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

Sundry Print Report

04/29/2024

Well Name: POKER LAKE UNIT 19 DTD

Well Location: T24S / R30E / SEC 19 / NENE / 32.209567 / -103.915783

County or Parish/State: EDDY / NM

Well Number: 423H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM002860

Unit or CA Name:

Unit or CA Number: NMNM71016X

US Well Number: 3001553841

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2778062

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/05/2024

Time Sundry Submitted: 06:24

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, and proposed total depth. FROM: TO: SHL: 275' FNL & 1106' FEL of Section 19-T24S-R30E 275' FNL & 1106' FEL of Section 19-T24S-R30E FTP: 100' FSL & 550' FEL of Section 18-T24S-R30E 100' FNL & 241' FEL of Section 19-T24S-R30E LTP: 2310' FSL & 550' FEL of Section 31-T23S-R30E 330' FSL & 254' FEL of Section 31-T24S-R30E BHL: 2440' FSL & 550' FEL of Section 31-T23S-R30E 230' FSL & 254' FEL of Section 31-T24S-R30E Proposed total depth will change from 29166' MD; 10605' TVD (Wolfcamp) to 10521' MD; TVD 11364' (Wolfcamp). 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_19_DTD_South_423H_20240305182353.pdf

BOP_Variance_new_Language_BOP_BTV_20240305182343.pdf

3_String_Bighole_SDT_2856_1_MBS_20240305182345.pdf

POKER_LAKE_UNIT_19_DTD_423H_C_102_FINAL_20240305182344.pdf

PLU_19_DTD_423H_Pad_D_Drilling_Plan_20240305182340.pdf

Well_Control_Plan_w_CFR_43_3172_20240305182340.pdf

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Conditions of Approval

Additional

Sec19_24S_30E_NMP_Sundry_2778062_Poker_Lake_Unit_19_DTD_423H_COAs_20240321151500.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 06:24 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 / 275 FNL / 1106 FEL / TWSP: 24S / RANGE: 30E / SECTION: 19 / LAT: 32.209567 / LONG: -103.915783 (TVD: 0 feet, MD: 0 feet)

PPP: SESE / 330 FSL / 550 FEL / TWSP: 24S / RANGE: 30E / SECTION: 7 / LAT: 32.21766 / LONG: -103.92432 (TVD: 10605 feet, MD: 16300 feet)

PPP: SESE / 100 FSL / 550 FEL / TWSP: 24S / RANGE: 30E / SECTION: 18 / LAT: 32.210616 / LONG: -103.913989 (TVD: 10605 feet, MD: 11000 feet)

BHL: NESE / 2440 FSL / 550 FEL / TWSP: 23S / RANGE: 30E / SECTION: 31 / LAT: 32.260684 / LONG: -103.913965 (TVD: 10605 feet, MD: 29166 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 19 DTD 423H
LOCATION:	Sec 19-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2778062** on 03/21/2024. 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 430 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.**

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC.
Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.**

a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
c. Manufacturer representative shall install the test plug for the initial BOP test.
d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

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 19 DTD South 423H

Measured Depth:	26673.88 ft
TVD RKB:	11364.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	440166.10 ft
Easting:	629294.70 ft
RKB:	3211.00 ft
Ground Level:	3179.00 ft
North Reference:	Grid
Convergence Angle:	0.22 Deg

Plan Sections Poker Lake Unit 19 DTD South 423H

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	
1590.88	9.82	77.67	1588.48	8.96	40.98	2.00	0.00	2.00	
6282.63	9.82	77.67	6211.52	179.84	822.52	0.00	0.00	0.00	
6773.50	0.00	0.00	6700.00	188.80	863.50	-2.00	0.00	2.00	
10721.30	0.00	0.00	10647.80	188.80	863.50	0.00	0.00	0.00	
11846.30	90.00	179.72	11364.00	-527.39	866.97	8.00	0.00	8.00	
26573.83	90.00	179.72	11364.00	-15254.75	938.43	0.00	0.00	0.00	LTP 28
26673.88	90.00	179.72	11364.00	-15354.79	938.92	0.00	0.00	0.00	BHL 28

Position Uncertainty Poker Lake Unit 19 DTD South 423H

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

Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.346	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.373	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.405	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.441	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	2.483	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	2.528	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	2.577	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	2.630	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	77.667	1199.980	4.961	0.000	4.557	0.000	2.686	0.000	0.000	5.185	4.302	-43.587	MWD+IFR1+MS
1300.000	4.000	77.667	1299.838	5.739	0.000	4.921	0.000	2.746	0.000	0.000	5.799	4.861	-26.349	MWD+IFR1+MS
1400.000	6.000	77.667	1399.452	6.437	0.000	5.286	0.000	2.811	0.000	0.000	6.462	5.279	-16.426	MWD+IFR1+MS
1500.000	8.000	77.667	1498.702	7.077	0.000	5.650	0.000	2.883	0.000	0.000	7.110	5.650	-11.224	MWD+IFR1+MS
1590.876	9.818	77.667	1588.477	7.563	0.000	5.978	0.000	2.954	0.000	0.000	7.618	5.971	-8.848	MWD+IFR1+MS
1600.000	9.818	77.667	1597.468	7.587	0.000	6.008	0.000	2.956	0.000	0.000	7.644	6.002	-8.856	MWD+IFR1+MS
1700.000	9.818	77.667	1696.003	7.854	0.000	6.356	0.000	3.029	0.000	0.000	7.907	6.349	-8.689	MWD+IFR1+MS
1800.000	9.818	77.667	1794.539	8.145	0.000	6.725	0.000	3.106	0.000	0.000	8.196	6.715	-7.885	MWD+IFR1+MS
1900.000	9.818	77.667	1893.075	8.442	0.000	7.094	0.000	3.185	0.000	0.000	8.492	7.081	-7.082	MWD+IFR1+MS
2000.000	9.818	77.667	1991.610	8.746	0.000	7.464	0.000	3.268	0.000	0.000	8.795	7.448	-6.281	MWD+IFR1+MS
2100.000	9.818	77.667	2090.146	9.056	0.000	7.835	0.000	3.353	0.000	0.000	9.103	7.815	-5.483	MWD+IFR1+MS
2200.000	9.818	77.667	2188.681	9.371	0.000	8.206	0.000	3.441	0.000	0.000	9.416	8.182	-4.687	MWD+IFR1+MS
2300.000	9.818	77.667	2287.217	9.690	0.000	8.577	0.000	3.530	0.000	0.000	9.734	8.550	-3.896	MWD+IFR1+MS
2400.000	9.818	77.667	2385.753	10.013	0.000	8.948	0.000	3.622	0.000	0.000	10.056	8.917	-3.111	MWD+IFR1+MS
2500.000	9.818	77.667	2484.288	10.340	0.000	9.320	0.000	3.716	0.000	0.000	10.382	9.285	-2.331	MWD+IFR1+MS
2600.000	9.818	77.667	2582.824	10.671	0.000	9.692	0.000	3.812	0.000	0.000	10.711	9.653	-1.557	MWD+IFR1+MS
2700.000	9.818	77.667	2681.359	11.004	0.000	10.065	0.000	3.910	0.000	0.000	11.044	10.022	-0.791	MWD+IFR1+MS
2800.000	9.818	77.667	2779.895	11.341	0.000	10.437	0.000	4.009	0.000	0.000	11.379	10.390	-0.033	MWD+IFR1+MS
2900.000	9.818	77.667	2878.430	11.680	0.000	10.810	0.000	4.111	0.000	0.000	11.717	10.759	0.717	MWD+IFR1+MS

3000.000	9.818	77.667	2976.966	12.021	0.000	11.182	0.000	4.214	0.000	0.000	12.057	11.127	1.459	MWD+IFR1+MS
3100.000	9.818	77.667	3075.502	12.365	0.000	11.555	0.000	4.318	0.000	0.000	12.399	11.496	2.191	MWD+IFR1+MS
3200.000	9.818	77.667	3174.037	12.710	0.000	11.928	0.000	4.424	0.000	0.000	12.743	11.865	2.913	MWD+IFR1+MS
3300.000	9.818	77.667	3272.573	13.057	0.000	12.301	0.000	4.532	0.000	0.000	13.089	12.234	3.625	MWD+IFR1+MS
3400.000	9.818	77.667	3371.108	13.406	0.000	12.674	0.000	4.642	0.000	0.000	13.437	12.604	4.328	MWD+IFR1+MS
3500.000	9.818	77.667	3469.644	13.757	0.000	13.048	0.000	4.752	0.000	0.000	13.786	12.973	5.019	MWD+IFR1+MS
3600.000	9.818	77.667	3568.180	14.109	0.000	13.421	0.000	4.865	0.000	0.000	14.136	13.343	5.700	MWD+IFR1+MS
3700.000	9.818	77.667	3666.715	14.462	0.000	13.794	0.000	4.979	0.000	0.000	14.488	13.713	6.370	MWD+IFR1+MS
3800.000	9.818	77.667	3765.251	14.816	0.000	14.168	0.000	5.094	0.000	0.000	14.841	14.083	7.029	MWD+IFR1+MS
3900.000	9.818	77.667	3863.786	15.172	0.000	14.541	0.000	5.211	0.000	0.000	15.195	14.453	7.678	MWD+IFR1+MS
4000.000	9.818	77.667	3962.322	15.529	0.000	14.915	0.000	5.330	0.000	0.000	15.550	14.823	8.315	MWD+IFR1+MS
4100.000	9.818	77.667	4060.857	15.887	0.000	15.289	0.000	5.450	0.000	0.000	15.906	15.193	8.941	MWD+IFR1+MS
4200.000	9.818	77.667	4159.393	16.245	0.000	15.662	0.000	5.572	0.000	0.000	16.263	15.563	9.557	MWD+IFR1+MS
4300.000	9.818	77.667	4257.929	16.605	0.000	16.036	0.000	5.696	0.000	0.000	16.621	15.934	10.161	MWD+IFR1+MS
4400.000	9.818	77.667	4356.464	16.965	0.000	16.410	0.000	5.821	0.000	0.000	16.980	16.304	10.755	MWD+IFR1+MS
4500.000	9.818	77.667	4455.000	17.326	0.000	16.784	0.000	5.947	0.000	0.000	17.339	16.675	11.338	MWD+IFR1+MS
4600.000	9.818	77.667	4553.535	17.688	0.000	17.158	0.000	6.075	0.000	0.000	17.699	17.046	11.911	MWD+IFR1+MS
4700.000	9.818	77.667	4652.071	18.051	0.000	17.532	0.000	6.205	0.000	0.000	18.059	17.417	12.473	MWD+IFR1+MS
4800.000	9.818	77.667	4750.606	18.414	0.000	17.906	0.000	6.337	0.000	0.000	18.420	17.788	13.026	MWD+IFR1+MS
4900.000	9.818	77.667	4849.142	18.778	0.000	18.280	0.000	6.471	0.000	0.000	18.782	18.159	13.568	MWD+IFR1+MS
5000.000	9.818	77.667	4947.678	19.142	0.000	18.654	0.000	6.606	0.000	0.000	19.144	18.531	14.100	MWD+IFR1+MS
5100.000	9.818	77.667	5046.213	19.507	0.000	19.028	0.000	6.743	0.000	0.000	19.506	18.902	14.623	MWD+IFR1+MS
5200.000	9.818	77.667	5144.749	19.872	0.000	19.402	0.000	6.881	0.000	0.000	19.869	19.274	15.136	MWD+IFR1+MS
5300.000	9.818	77.667	5243.284	20.238	0.000	19.776	0.000	7.022	0.000	0.000	20.233	19.645	15.641	MWD+IFR1+MS
5400.000	9.818	77.667	5341.820	20.604	0.000	20.150	0.000	7.164	0.000	0.000	20.597	20.017	16.136	MWD+IFR1+MS
5500.000	9.818	77.667	5440.356	20.971	0.000	20.524	0.000	7.308	0.000	0.000	20.961	20.389	16.623	MWD+IFR1+MS
5600.000	9.818	77.667	5538.891	21.338	0.000	20.899	0.000	7.455	0.000	0.000	21.325	20.761	17.101	MWD+IFR1+MS
5700.000	9.818	77.667	5637.427	21.706	0.000	21.273	0.000	7.603	0.000	0.000	21.690	21.133	17.570	MWD+IFR1+MS
5800.000	9.818	77.667	5735.962	22.074	0.000	21.647	0.000	7.753	0.000	0.000	22.055	21.505	18.032	MWD+IFR1+MS
5900.000	9.818	77.667	5834.498	22.442	0.000	22.021	0.000	7.905	0.000	0.000	22.421	21.877	18.486	MWD+IFR1+MS
6000.000	9.818	77.667	5933.033	22.811	0.000	22.395	0.000	8.059	0.000	0.000	22.787	22.250	18.932	MWD+IFR1+MS
6100.000	9.818	77.667	6031.569	23.180	0.000	22.770	0.000	8.215	0.000	0.000	23.153	22.622	19.370	MWD+IFR1+MS
6200.000	9.818	77.667	6130.105	23.549	0.000	23.144	0.000	8.373	0.000	0.000	23.519	22.994	19.802	MWD+IFR1+MS

6282.628	9.818	77.667	6211.523	23.852	0.000	23.451	0.000	8.505	0.000	0.000	23.818	23.302	20.057	MWD+IFR1+MS
6300.000	9.470	77.667	6228.649	23.919	0.000	23.515	0.000	8.533	0.000	0.000	23.879	23.367	20.071	MWD+IFR1+MS
6400.000	7.470	77.667	6327.553	24.325	0.000	23.881	0.000	8.696	0.000	0.000	24.266	23.738	18.834	MWD+IFR1+MS
6500.000	5.470	77.667	6426.911	24.769	0.000	24.245	0.000	8.859	0.000	0.000	24.719	24.108	15.829	MWD+IFR1+MS
6600.000	3.470	77.667	6526.602	25.177	0.000	24.604	0.000	9.017	0.000	0.000	25.167	24.469	13.613	MWD+IFR1+MS
6700.000	1.470	77.667	6626.504	25.548	0.000	24.957	0.000	9.171	0.000	0.000	25.609	24.822	11.958	MWD+IFR1+MS
6773.504	0.000	0.000	6700.000	25.113	0.000	25.834	0.000	9.282	0.000	0.000	25.862	25.085	10.973	MWD+IFR1+MS
6800.000	0.000	0.000	6726.496	25.203	0.000	25.918	0.000	9.322	0.000	0.000	25.946	25.175	11.007	MWD+IFR1+MS
6900.000	0.000	0.000	6826.496	25.541	0.000	26.238	0.000	9.475	0.000	0.000	26.264	25.514	10.985	MWD+IFR1+MS
7000.000	0.000	0.000	6926.496	25.884	0.000	26.562	0.000	9.630	0.000	0.000	26.587	25.859	10.661	MWD+IFR1+MS
7100.000	0.000	0.000	7026.496	26.227	0.000	26.888	0.000	9.788	0.000	0.000	26.910	26.204	10.324	MWD+IFR1+MS
7200.000	0.000	0.000	7126.496	26.571	0.000	27.214	0.000	9.949	0.000	0.000	27.235	26.550	9.975	MWD+IFR1+MS
7300.000	0.000	0.000	7226.496	26.915	0.000	27.542	0.000	10.112	0.000	0.000	27.560	26.896	9.613	MWD+IFR1+MS
7400.000	0.000	0.000	7326.496	27.259	0.000	27.870	0.000	10.279	0.000	0.000	27.886	27.243	9.237	MWD+IFR1+MS
7500.000	0.000	0.000	7426.496	27.604	0.000	28.198	0.000	10.448	0.000	0.000	28.213	27.589	8.847	MWD+IFR1+MS
7600.000	0.000	0.000	7526.496	27.949	0.000	28.528	0.000	10.620	0.000	0.000	28.541	27.936	8.441	MWD+IFR1+MS
7700.000	0.000	0.000	7626.496	28.295	0.000	28.858	0.000	10.795	0.000	0.000	28.869	28.283	8.020	MWD+IFR1+MS
7800.000	0.000	0.000	7726.496	28.641	0.000	29.189	0.000	10.973	0.000	0.000	29.198	28.631	7.582	MWD+IFR1+MS
7900.000	0.000	0.000	7826.496	28.987	0.000	29.520	0.000	11.153	0.000	0.000	29.528	28.978	7.126	MWD+IFR1+MS
8000.000	0.000	0.000	7926.496	29.333	0.000	29.852	0.000	11.337	0.000	0.000	29.859	29.326	6.652	MWD+IFR1+MS
8100.000	0.000	0.000	8026.496	29.680	0.000	30.185	0.000	11.524	0.000	0.000	30.191	29.674	6.159	MWD+IFR1+MS
8200.000	0.000	0.000	8126.496	30.027	0.000	30.518	0.000	11.713	0.000	0.000	30.523	30.022	5.647	MWD+IFR1+MS
8300.000	0.000	0.000	8226.496	30.374	0.000	30.852	0.000	11.906	0.000	0.000	30.856	30.370	5.113	MWD+IFR1+MS
8400.000	0.000	0.000	8326.496	30.721	0.000	31.186	0.000	12.101	0.000	0.000	31.189	30.718	4.557	MWD+IFR1+MS
8500.000	0.000	0.000	8426.496	31.069	0.000	31.521	0.000	12.299	0.000	0.000	31.523	31.067	3.979	MWD+IFR1+MS
8600.000	0.000	0.000	8526.496	31.417	0.000	31.857	0.000	12.501	0.000	0.000	31.858	31.416	3.377	MWD+IFR1+MS
8700.000	0.000	0.000	8626.496	31.765	0.000	32.193	0.000	12.705	0.000	0.000	32.194	31.764	2.750	MWD+IFR1+MS
8800.000	0.000	0.000	8726.496	32.114	0.000	32.529	0.000	12.913	0.000	0.000	32.529	32.113	2.099	MWD+IFR1+MS
8900.000	0.000	0.000	8826.496	32.462	0.000	32.866	0.000	13.123	0.000	0.000	32.866	32.462	1.420	MWD+IFR1+MS
9000.000	0.000	0.000	8926.496	32.811	0.000	33.203	0.000	13.336	0.000	0.000	33.203	32.811	0.715	MWD+IFR1+MS
9100.000	0.000	0.000	9026.496	33.160	0.000	33.541	0.000	13.553	0.000	0.000	33.541	33.160	-0.018	MWD+IFR1+MS
9200.000	0.000	0.000	9126.496	33.510	0.000	33.879	0.000	13.772	0.000	0.000	33.879	33.509	-0.780	MWD+IFR1+MS
9300.000	0.000	0.000	9226.496	33.859	0.000	34.218	0.000	13.995	0.000	0.000	34.218	33.859	-1.570	MWD+IFR1+MS

9400.000	0.000	0.000	9326.496	34.209	0.000	34.557	0.000	14.220	0.000	0.000	34.557	34.208	-2.391	MWD+IFR1+MS
9500.000	0.000	0.000	9426.496	34.558	0.000	34.896	0.000	14.449	0.000	0.000	34.897	34.557	-3.241	MWD+IFR1+MS
9600.000	0.000	0.000	9526.496	34.908	0.000	35.236	0.000	14.681	0.000	0.000	35.238	34.907	-4.120	MWD+IFR1+MS
9700.000	0.000	0.000	9626.496	35.259	0.000	35.576	0.000	14.915	0.000	0.000	35.578	35.256	-5.030	MWD+IFR1+MS
9800.000	0.000	0.000	9726.496	35.609	0.000	35.916	0.000	15.153	0.000	0.000	35.920	35.606	-5.969	MWD+IFR1+MS
9900.000	0.000	0.000	9826.496	35.959	0.000	36.257	0.000	15.394	0.000	0.000	36.262	35.955	-6.936	MWD+IFR1+MS
10000.000	0.000	0.000	9926.496	36.310	0.000	36.598	0.000	15.638	0.000	0.000	36.604	36.304	-7.931	MWD+IFR1+MS
10100.000	0.000	0.000	10026.496	36.661	0.000	36.940	0.000	15.885	0.000	0.000	36.947	36.654	-8.952	MWD+IFR1+MS
10200.000	0.000	0.000	10126.496	37.012	0.000	37.282	0.000	16.135	0.000	0.000	37.290	37.003	-9.998	MWD+IFR1+MS
10300.000	0.000	0.000	10226.496	37.363	0.000	37.624	0.000	16.388	0.000	0.000	37.634	37.352	-11.067	MWD+IFR1+MS
10400.000	0.000	0.000	10326.496	37.714	0.000	37.966	0.000	16.645	0.000	0.000	37.979	37.702	-12.156	MWD+IFR1+MS
10500.000	0.000	0.000	10426.496	38.066	0.000	38.309	0.000	16.904	0.000	0.000	38.323	38.051	-13.263	MWD+IFR1+MS
10600.000	0.000	0.000	10526.496	38.417	0.000	38.652	0.000	17.167	0.000	0.000	38.669	38.400	-14.385	MWD+IFR1+MS
10700.000	0.000	0.000	10626.496	38.769	0.000	38.995	0.000	17.432	0.000	0.000	39.014	38.750	-15.518	MWD+IFR1+MS
10721.304	0.000	0.000	10647.800	38.843	0.000	39.068	0.000	17.489	0.000	0.000	39.087	38.824	-15.591	MWD+IFR1+MS
10800.000	6.296	179.722	10726.338	38.953	0.000	39.325	-0.000	17.702	0.000	0.000	39.357	39.172	-24.941	MWD+IFR1+MS
10900.000	14.296	179.722	10824.648	39.294	0.000	39.635	-0.000	18.030	0.000	0.000	40.366	39.615	99.104	MWD+IFR1+MS
11000.000	22.296	179.722	10919.516	39.269	0.000	39.933	-0.000	18.510	0.000	0.000	41.595	39.914	95.886	MWD+IFR1+MS
11100.000	30.296	179.722	11009.095	38.703	0.000	40.215	-0.000	19.188	0.000	0.000	42.668	40.192	95.150	MWD+IFR1+MS
11200.000	38.296	179.722	11091.642	37.671	0.000	40.476	-0.000	20.094	0.000	0.000	43.565	40.449	94.955	MWD+IFR1+MS
11300.000	46.296	179.722	11165.550	36.277	0.000	40.714	-0.000	21.228	0.000	0.000	44.279	40.682	95.011	MWD+IFR1+MS
11400.000	54.296	179.722	11229.381	34.656	0.000	40.929	-0.000	22.566	0.000	0.000	44.814	40.891	95.245	MWD+IFR1+MS
11500.000	62.296	179.722	11281.891	32.979	0.000	41.118	-0.000	24.065	0.000	0.000	45.184	41.072	95.631	MWD+IFR1+MS
11600.000	70.296	179.722	11322.060	31.452	0.000	41.280	-0.000	25.673	0.000	0.000	45.411	41.224	96.160	MWD+IFR1+MS
11700.000	78.296	179.722	11349.106	30.302	0.000	41.413	-0.000	27.332	0.000	0.000	45.529	41.347	96.815	MWD+IFR1+MS
11800.000	86.296	179.722	11362.501	29.747	0.000	41.518	-0.000	28.988	0.000	0.000	45.577	41.437	97.554	MWD+IFR1+MS
11846.304	90.000	179.722	11363.997	29.227	0.000	41.554	-0.000	29.227	0.000	0.000	45.587	41.466	97.890	MWD+IFR1+MS
11900.000	90.000	179.722	11363.997	29.337	0.000	41.593	-0.000	29.337	0.000	0.000	45.598	41.497	98.292	MWD+IFR1+MS
12000.000	90.000	179.722	11363.997	29.510	0.000	41.680	-0.000	29.510	0.000	0.000	45.619	41.568	99.081	MWD+IFR1+MS
12100.000	90.000	179.722	11363.997	29.706	0.000	41.784	-0.000	29.706	0.000	0.000	45.643	41.653	99.923	MWD+IFR1+MS
12200.000	90.000	179.722	11363.997	29.921	0.000	41.901	-0.000	29.921	0.000	0.000	45.669	41.749	100.823	MWD+IFR1+MS
12300.000	90.000	179.722	11363.997	30.155	0.000	42.031	-0.000	30.155	0.000	0.000	45.699	41.856	101.792	MWD+IFR1+MS
12400.000	90.000	179.722	11363.997	30.408	0.000	42.175	-0.000	30.408	0.000	0.000	45.732	41.974	102.838	MWD+IFR1+MS

12500.000	90.000	179.722	11363.997	30.678	0.000	42.333	-0.000	30.678	0.000	0.000	45.769	42.102	103.974	MWD+IFR1+MS
12600.000	90.000	179.722	11363.997	30.967	0.000	42.504	-0.000	30.967	0.000	0.000	45.810	42.239	105.214	MWD+IFR1+MS
12700.000	90.000	179.722	11363.997	31.272	0.000	42.687	-0.000	31.272	0.000	0.000	45.856	42.385	106.573	MWD+IFR1+MS
12800.000	90.000	179.722	11363.997	31.593	0.000	42.884	-0.000	31.593	0.000	0.000	45.908	42.538	108.065	MWD+IFR1+MS
12900.000	90.000	179.722	11363.997	31.931	0.000	43.093	-0.000	31.931	0.000	0.000	45.966	42.699	109.710	MWD+IFR1+MS
13000.000	90.000	179.722	11363.997	32.284	0.000	43.315	-0.000	32.284	0.000	0.000	46.032	42.864	111.523	MWD+IFR1+MS
13100.000	90.000	179.722	11363.997	32.653	0.000	43.549	-0.000	32.653	0.000	0.000	46.107	43.034	113.521	MWD+IFR1+MS
13200.000	90.000	179.722	11363.997	33.036	0.000	43.795	-0.000	33.036	0.000	0.000	46.193	43.206	115.718	MWD+IFR1+MS
13300.000	90.000	179.722	11363.997	33.432	0.000	44.054	-0.000	33.432	0.000	0.000	46.290	43.378	118.119	MWD+IFR1+MS
13400.000	90.000	179.722	11363.997	33.843	0.000	44.324	-0.000	33.843	0.000	0.000	46.402	43.549	120.723	MWD+IFR1+MS
13500.000	90.000	179.722	11363.997	34.266	0.000	44.605	-0.000	34.266	0.000	0.000	46.529	43.716	123.513	MWD+IFR1+MS
13600.000	90.000	179.722	11363.997	34.702	0.000	44.898	-0.000	34.702	0.000	0.000	46.674	43.877	126.459	MWD+IFR1+MS
13700.000	90.000	179.722	11363.997	35.151	0.000	45.202	-0.000	35.151	0.000	0.000	46.838	44.031	129.511	MWD+IFR1+MS
13800.000	90.000	179.722	11363.997	35.611	0.000	45.516	-0.000	35.611	0.000	0.000	47.022	44.175	132.609	MWD+IFR1+MS
13900.000	90.000	179.722	11363.997	36.082	0.000	45.841	-0.000	36.082	0.000	0.000	47.228	44.310	-44.313	MWD+IFR1+MS
14000.000	90.000	179.722	11363.997	36.563	0.000	46.177	-0.000	36.563	0.000	0.000	47.456	44.434	-41.322	MWD+IFR1+MS
14100.000	90.000	179.722	11363.997	37.056	0.000	46.523	-0.000	37.056	0.000	0.000	47.705	44.547	-38.470	MWD+IFR1+MS
14200.000	90.000	179.722	11363.997	37.558	0.000	46.879	-0.000	37.558	0.000	0.000	47.975	44.650	-35.799	MWD+IFR1+MS
14300.000	90.000	179.722	11363.997	38.069	0.000	47.244	-0.000	38.069	0.000	0.000	48.264	44.743	-33.329	MWD+IFR1+MS
14400.000	90.000	179.722	11363.997	38.590	0.000	47.619	-0.000	38.590	0.000	0.000	48.572	44.829	-31.070	MWD+IFR1+MS
14500.000	90.000	179.722	11363.997	39.120	0.000	48.004	-0.000	39.120	0.000	0.000	48.897	44.907	-29.018	MWD+IFR1+MS
14600.000	90.000	179.722	11363.997	39.658	0.000	48.397	-0.000	39.658	0.000	0.000	49.237	44.979	-27.164	MWD+IFR1+MS
14700.000	90.000	179.722	11363.997	40.204	0.000	48.799	-0.000	40.204	0.000	0.000	49.593	45.046	-25.492	MWD+IFR1+MS
14800.000	90.000	179.722	11363.997	40.759	0.000	49.210	-0.000	40.759	0.000	0.000	49.962	45.108	-23.985	MWD+IFR1+MS
14900.000	90.000	179.722	11363.997	41.320	0.000	49.629	-0.000	41.320	0.000	0.000	50.345	45.166	-22.626	MWD+IFR1+MS
15000.000	90.000	179.722	11363.997	41.889	0.000	50.057	-0.000	41.889	0.000	0.000	50.739	45.221	-21.399	MWD+IFR1+MS
15100.000	90.000	179.722	11363.997	42.464	0.000	50.492	-0.000	42.464	0.000	0.000	51.144	45.273	-20.290	MWD+IFR1+MS
15200.000	90.000	179.722	11363.997	43.047	0.000	50.935	-0.000	43.047	0.000	0.000	51.561	45.323	-19.283	MWD+IFR1+MS
15300.000	90.000	179.722	11363.997	43.635	0.000	51.386	-0.000	43.635	0.000	0.000	51.987	45.371	-18.369	MWD+IFR1+MS
15400.000	90.000	179.722	11363.997	44.230	0.000	51.844	-0.000	44.230	0.000	0.000	52.423	45.417	-17.534	MWD+IFR1+MS
15500.000	90.000	179.722	11363.997	44.830	0.000	52.310	-0.000	44.830	0.000	0.000	52.868	45.463	-16.771	MWD+IFR1+MS
15600.000	90.000	179.722	11363.997	45.436	0.000	52.782	-0.000	45.436	0.000	0.000	53.321	45.507	-16.072	MWD+IFR1+MS
15700.000	90.000	179.722	11363.997	46.048	0.000	53.261	-0.000	46.048	0.000	0.000	53.783	45.550	-15.428	MWD+IFR1+MS

15800.000	90.000	179.722	11363.997	46.665	0.000	53.747	-0.000	46.665	0.000	0.000	54.253	45.593	-14.835	MWD+IFR1+MS
15900.000	90.000	179.722	11363.997	47.286	0.000	54.239	-0.000	47.286	0.000	0.000	54.730	45.635	-14.287	MWD+IFR1+MS
16000.000	90.000	179.722	11363.997	47.913	0.000	54.738	-0.000	47.913	0.000	0.000	55.215	45.677	-13.778	MWD+IFR1+MS
16100.000	90.000	179.722	11363.997	48.544	0.000	55.242	-0.000	48.544	0.000	0.000	55.706	45.718	-13.306	MWD+IFR1+MS
16200.000	90.000	179.722	11363.997	49.179	0.000	55.753	-0.000	49.179	0.000	0.000	56.205	45.759	-12.865	MWD+IFR1+MS
16300.000	90.000	179.722	11363.997	49.819	0.000	56.269	-0.000	49.819	0.000	0.000	56.710	45.801	-12.455	MWD+IFR1+MS
16400.000	90.000	179.722	11363.997	50.463	0.000	56.791	-0.000	50.463	0.000	0.000	57.221	45.842	-12.070	MWD+IFR1+MS
16500.000	90.000	179.722	11363.997	51.111	0.000	57.319	-0.000	51.111	0.000	0.000	57.738	45.883	-11.710	MWD+IFR1+MS
16600.000	90.000	179.722	11363.997	51.762	0.000	57.851	-0.000	51.762	0.000	0.000	58.261	45.924	-11.372	MWD+IFR1+MS
16700.000	90.000	179.722	11363.997	52.417	0.000	58.389	-0.000	52.417	0.000	0.000	58.790	45.965	-11.053	MWD+IFR1+MS
16800.000	90.000	179.722	11363.997	53.076	0.000	58.932	-0.000	53.076	0.000	0.000	59.325	46.006	-10.753	MWD+IFR1+MS
16900.000	90.000	179.722	11363.997	53.738	0.000	59.480	-0.000	53.738	0.000	0.000	59.864	46.048	-10.470	MWD+IFR1+MS
17000.000	90.000	179.722	11363.997	54.404	0.000	60.033	-0.000	54.404	0.000	0.000	60.409	46.090	-10.202	MWD+IFR1+MS
17100.000	90.000	179.722	11363.997	55.072	0.000	60.590	-0.000	55.072	0.000	0.000	60.959	46.132	-9.948	MWD+IFR1+MS
17200.000	90.000	179.722	11363.997	55.744	0.000	61.152	-0.000	55.744	0.000	0.000	61.513	46.174	-9.707	MWD+IFR1+MS
17300.000	90.000	179.722	11363.997	56.418	0.000	61.718	-0.000	56.418	0.000	0.000	62.073	46.217	-9.479	MWD+IFR1+MS
17400.000	90.000	179.722	11363.997	57.096	0.000	62.289	-0.000	57.096	0.000	0.000	62.637	46.260	-9.261	MWD+IFR1+MS
17500.000	90.000	179.722	11363.997	57.776	0.000	62.863	-0.000	57.776	0.000	0.000	63.205	46.303	-9.054	MWD+IFR1+MS
17600.000	90.000	179.722	11363.997	58.458	0.000	63.442	-0.000	58.458	0.000	0.000	63.778	46.346	-8.857	MWD+IFR1+MS
17700.000	90.000	179.722	11363.997	59.144	0.000	64.024	-0.000	59.144	0.000	0.000	64.354	46.390	-8.669	MWD+IFR1+MS
17800.000	90.000	179.722	11363.997	59.831	0.000	64.611	-0.000	59.831	0.000	0.000	64.935	46.435	-8.489	MWD+IFR1+MS
17900.000	90.000	179.722	11363.997	60.521	0.000	65.201	-0.000	60.521	0.000	0.000	65.520	46.479	-8.316	MWD+IFR1+MS
18000.000	90.000	179.722	11363.997	61.213	0.000	65.794	-0.000	61.213	0.000	0.000	66.108	46.524	-8.152	MWD+IFR1+MS
18100.000	90.000	179.722	11363.997	61.908	0.000	66.392	-0.000	61.908	0.000	0.000	66.700	46.570	-7.994	MWD+IFR1+MS
18200.000	90.000	179.722	11363.997	62.605	0.000	66.992	-0.000	62.605	0.000	0.000	67.296	46.616	-7.842	MWD+IFR1+MS
18300.000	90.000	179.722	11363.997	63.303	0.000	67.596	-0.000	63.303	0.000	0.000	67.896	46.662	-7.697	MWD+IFR1+MS
18400.000	90.000	179.722	11363.997	64.004	0.000	68.203	-0.000	64.004	0.000	0.000	68.498	46.709	-7.557	MWD+IFR1+MS
18500.000	90.000	179.722	11363.997	64.707	0.000	68.814	-0.000	64.707	0.000	0.000	69.104	46.756	-7.423	MWD+IFR1+MS
18600.000	90.000	179.722	11363.997	65.411	0.000	69.427	-0.000	65.411	0.000	0.000	69.713	46.804	-7.293	MWD+IFR1+MS
18700.000	90.000	179.722	11363.997	66.117	0.000	70.044	-0.000	66.117	0.000	0.000	70.326	46.852	-7.169	MWD+IFR1+MS
18800.000	90.000	179.722	11363.997	66.825	0.000	70.663	-0.000	66.825	0.000	0.000	70.941	46.900	-7.049	MWD+IFR1+MS
18900.000	90.000	179.722	11363.997	67.535	0.000	71.285	-0.000	67.535	0.000	0.000	71.559	46.949	-6.933	MWD+IFR1+MS
19000.000	90.000	179.722	11363.997	68.246	0.000	71.910	-0.000	68.246	0.000	0.000	72.181	46.999	-6.821	MWD+IFR1+MS

19100.000	90.000	179.722	11363.997	68.959	0.000	72.538	-0.000	68.959	0.000	0.000	72.805	47.049	-6.713	MWD+IFR1+MS
19200.000	90.000	179.722	11363.997	69.674	0.000	73.168	-0.000	69.674	0.000	0.000	73.431	47.099	-6.609	MWD+IFR1+MS
19300.000	90.000	179.722	11363.997	70.390	0.000	73.801	-0.000	70.390	0.000	0.000	74.061	47.150	-6.508	MWD+IFR1+MS
19400.000	90.000	179.722	11363.997	71.107	0.000	74.436	-0.000	71.107	0.000	0.000	74.693	47.201	-6.411	MWD+IFR1+MS
19500.000	90.000	179.722	11363.997	71.826	0.000	75.074	-0.000	71.826	0.000	0.000	75.327	47.253	-6.316	MWD+IFR1+MS
19600.000	90.000	179.722	11363.997	72.547	0.000	75.714	-0.000	72.547	0.000	0.000	75.964	47.305	-6.225	MWD+IFR1+MS
19700.000	90.000	179.722	11363.997	73.268	0.000	76.356	-0.000	73.268	0.000	0.000	76.603	47.358	-6.136	MWD+IFR1+MS
19800.000	90.000	179.722	11363.997	73.991	0.000	77.001	-0.000	73.991	0.000	0.000	77.245	47.411	-6.050	MWD+IFR1+MS
19900.000	90.000	179.722	11363.997	74.715	0.000	77.648	-0.000	74.715	0.000	0.000	77.889	47.465	-5.967	MWD+IFR1+MS
20000.000	90.000	179.722	11363.997	75.440	0.000	78.297	-0.000	75.440	0.000	0.000	78.535	47.519	-5.886	MWD+IFR1+MS
20100.000	90.000	179.722	11363.997	76.167	0.000	78.948	-0.000	76.167	0.000	0.000	79.183	47.574	-5.807	MWD+IFR1+MS
20200.000	90.000	179.722	11363.997	76.895	0.000	79.601	-0.000	76.895	0.000	0.000	79.834	47.629	-5.731	MWD+IFR1+MS
20300.000	90.000	179.722	11363.997	77.623	0.000	80.256	-0.000	77.623	0.000	0.000	80.486	47.685	-5.656	MWD+IFR1+MS
20400.000	90.000	179.722	11363.997	78.353	0.000	80.913	-0.000	78.353	0.000	0.000	81.141	47.741	-5.584	MWD+IFR1+MS
20500.000	90.000	179.722	11363.997	79.084	0.000	81.572	-0.000	79.084	0.000	0.000	81.797	47.797	-5.514	MWD+IFR1+MS
20600.000	90.000	179.722	11363.997	79.816	0.000	82.233	-0.000	79.816	0.000	0.000	82.455	47.854	-5.446	MWD+IFR1+MS
20700.000	90.000	179.722	11363.997	80.549	0.000	82.896	-0.000	80.549	0.000	0.000	83.115	47.912	-5.379	MWD+IFR1+MS
20800.000	90.000	179.722	11363.997	81.283	0.000	83.560	-0.000	81.283	0.000	0.000	83.777	47.970	-5.315	MWD+IFR1+MS
20900.000	90.000	179.722	11363.997	82.018	0.000	84.226	-0.000	82.018	0.000	0.000	84.441	48.028	-5.251	MWD+IFR1+MS
21000.000	90.000	179.722	11363.997	82.753	0.000	84.894	-0.000	82.753	0.000	0.000	85.107	48.087	-5.190	MWD+IFR1+MS
21100.000	90.000	179.722	11363.997	83.490	0.000	85.563	-0.000	83.490	0.000	0.000	85.774	48.147	-5.130	MWD+IFR1+MS
21200.000	90.000	179.722	11363.997	84.227	0.000	86.234	-0.000	84.227	0.000	0.000	86.442	48.207	-5.072	MWD+IFR1+MS
21300.000	90.000	179.722	11363.997	84.966	0.000	86.907	-0.000	84.966	0.000	0.000	87.113	48.267	-5.015	MWD+IFR1+MS
21400.000	90.000	179.722	11363.997	85.705	0.000	87.581	-0.000	85.705	0.000	0.000	87.785	48.328	-4.959	MWD+IFR1+MS
21500.000	90.000	179.722	11363.997	86.445	0.000	88.256	-0.000	86.445	0.000	0.000	88.458	48.389	-4.905	MWD+IFR1+MS
21600.000	90.000	179.722	11363.997	87.186	0.000	88.933	-0.000	87.186	0.000	0.000	89.133	48.451	-4.852	MWD+IFR1+MS
21700.000	90.000	179.722	11363.997	87.927	0.000	89.612	-0.000	87.927	0.000	0.000	89.810	48.513	-4.800	MWD+IFR1+MS
21800.000	90.000	179.722	11363.997	88.669	0.000	90.292	-0.000	88.669	0.000	0.000	90.488	48.576	-4.749	MWD+IFR1+MS
21900.000	90.000	179.722	11363.997	89.412	0.000	90.973	-0.000	89.412	0.000	0.000	91.167	48.639	-4.700	MWD+IFR1+MS
22000.000	90.000	179.722	11363.997	90.156	0.000	91.656	-0.000	90.156	0.000	0.000	91.848	48.703	-4.652	MWD+IFR1+MS
22100.000	90.000	179.722	11363.997	90.901	0.000	92.339	-0.000	90.901	0.000	0.000	92.530	48.767	-4.604	MWD+IFR1+MS
22200.000	90.000	179.722	11363.997	91.646	0.000	93.024	-0.000	91.646	0.000	0.000	93.213	48.832	-4.558	MWD+IFR1+MS
22300.000	90.000	179.722	11363.997	92.391	0.000	93.711	-0.000	92.391	0.000	0.000	93.898	48.897	-4.513	MWD+IFR1+MS

22400.000	90.000	179.722	11363.997	93.138	0.000	94.398	-0.000	93.138	0.000	0.000	94.583	48.963	-4.469	MWD+IFR1+MS
22500.000	90.000	179.722	11363.997	93.885	0.000	95.087	-0.000	93.885	0.000	0.000	95.270	49.029	-4.425	MWD+IFR1+MS
22600.000	90.000	179.722	11363.997	94.632	0.000	95.777	-0.000	94.632	0.000	0.000	95.959	49.095	-4.383	MWD+IFR1+MS
22700.000	90.000	179.722	11363.997	95.381	0.000	96.468	-0.000	95.381	0.000	0.000	96.648	49.162	-4.341	MWD+IFR1+MS
22800.000	90.000	179.722	11363.997	96.129	0.000	97.160	-0.000	96.129	0.000	0.000	97.339	49.230	-4.301	MWD+IFR1+MS
22900.000	90.000	179.722	11363.997	96.879	0.000	97.854	-0.000	96.879	0.000	0.000	98.030	49.298	-4.261	MWD+IFR1+MS
23000.000	90.000	179.722	11363.997	97.629	0.000	98.548	-0.000	97.629	0.000	0.000	98.723	49.366	-4.222	MWD+IFR1+MS
23100.000	90.000	179.722	11363.997	98.379	0.000	99.243	-0.000	98.379	0.000	0.000	99.417	49.435	-4.184	MWD+IFR1+MS
23200.000	90.000	179.722	11363.997	99.130	0.000	99.940	-0.000	99.130	0.000	0.000	100.112	49.504	-4.146	MWD+IFR1+MS
23300.000	90.000	179.722	11363.997	99.882	0.000	100.637	-0.000	99.882	0.000	0.000	100.808	49.574	-4.109	MWD+IFR1+MS
23400.000	90.000	179.722	11363.997	100.634	0.000	101.336	-0.000	100.634	0.000	0.000	101.505	49.644	-4.073	MWD+IFR1+MS
23500.000	90.000	179.722	11363.997	101.386	0.000	102.035	-0.000	101.386	0.000	0.000	102.203	49.715	-4.038	MWD+IFR1+MS
23600.000	90.000	179.722	11363.997	102.139	0.000	102.735	-0.000	102.139	0.000	0.000	102.902	49.786	-4.003	MWD+IFR1+MS
23700.000	90.000	179.722	11363.997	102.893	0.000	103.437	-0.000	102.893	0.000	0.000	103.602	49.858	-3.969	MWD+IFR1+MS
23800.000	90.000	179.722	11363.997	103.646	0.000	104.139	-0.000	103.646	0.000	0.000	104.302	49.930	-3.936	MWD+IFR1+MS
23900.000	90.000	179.722	11363.997	104.401	0.000	104.842	-0.000	104.401	0.000	0.000	105.004	50.002	-3.903	MWD+IFR1+MS
24000.000	90.000	179.722	11363.997	105.156	0.000	105.546	-0.000	105.156	0.000	0.000	105.707	50.075	-3.871	MWD+IFR1+MS
24100.000	90.000	179.722	11363.997	105.911	0.000	106.250	-0.000	105.911	0.000	0.000	106.410	50.148	-3.839	MWD+IFR1+MS
24200.000	90.000	179.722	11363.997	106.667	0.000	106.956	-0.000	106.667	0.000	0.000	107.114	50.222	-3.808	MWD+IFR1+MS
24300.000	90.000	179.722	11363.997	107.423	0.000	107.662	-0.000	107.423	0.000	0.000	107.820	50.296	-3.777	MWD+IFR1+MS
24400.000	90.000	179.722	11363.997	108.179	0.000	108.370	-0.000	108.179	0.000	0.000	108.526	50.371	-3.747	MWD+IFR1+MS
24500.000	90.000	179.722	11363.997	108.936	0.000	109.078	-0.000	108.936	0.000	0.000	109.232	50.446	-3.718	MWD+IFR1+MS
24600.000	90.000	179.722	11363.997	109.694	0.000	109.786	-0.000	109.694	0.000	0.000	109.940	50.521	-3.689	MWD+IFR1+MS
24700.000	90.000	179.722	11363.997	110.451	0.000	110.496	-0.000	110.451	0.000	0.000	110.648	50.597	-3.660	MWD+IFR1+MS
24800.000	90.000	179.722	11363.997	111.209	0.000	111.206	-0.000	111.209	0.000	0.000	111.357	50.674	-3.632	MWD+IFR1+MS
24900.000	90.000	179.722	11363.997	111.968	0.000	111.917	-0.000	111.968	0.000	0.000	112.067	50.751	-3.605	MWD+IFR1+MS
25000.000	90.000	179.722	11363.997	112.727	0.000	112.629	-0.000	112.727	0.000	0.000	112.778	50.828	-3.578	MWD+IFR1+MS
25100.000	90.000	179.722	11363.997	113.486	0.000	113.341	-0.000	113.486	0.000	0.000	113.489	50.906	-3.551	MWD+IFR1+MS
25200.000	90.000	179.722	11363.997	114.245	0.000	114.054	-0.000	114.245	0.000	0.000	114.201	50.984	-3.525	MWD+IFR1+MS
25300.000	90.000	179.722	11363.997	115.005	0.000	114.768	-0.000	115.005	0.000	0.000	114.914	51.062	-3.499	MWD+IFR1+MS
25400.000	90.000	179.722	11363.997	115.765	0.000	115.482	-0.000	115.765	0.000	0.000	115.627	51.141	-3.474	MWD+IFR1+MS
25500.000	90.000	179.722	11363.997	116.526	0.000	116.198	-0.000	116.526	0.000	0.000	116.341	51.220	-3.449	MWD+IFR1+MS
25600.000	90.000	179.722	11363.997	117.287	0.000	116.913	-0.000	117.287	0.000	0.000	117.056	51.300	-3.424	MWD+IFR1+MS

25700.000	90.000	179.722	11363.997	118.048	0.000	117.630	-0.000	118.048	0.000	0.000	117.771	51.380	-3.400	MWD+IFR1+MS
25800.000	90.000	179.722	11363.997	118.809	0.000	118.347	-0.000	118.809	0.000	0.000	118.487	51.461	-3.376	MWD+IFR1+MS
25900.000	90.000	179.722	11363.997	119.571	0.000	119.064	-0.000	119.571	0.000	0.000	119.204	51.542	-3.353	MWD+IFR1+MS
26000.000	90.000	179.722	11363.997	120.333	0.000	119.782	-0.000	120.333	0.000	0.000	119.921	51.623	-3.330	MWD+IFR1+MS
26100.000	90.000	179.722	11363.997	121.095	0.000	120.501	-0.000	121.095	0.000	0.000	120.639	51.705	-3.307	MWD+IFR1+MS
26200.000	90.000	179.722	11363.997	121.858	0.000	121.220	-0.000	121.858	0.000	0.000	121.357	51.787	-3.285	MWD+IFR1+MS
26300.000	90.000	179.722	11363.997	122.621	0.000	121.940	-0.000	122.621	0.000	0.000	122.076	51.870	-3.263	MWD+IFR1+MS
26400.000	90.000	179.722	11363.997	123.384	0.000	122.661	-0.000	123.384	0.000	0.000	122.796	51.953	-3.241	MWD+IFR1+MS
26500.000	90.000	179.722	11363.997	124.147	0.000	123.382	-0.000	124.147	0.000	0.000	123.516	52.036	-3.219	MWD+IFR1+MS
26573.834	90.000	179.722	11363.997	124.711	0.000	123.914	-0.000	124.711	0.000	0.000	124.047	52.098	-3.204	MWD+IFR1+MS
26600.000	90.000	179.722	11363.997	124.910	0.000	124.102	-0.000	124.910	0.000	0.000	124.235	52.120	-3.198	MWD+IFR1+MS
26673.876	90.000	179.722	11363.997	125.474	0.000	124.634	-0.000	125.474	0.000	0.000	124.766	52.182	-3.183	MWD+IFR1+MS

Plan Targets Poker Lake Unit 19 DTD South 423H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 28	11597.29	440354.90	630158.20	8153.00	RECTANGLE
SHL 31	3508.99	440162.01	629305.44	0.00	RECTANGLE
LTP 28	26573.90	424911.30	630233.10	8153.00	RECTANGLE
BHL 28	26674.09	424811.30	630233.40	8153.00	RECTANGLE

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

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

Background

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

Supporting Documentation

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

Figure 1: Winch System attached to BOP Stack

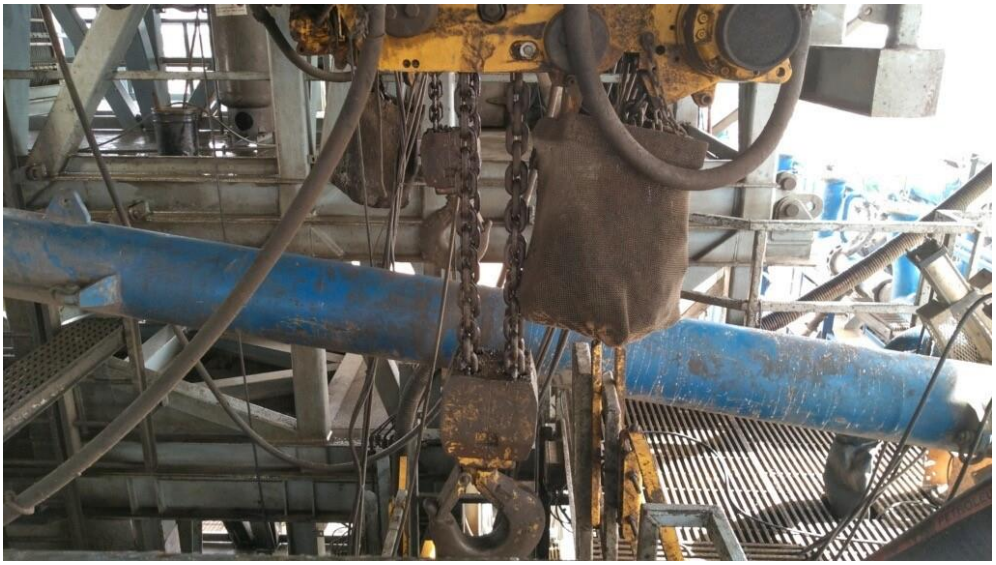


Figure 2: BOP Winch System

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

62 API STANDARD 53

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

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

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

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

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

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

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

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

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

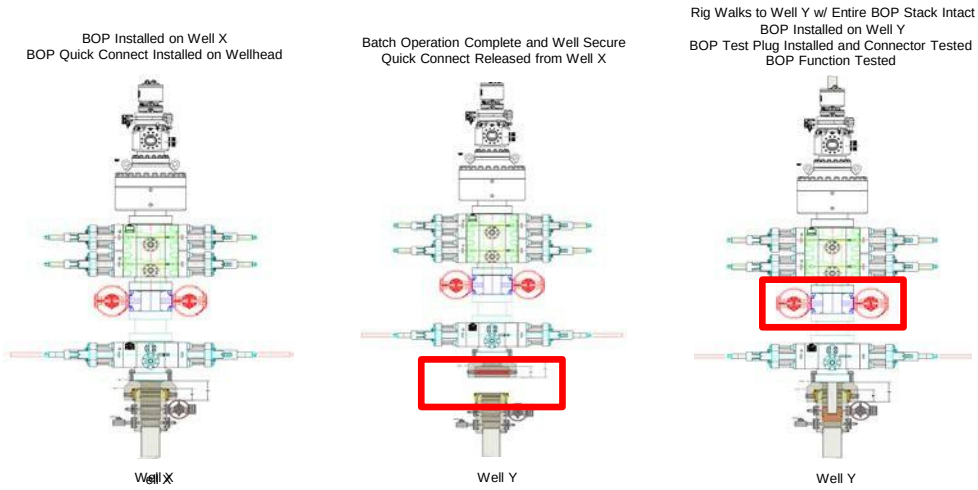
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often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

Procedures

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

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

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



Summary

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

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

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

1. After a full BOP test is conducted on the first well on the pad.

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

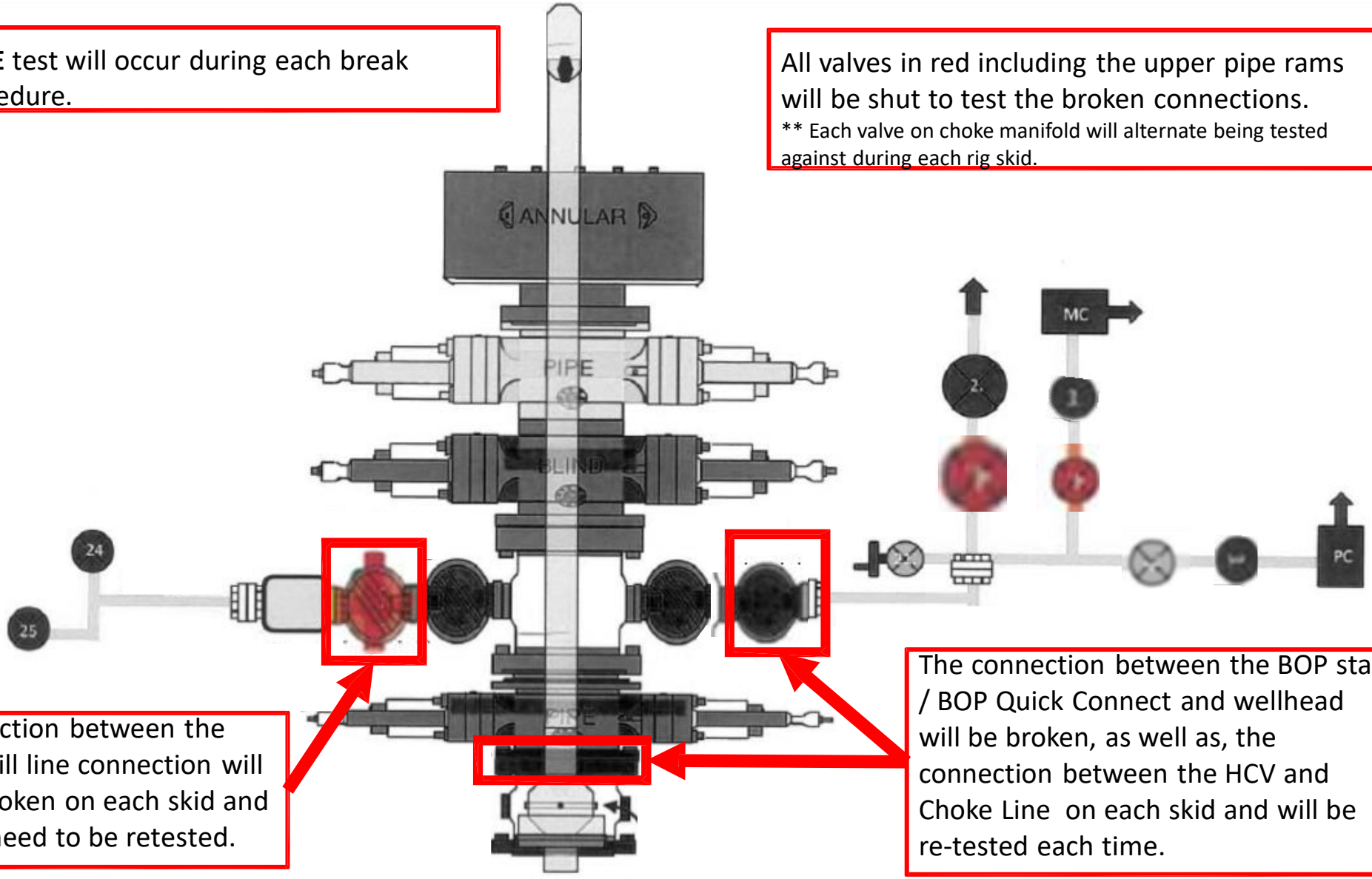
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

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

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

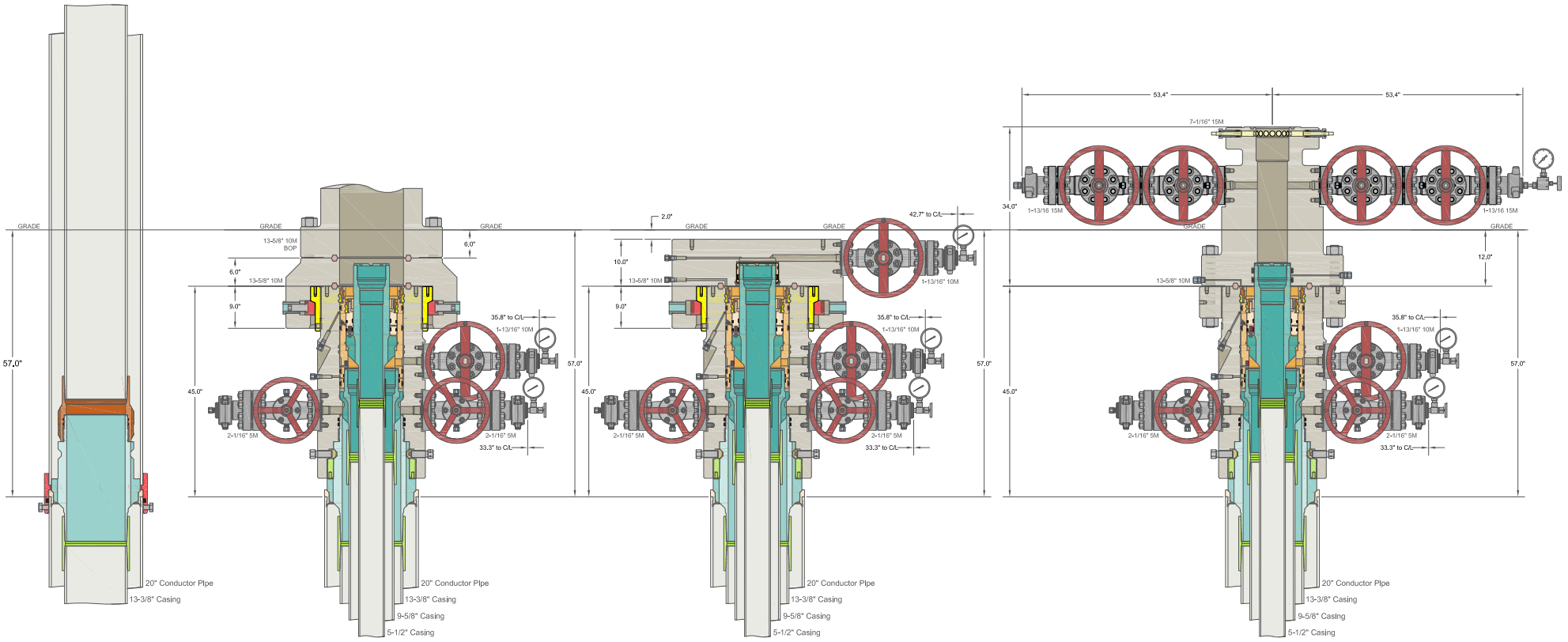
All valves in red including the upper pipe rams will be shut to test the broken connections.

** Each valve on choke manifold will alternate being tested against during each rig skid.



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

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



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

(20") x 13-3/8" x 9-5/8" x 5-1/2" 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	VJK	31MAR22
APPRV		
DRAWING NO.	SDT-2856	

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 Number	[2] Pool Code	[3] Pool Name
30-015-53841	98220	Purple Sage; Wolfcamp

[4] Property Code	[5] Property Name	[6] Well Number
333976	POKER LAKE UNIT 19 DTD	423H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC	3,179'

[10] Surface Location

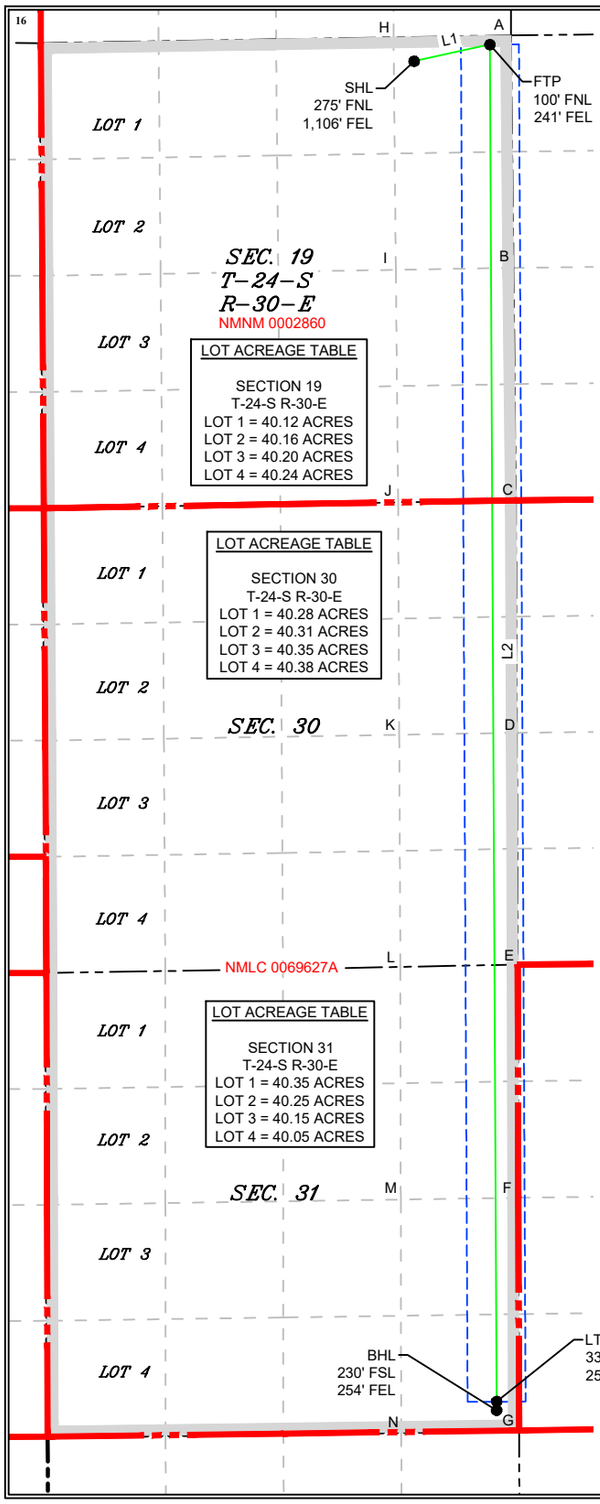
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	19	24S	30E		275	NORTH	1,106	EAST	EDDY

[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	31	24S	30E		230	SOUTH	254	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
1,922.84			

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	077°40'04"	883.94'
L2	179°43'16"	15,544.15'

COORDINATE TABLE

SHL (NAD 83 NME)	SHL (NAD 27 NME)
Y = 440,225.4 N	Y = 440,166.1 N
X = 670,478.3 E	X = 629,294.7 E
LAT. = 32.209567 °N	LAT. = 32.209443 °N
LONG. = 103.915783 °W	LONG. = 103.915295 °W

FTP (NAD 83 NME)	FTP (NAD 27 NME)
Y = 440,414.2 N	Y = 440,354.9 N
X = 671,341.9 E	X = 630,158.2 E
LAT. = 32.210077 °N	LAT. = 32.209952 °N
LONG. = 103.912989 °W	LONG. = 103.912501 °W

LTP (NAD 83 NME)	LTP (NAD 27 NME)
Y = 424,970.2 N	Y = 424,911.3 N
X = 671,417.3 E	X = 630,233.1 E
LAT. = 32.167623 °N	LAT. = 32.167498 °N
LONG. = 103.912940 °W	LONG. = 103.912454 °W

BHL (NAD 83 NME)	BHL (NAD 27 NME)
Y = 424,870.2 N	Y = 424,811.3 N
X = 671,417.5 E	X = 630,233.4 E
LAT. = 32.167348 °N	LAT. = 32.167223 °N
LONG. = 103.912940 °W	LONG. = 103.912455 °W

CORNER COORDINATES (NAD 83 NME)

A - Y =	440,518.1 N	A - X =	671,581.7 E
B - Y =	437,872.8 N	B - X =	671,608.7 E
C - Y =	435,227.3 N	C - X =	671,636.4 E
D - Y =	432,582.2 N	D - X =	671,647.1 E
E - Y =	429,944.5 N	E - X =	671,658.1 E
F - Y =	427,291.7 N	F - X =	671,665.3 E
G - Y =	424,643.6 N	G - X =	671,672.5 E
H - Y =	440,496.2 N	H - X =	670,244.6 E
I - Y =	437,850.2 N	I - X =	670,270.4 E
J - Y =	435,204.8 N	J - X =	670,296.6 E
K - Y =	432,560.0 N	K - X =	670,309.1 E
L - Y =	429,918.6 N	L - X =	670,321.8 E
M - Y =	427,271.5 N	M - X =	670,326.5 E
N - Y =	424,625.7 N	N - X =	670,331.2 E

CORNER COORDINATES (NAD 27 NME)

A - Y =	440,458.8 N	A - X =	630,398.1 E
B - Y =	437,813.6 N	B - X =	630,425.0 E
C - Y =	435,168.2 N	C - X =	630,452.5 E
D - Y =	432,523.1 N	D - X =	630,463.2 E
E - Y =	429,885.5 N	E - X =	630,474.1 E
F - Y =	427,232.8 N	F - X =	630,481.2 E
G - Y =	424,584.7 N	G - X =	630,488.3 E
H - Y =	440,436.9 N	H - X =	629,060.9 E
I - Y =	437,791.0 N	I - X =	629,086.7 E
J - Y =	435,145.6 N	J - X =	629,112.8 E
K - Y =	432,500.9 N	K - X =	629,125.2 E
L - Y =	429,859.6 N	L - X =	629,137.8 E
M - Y =	427,212.6 N	M - X =	629,142.4 E
N - Y =	424,566.8 N	N - X =	629,147.0 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.

Terra Sebastian 3/05/2024
Signature Date

Terra Sebastian
Printed Name

terra.b.sebastian@exxonmobil.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

02/09/2024
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

RP 618.013003.05-63

J:\618.013 XTO Energy – NM\003 Poker Lake Unit\05 – PLU 19 DTD – EDDY\Wells\63 – 423H\DWG\SOUTH 423H 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

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

XTO Energy Inc.
PLU 19 Dog Town Draw 324H
Projected TD: 26673.88' MD / 11364' TVD
SHL: 275' FNL & 1106' FEL , Section 19, T24S, R30E
BHL: 230' FSL & 254' FEL , Section 31, T24S, R30E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	688'	Water
Top of Salt	1091'	Water
Base of Salt	3284'	Water
Delaware	3478'	Water
Brushy Canyon	5976'	Water/Oil/Gas
Bone Spring	7272'	Water
1st Bone Spring	8258'	Water/Oil/Gas
2nd Bone Spring	9076'	Water/Oil/Gas
3rd Bone Spring	10170'	Water/Oil/Gas
Wolfcamp	10561'	Water/Oil/Gas
Wolfcamp X	10582'	Water/Oil/Gas
Wolfcamp Y	10660'	Water/Oil/Gas
Wolfcamp A	10702'	Water/Oil/Gas
Wolfcamp B	11036'	Water/Oil/Gas
Wolfcamp C	11244'	Water/Oil/Gas
Target/Land Curve	11364'	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 @ 788' (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 10521.3' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 26673.88 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10221.3 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0’ – 788'	13.375	54.5	J-55	BTC	New	1.12	3.28	21.17
12.25	0’ – 4000'	9.625	40	HC P-110	BTC	New	1.98	2.34	3.01
12.25	4000' – 10521.3'	9.625	40	HC L-80	BTC	New	1.44	1.70	3.51
8.5	0’ – 10421.3'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.86	1.88
8.5	10421.3' - 26673.88'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.71	1.88

· 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.
· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

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

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

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

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 788'

Lead: 360 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 +/- 10521.3'
1st Stage
Optional Lead: 1010 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 1310 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 5976
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: 2110 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 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5976') 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: 5.5, 20 New Semi-Premium, RY P-110 casing to be set at +/- 26673.88'

Lead: 50 sxs NeoCem (mixed at 13.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10221.3 feet
Tail: 3140 sxs VersaCem (mixed at 14.8 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10721.3 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 4000 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 day.

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

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

on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 788'	17.5	FW/Native	8.4-8.9	35-40	NC
788' - 10521.3'	12.25	FW / Cut Brine / Direct Emulsion	8.7-9.2	30-32	NC
10521.3' - 26673.88'	8.5	OBM	11-11.5	50-60	NC - 20

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

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

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 175 to 195 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6500 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.

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

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

General Procedure While Drilling

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

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

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

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

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 338637
	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.	5/8/2024