =	635,862.8 E
R - Y =	419,343.1 N	R - X =	635,874.0 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.

Signature 3/5/2024 Date

Jean A. Cooper
Printed Name

jean.cooper@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/AI 618.013003.06-54

J:\618.013 XTO Energy - NM\003 Poker Lake Unit\06 - PLU 20 DTD - EDDY\Wells\54 - 422H\DWG\SOUTH 422H 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

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

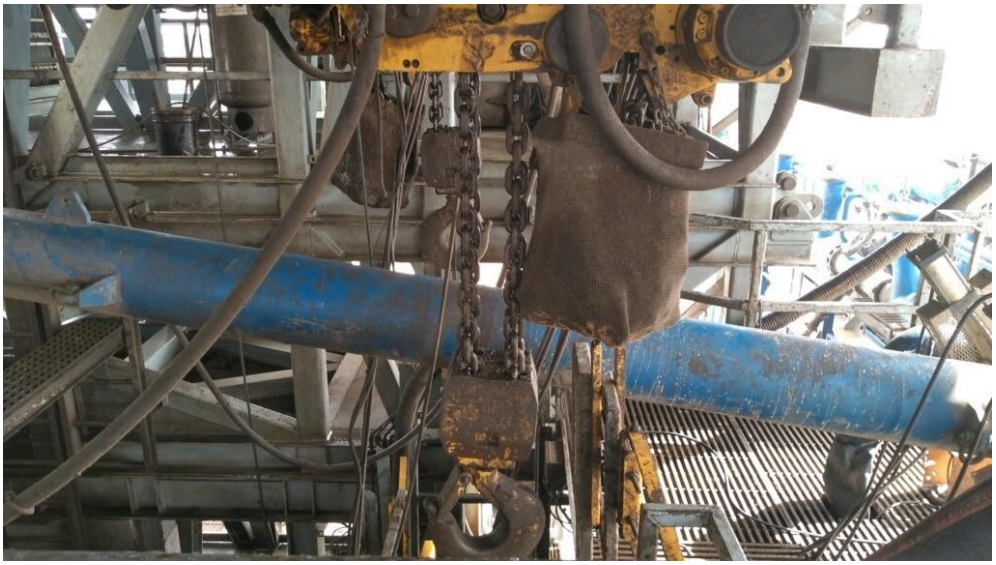


Figure 2: BOP Winch System

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.

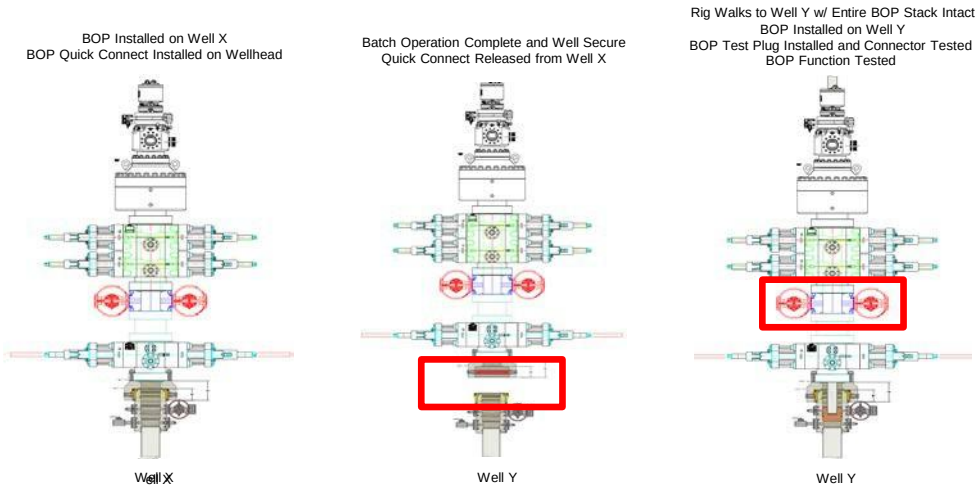
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often 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.

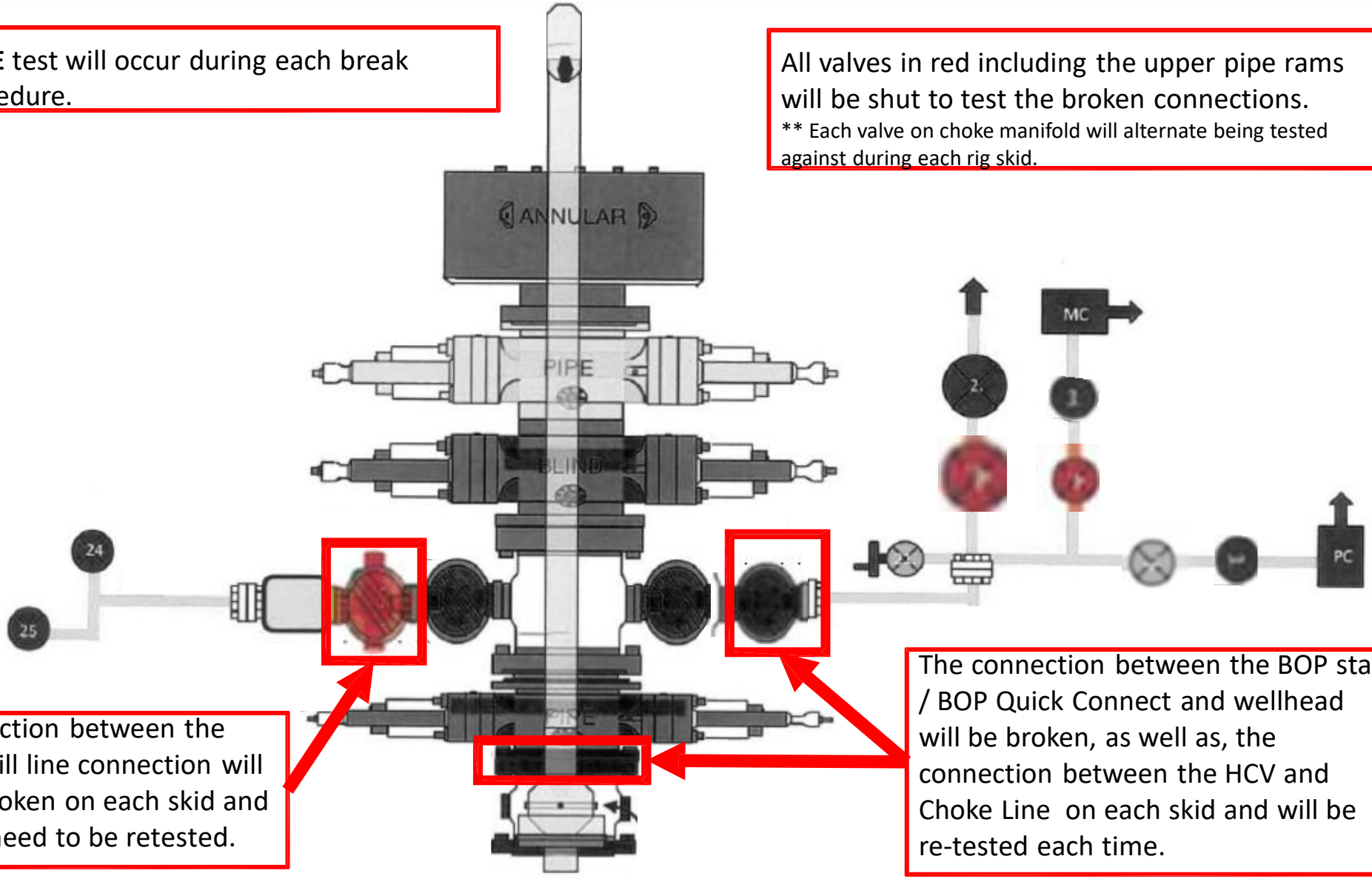
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

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.

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

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

<u>General Procedure While Drilling</u>

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

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

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

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 342205
	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.	5/17/2024