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

Sundry Print Report

05/10/2024

Well Name: POKER LAKE UNIT 20 DTD

Well Location: T24S / R30E / SEC 20 / NENE / 32.209454 / -103.898433

County or Parish/State: EDDY / NM

Well Number: 409H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM02860

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number: NMNM71016X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2781347

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/24/2024

Time Sundry Submitted: 04:10

Date proposed operation will begin: 08/15/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, FTP, LTP, BHL, casing sizes, cement, proposed total depth. FROM: TO: SHL: 357' FNL & 1097' FEL of Section 20-T24S-R30E 337' FNL & 608' FEL of Section 20-T24S-R30E FTP: 100' FSL & 1530' FEL of Section 17-T24S-R30E 100' FNL & 1199' FEL of Section 20-T24S-R30E LTP: 330' FNL & 1530' FEL of Section 32-T23S-R30E 330' FSL & 1005' FEL of Section 5-T25S-R30E BHL: 200' FNL & 1530' FEL of Section 32-T23S-R30E 230' FSL & 1005' FEL of Section 5-T25S-R30E Proposed total depth will change from 30722’ MD; 9517’ TVD (Wildcat/Bone Spring) to 32427’ MD; TVD 11835’ (Bone Spring). See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Drilling Plan, MBS, BOP Variance, Well Controls Plan

NOI Attachments

Procedure Description

PLU_20_DTD_409H_BLM_APD_Change_Sundry_attachments_20240324160857.pdf

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Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2781347_Poker_Lake_Unit_20_DTD_409H_COAs_20240404142829.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: RICHARD REDUS

Signed on: MAR 24, 2024 04:08 PM

Name: XTO PERMIAN OPERATING LLC

Title: Permitting Manager

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING **State:** TX

Phone: (720) 539-1673

Email address: RICHARD.L.REDUS@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: 05/10/2024

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 Controls Plan

Location of Well

0. SHL: NENE / 357 FNL / 1097 FEL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.209454 / LONG: -103.898433 (TVD: 0 feet, MD: 0 feet)

PPP: SWSE / 330 FSL / 1530 FEL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.22549 / LONG: -103.89986 (TVD: 9517 feet, MD: 15200 feet)

PPP: SWSE / 100 FSL / 1530 FEL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210703 / LONG: -103.899829 (TVD: 9517 feet, MD: 9900 feet)

PPP: SWSE / 330 FSL / 1530 FEL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.24023 / LONG: -103.89986 (TVD: 9517 feet, MD: 20500 feet)

BHL: NWNE / 200 FNL / 1530 FEL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268058 / LONG: -103.899835 (TVD: 9517 feet, MD: 30722 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 409H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2781347** on 04/04/2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

H_2S	◉ No	○ Yes		
Potash / WIPP	◉ None	○ Secretary	○ R-111-P	☐ WIPP
Cave / Karst	◉ Low	○ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☐ Primary Squeeze	☑ Cont. Squeeze	☐ EchoMeter	☐ DV Tool
Special Req	☑ Break Testing	☐ Water Disposal	☐ COM	☑ Unit
Variance	☑ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☑ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ **Batch APD / Sundry**				

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 700 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. ***Set depth adjusted per BLM geologist.***

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead

cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:

   - Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

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

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

3. The minimum required fill of cement behind the **6** inch production casing is:

   - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

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

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

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

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

BOPE Break Testing Variance

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

Offline Cementing

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

GENERAL REQUIREMENTS

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

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

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

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

Lea County (API No. / US Well No. contains 30-025-#####)
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240; (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. **Wait on cement (WOC) for Potash Areas:** After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

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

B. PRESSURE CONTROL

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

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

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

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

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

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

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
30-015-54821	97814	Wildcat;Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
335377	POKER LAKE UNIT 20 DTD	409H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC	3,290'

[10] Surface Location

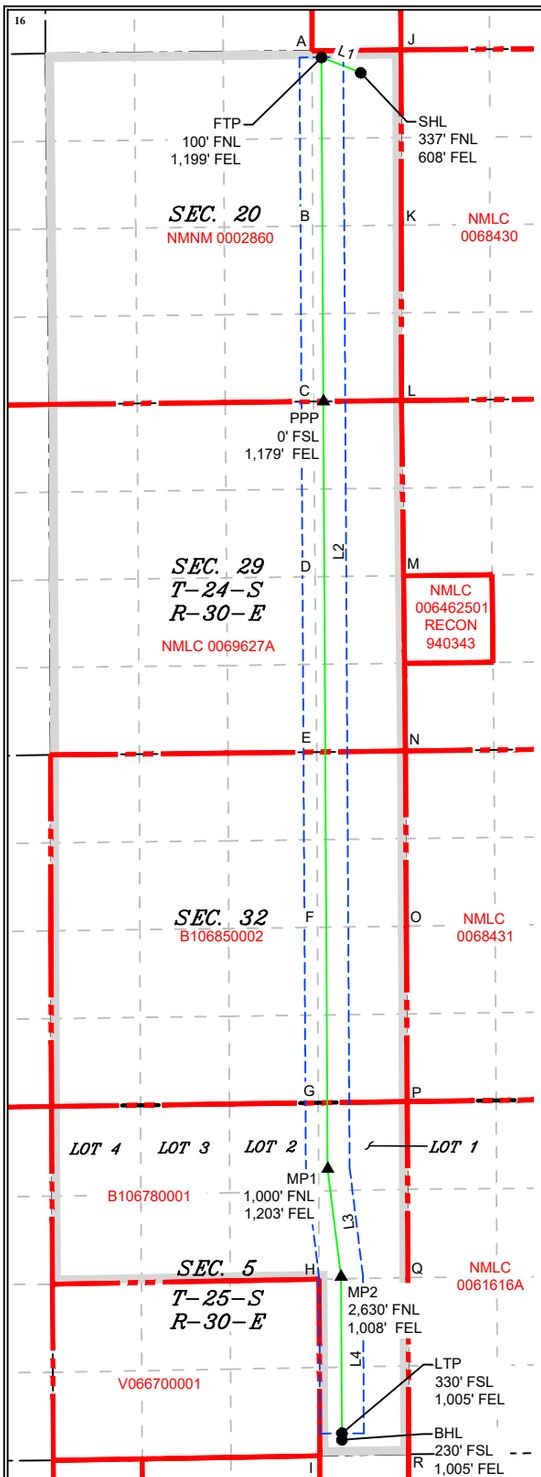
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	20	24S	30E		337	NORTH	608	EAST	EDDY

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	5	25S	30E		230	SOUTH	1,005	EAST	EDDY

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

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



LEGEND

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

LOT ACREAGE TABLE

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

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	291°18'21"	635.17'
L2	179°40'30"	16,761.36'
L3	172°57'16"	1,639.84'
L4	179°40'42"	2,459.94'

COORDINATE TABLE

	SHL (NAD 83 NME)	SHL (NAD 27 NME)
Y =	440,230.9 N	440,171.6 N
X =	676,334.3 E	635,150.6 E
LAT. =	32.209518 °N	32.209394 °N
LONG. =	103.896849 °W	103.896362 °W

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

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

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

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

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

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

CORNER COORDINATES (NAD 83 NME)

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

CORNER COORDINATES (NAD 27 NME)

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

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Manish Saini 03/21/2024
Signature Date

Manish Saini
Printed Name

manish.saini@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.

3/15/2024
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

RP/AI/DB 618.013003.06-57

J:\618.013 XTO Energy - NM\003 Poker Lake Unit\06 - PLU 20 DTD - EDDY\Wells\-57 - 409H\DWG\SOUTH 409H C-102.dwg

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

XTO Energy Inc.
PLU 20 Dog Town Draw 409H
Projected TD: 32427.89' MD / 11835' TVD
SHL: 337' FNL & 608' FEL , Section 20, T24S, R30E
BHL: 230' FSL & 1005' FEL , Section 5, T25S, R30E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	929'	Water
Top of Salt	1332'	Water
Base of Salt	3525'	Water
Delaware	3719'	Water
Brushy Canyon	6217'	Water/Oil/Gas
Bone Spring	7513'	Water
1st Bone Spring	8499'	Water/Oil/Gas
2nd Bone Spring	9317'	Water/Oil/Gas
3rd Bone Spring	10411'	Water/Oil/Gas
Target/Land Curve	11835'	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 @ 1029' (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 10956.22' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 32427.89 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10656.22 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1029'	13.375	54.5	J-55	BTC	New	1.05	2.51	16.21
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	1.48	2.31	2.89
12.25	4000' – 10956.22'	9.625	40	HC L-80	BTC	New	1.08	1.60	3.29
8.5	0' – 10856.22'	6	26	P-110	Semi-Premium	New	1.17	1.86	1.48
8.5	10856.22' - 32427.89'	6	26	P-110	Semi-Premium	New	1.17	1.71	1.67

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

Wellhead:

Permanent Wellhead – Multibowl System

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

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

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

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1029'

Lead: 540 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 300 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Top of Cement: Surface
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 9.625, 40 New casing to be set at +/- 10956.22'
1st Stage
Optional Lead: 1050 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 1370 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6217
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
Tail: 2190 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 0
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 9-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6217') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

Production Casing: 6, 26 New Semi-Premium, P-110 casing to be set at +/- 32427.89'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10656.22 feet
Tail: 3620 sxs VersaCem (mixed at 14.8 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 11156.22 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 10M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 5335 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, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nippling up on the 9.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week.

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

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

hole on each of the wells.

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

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 1029'	17.5	FW/Native	8.4-8.9	35-40	NC
1029' - 10956.22'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
10956.22' - 32427.89'	8.5	OBM	12.9-13.4	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 180 to 200 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 7939 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.

Well Plan Report - Poker Lake Unit 20 DTD South 409H

Measured Depth:	32427.89 ft
TVD RKB:	11835.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	440171.60 ft
Easting:	635150.60 ft
RKB:	3322.00 ft
Ground Level:	3290.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan Sections Poker Lake Unit 20 DTD South 409H

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	
1444.62	6.89	291.31	1443.79	7.52	-19.29	2.00	0.00	2.00	
6392.80	6.89	291.31	6356.21	223.28	-572.51	0.00	0.00	0.00	
6737.42	0.00	0.00	6700.00	230.80	-591.80	-2.00	0.00	2.00	
11156.22	0.00	0.00	11118.80	230.80	-591.80	0.00	0.00	0.00	
12281.22	90.00	179.68	11835.00	-485.39	-587.76	8.00	0.00	8.00	
12281.24	90.00	179.68	11835.00	-485.41	-587.76	0.00	0.00	0.00	
28325.99	90.00	179.68	11835.00	-16529.90	-497.20	0.00	0.00	0.00	MP1 409H
28706.04	90.00	172.08	11835.00	-16908.69	-469.89	-0.00	-2.00	2.00	
29966.69	90.00	172.08	11835.00	-18157.30	-296.10	0.00	0.00	0.00	MP2 409H
30383.78	90.00	180.42	11835.00	-18573.13	-268.82	0.00	2.00	2.00	
32327.80	90.00	180.42	11835.00	-20517.10	-283.00	0.00	0.00	0.00	LTP 22

32427.89	90.00	180.42	11835.00	-20617.18	-283.73	0.00	0.00	0.00	BHL 22

Position Uncertainty Poker Lake Unit 20 DTD South 409H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Highside Bias (ft)	Lateral Error (ft)	Lateral Bias (ft)	Vertical Error (ft)	Vertical Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.374	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.406	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.443	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.484	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.530	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.580	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.633	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	291.306	1199.980	4.392	0.000	5.024	0.000	2.689	0.000	0.000	5.060	4.353	124.733	MWD+IFR1+MS
1300.000	4.000	291.306	1299.838	5.261	0.000	5.358	0.000	2.749	0.000	0.000	5.359	5.268	114.490	MWD+IFR1+MS
1400.000	6.000	291.306	1399.452	6.020	0.000	5.696	0.000	2.814	0.000	0.000	6.072	5.657	38.811	MWD+IFR1+MS
1444.620	6.892	291.306	1443.789	6.185	0.000	5.837	0.000	2.840	0.000	0.000	6.248	5.794	38.793	MWD+IFR1+MS
1500.000	6.892	291.306	1498.769	6.354	0.000	6.012	0.000	2.875	0.000	0.000	6.420	5.966	39.447	MWD+IFR1+MS
1600.000	6.892	291.306	1598.047	6.661	0.000	6.346	0.000	2.944	0.000	0.000	6.737	6.287	42.050	MWD+IFR1+MS
1700.000	6.892	291.306	1697.324	6.984	0.000	6.693	0.000	3.017	0.000	0.000	7.078	6.614	45.341	MWD+IFR1+MS
1800.000	6.892	291.306	1796.601	7.312	0.000	7.043	0.000	3.091	0.000	0.000	7.424	6.942	48.139	MWD+IFR1+MS
1900.000	6.892	291.306	1895.879	7.643	0.000	7.395	0.000	3.168	0.000	0.000	7.774	7.272	50.505	MWD+IFR1+MS
2000.000	6.892	291.306	1995.156	7.978	0.000	7.747	0.000	3.248	0.000	0.000	8.127	7.603	52.504	MWD+IFR1+MS
2100.000	6.892	291.306	2094.433	8.315	0.000	8.101	0.000	3.329	0.000	0.000	8.482	7.936	54.200	MWD+IFR1+MS
2200.000	6.892	291.306	2193.711	8.655	0.000	8.456	0.000	3.413	0.000	0.000	8.839	8.271	55.647	MWD+IFR1+MS
2300.000	6.892	291.306	2292.988	8.997	0.000	8.812	0.000	3.498	0.000	0.000	9.197	8.608	56.889	MWD+IFR1+MS
2400.000	6.892	291.306	2392.265	9.342	0.000	9.169	0.000	3.585	0.000	0.000	9.556	8.947	57.962	MWD+IFR1+MS
2500.000	6.892	291.306	2491.542	9.687	0.000	9.526	0.000	3.674	0.000	0.000	9.917	9.287	58.897	MWD+IFR1+MS

2600.000	6.892	291.306	2590.820	10.035	0.000	9.884	0.000	3.764	0.000	0.000	10.278	9.628	59.716	MWD+IFR1+MS
2700.000	6.892	291.306	2690.097	10.384	0.000	10.243	0.000	3.856	0.000	0.000	10.640	9.971	60.439	MWD+IFR1+MS
2800.000	6.892	291.306	2789.374	10.734	0.000	10.602	0.000	3.949	0.000	0.000	11.002	10.316	61.079	MWD+IFR1+MS
2900.000	6.892	291.306	2888.652	11.086	0.000	10.962	0.000	4.044	0.000	0.000	11.365	10.661	61.651	MWD+IFR1+MS
3000.000	6.892	291.306	2987.929	11.439	0.000	11.322	0.000	4.141	0.000	0.000	11.729	11.008	62.163	MWD+IFR1+MS
3100.000	6.892	291.306	3087.206	11.792	0.000	11.682	0.000	4.239	0.000	0.000	12.093	11.355	62.624	MWD+IFR1+MS
3200.000	6.892	291.306	3186.484	12.146	0.000	12.043	0.000	4.338	0.000	0.000	12.457	11.703	63.041	MWD+IFR1+MS
3300.000	6.892	291.306	3285.761	12.502	0.000	12.404	0.000	4.439	0.000	0.000	12.821	12.053	63.420	MWD+IFR1+MS
3400.000	6.892	291.306	3385.038	12.858	0.000	12.766	0.000	4.541	0.000	0.000	13.186	12.403	63.765	MWD+IFR1+MS
3500.000	6.892	291.306	3484.316	13.214	0.000	13.127	0.000	4.644	0.000	0.000	13.551	12.754	64.080	MWD+IFR1+MS
3600.000	6.892	291.306	3583.593	13.572	0.000	13.489	0.000	4.749	0.000	0.000	13.916	13.105	64.370	MWD+IFR1+MS
3700.000	6.892	291.306	3682.870	13.930	0.000	13.851	0.000	4.856	0.000	0.000	14.281	13.458	64.636	MWD+IFR1+MS
3800.000	6.892	291.306	3782.148	14.288	0.000	14.214	0.000	4.964	0.000	0.000	14.646	13.810	64.882	MWD+IFR1+MS
3900.000	6.892	291.306	3881.425	14.647	0.000	14.576	0.000	5.073	0.000	0.000	15.012	14.164	65.109	MWD+IFR1+MS
4000.000	6.892	291.306	3980.702	15.006	0.000	14.939	0.000	5.184	0.000	0.000	15.378	14.518	65.320	MWD+IFR1+MS
4100.000	6.892	291.306	4079.980	15.366	0.000	15.302	0.000	5.297	0.000	0.000	15.744	14.872	65.516	MWD+IFR1+MS
4200.000	6.892	291.306	4179.257	15.726	0.000	15.665	0.000	5.411	0.000	0.000	16.110	15.227	65.698	MWD+IFR1+MS
4300.000	6.892	291.306	4278.534	16.087	0.000	16.028	0.000	5.527	0.000	0.000	16.476	15.582	65.868	MWD+IFR1+MS
4400.000	6.892	291.306	4377.812	16.448	0.000	16.392	0.000	5.644	0.000	0.000	16.842	15.938	66.026	MWD+IFR1+MS
4500.000	6.892	291.306	4477.089	16.809	0.000	16.755	0.000	5.763	0.000	0.000	17.208	16.294	66.175	MWD+IFR1+MS
4600.000	6.892	291.306	4576.366	17.171	0.000	17.119	0.000	5.883	0.000	0.000	17.575	16.650	66.314	MWD+IFR1+MS
4700.000	6.892	291.306	4675.644	17.533	0.000	17.483	0.000	6.006	0.000	0.000	17.941	17.007	66.444	MWD+IFR1+MS
4800.000	6.892	291.306	4774.921	17.895	0.000	17.846	0.000	6.130	0.000	0.000	18.308	17.364	66.567	MWD+IFR1+MS
4900.000	6.892	291.306	4874.198	18.257	0.000	18.210	0.000	6.255	0.000	0.000	18.674	17.721	66.682	MWD+IFR1+MS
5000.000	6.892	291.306	4973.476	18.620	0.000	18.574	0.000	6.383	0.000	0.000	19.041	18.079	66.790	MWD+IFR1+MS
5100.000	6.892	291.306	5072.753	18.983	0.000	18.938	0.000	6.512	0.000	0.000	19.408	18.437	66.893	MWD+IFR1+MS
5200.000	6.892	291.306	5172.030	19.346	0.000	19.303	0.000	6.643	0.000	0.000	19.775	18.795	66.989	MWD+IFR1+MS
5300.000	6.892	291.306	5271.308	19.709	0.000	19.667	0.000	6.776	0.000	0.000	20.141	19.153	67.080	MWD+IFR1+MS
5400.000	6.892	291.306	5370.585	20.072	0.000	20.031	0.000	6.911	0.000	0.000	20.508	19.512	67.166	MWD+IFR1+MS
5500.000	6.892	291.306	5469.862	20.436	0.000	20.396	0.000	7.048	0.000	0.000	20.875	19.870	67.248	MWD+IFR1+MS
5600.000	6.892	291.306	5569.140	20.800	0.000	20.760	0.000	7.187	0.000	0.000	21.242	20.229	67.325	MWD+IFR1+MS
5700.000	6.892	291.306	5668.417	21.164	0.000	21.125	0.000	7.328	0.000	0.000	21.609	20.588	67.397	MWD+IFR1+MS
5800.000	6.892	291.306	5767.694	21.528	0.000	21.489	0.000	7.471	0.000	0.000	21.977	20.948	67.466	MWD+IFR1+MS

5900.000	6.892	291.306	5866.972	21.892	0.000	21.854	0.000	7.616	0.000	0.000	22.344	21.307	67.532	MWD+IFR1+MS
6000.000	6.892	291.306	5966.249	22.256	0.000	22.218	0.000	7.763	0.000	0.000	22.711	21.667	67.593	MWD+IFR1+MS
6100.000	6.892	291.306	6065.526	22.621	0.000	22.583	0.000	7.912	0.000	0.000	23.078	22.027	67.652	MWD+IFR1+MS
6200.000	6.892	291.306	6164.804	22.986	0.000	22.948	0.000	8.063	0.000	0.000	23.445	22.387	67.708	MWD+IFR1+MS
6300.000	6.892	291.306	6264.081	23.350	0.000	23.313	0.000	8.217	0.000	0.000	23.813	22.747	67.760	MWD+IFR1+MS
6392.800	6.892	291.306	6356.211	23.688	0.000	23.651	0.000	8.361	0.000	0.000	24.152	23.081	67.809	MWD+IFR1+MS
6400.000	6.748	291.306	6363.359	23.715	0.000	23.676	0.000	8.373	0.000	0.000	24.177	23.107	67.814	MWD+IFR1+MS
6500.000	4.748	291.306	6462.851	24.104	0.000	24.034	0.000	8.531	0.000	0.000	24.552	23.475	67.058	MWD+IFR1+MS
6600.000	2.748	291.306	6562.632	24.541	0.000	24.392	0.000	8.689	0.000	0.000	24.984	23.860	64.446	MWD+IFR1+MS
6700.000	0.748	291.306	6662.581	24.943	0.000	24.746	0.000	8.845	0.000	0.000	25.414	24.236	62.126	MWD+IFR1+MS
6737.420	0.000	0.000	6700.000	25.291	0.000	24.628	0.000	8.903	0.000	0.000	25.544	24.365	62.127	MWD+IFR1+MS
6800.000	0.000	0.000	6762.580	25.503	0.000	24.839	0.000	9.000	0.000	0.000	25.751	24.582	62.313	MWD+IFR1+MS
6900.000	0.000	0.000	6862.580	25.842	0.000	25.180	0.000	9.157	0.000	0.000	26.080	24.932	62.604	MWD+IFR1+MS
7000.000	0.000	0.000	6962.580	26.183	0.000	25.524	0.000	9.316	0.000	0.000	26.411	25.287	62.968	MWD+IFR1+MS
7100.000	0.000	0.000	7062.580	26.525	0.000	25.868	0.000	9.479	0.000	0.000	26.743	25.642	63.338	MWD+IFR1+MS
7200.000	0.000	0.000	7162.580	26.868	0.000	26.213	0.000	9.643	0.000	0.000	27.076	25.998	63.713	MWD+IFR1+MS
7300.000	0.000	0.000	7262.580	27.211	0.000	26.558	0.000	9.811	0.000	0.000	27.409	26.353	64.095	MWD+IFR1+MS
7400.000	0.000	0.000	7362.580	27.554	0.000	26.903	0.000	9.981	0.000	0.000	27.743	26.708	64.482	MWD+IFR1+MS
7500.000	0.000	0.000	7462.580	27.898	0.000	27.249	0.000	10.154	0.000	0.000	28.078	27.063	64.875	MWD+IFR1+MS
7600.000	0.000	0.000	7562.580	28.242	0.000	27.595	0.000	10.330	0.000	0.000	28.413	27.418	65.273	MWD+IFR1+MS
7700.000	0.000	0.000	7662.580	28.586	0.000	27.941	0.000	10.509	0.000	0.000	28.750	27.773	65.677	MWD+IFR1+MS
7800.000	0.000	0.000	7762.580	28.931	0.000	28.288	0.000	10.690	0.000	0.000	29.086	28.128	66.087	MWD+IFR1+MS
7900.000	0.000	0.000	7862.580	29.276	0.000	28.635	0.000	10.874	0.000	0.000	29.424	28.483	66.502	MWD+IFR1+MS
8000.000	0.000	0.000	7962.580	29.622	0.000	28.982	0.000	11.061	0.000	0.000	29.761	28.838	66.923	MWD+IFR1+MS
8100.000	0.000	0.000	8062.580	29.967	0.000	29.330	0.000	11.251	0.000	0.000	30.100	29.193	67.349	MWD+IFR1+MS
8200.000	0.000	0.000	8162.580	30.313	0.000	29.677	0.000	11.444	0.000	0.000	30.439	29.548	67.781	MWD+IFR1+MS
8300.000	0.000	0.000	8262.580	30.660	0.000	30.025	0.000	11.639	0.000	0.000	30.779	29.903	68.218	MWD+IFR1+MS
8400.000	0.000	0.000	8362.580	31.006	0.000	30.374	0.000	11.838	0.000	0.000	31.119	30.258	68.660	MWD+IFR1+MS
8500.000	0.000	0.000	8462.580	31.353	0.000	30.722	0.000	12.039	0.000	0.000	31.459	30.613	69.107	MWD+IFR1+MS
8600.000	0.000	0.000	8562.580	31.700	0.000	31.071	0.000	12.243	0.000	0.000	31.800	30.968	69.558	MWD+IFR1+MS
8700.000	0.000	0.000	8662.580	32.047	0.000	31.420	0.000	12.450	0.000	0.000	32.142	31.323	70.015	MWD+IFR1+MS
8800.000	0.000	0.000	8762.580	32.395	0.000	31.769	0.000	12.660	0.000	0.000	32.484	31.678	70.476	MWD+IFR1+MS
8900.000	0.000	0.000	8862.580	32.743	0.000	32.118	0.000	12.873	0.000	0.000	32.827	32.033	70.942	MWD+IFR1+MS

9000.000	0.000	0.000	8962.580	33.091	0.000	32.468	0.000	13.089	0.000	0.000	33.170	32.388	71.411	MWD+IFR1+MS
9100.000	0.000	0.000	9062.580	33.439	0.000	32.818	0.000	13.308	0.000	0.000	33.513	32.742	71.885	MWD+IFR1+MS
9200.000	0.000	0.000	9162.580	33.788	0.000	33.168	0.000	13.530	0.000	0.000	33.857	33.097	72.362	MWD+IFR1+MS
9300.000	0.000	0.000	9262.580	34.136	0.000	33.518	0.000	13.754	0.000	0.000	34.201	33.452	72.844	MWD+IFR1+MS
9400.000	0.000	0.000	9362.580	34.485	0.000	33.868	0.000	13.982	0.000	0.000	34.545	33.807	73.328	MWD+IFR1+MS
9500.000	0.000	0.000	9462.580	34.834	0.000	34.219	0.000	14.213	0.000	0.000	34.890	34.161	73.816	MWD+IFR1+MS
9600.000	0.000	0.000	9562.580	35.184	0.000	34.569	0.000	14.446	0.000	0.000	35.236	34.516	74.306	MWD+IFR1+MS
9700.000	0.000	0.000	9662.580	35.533	0.000	34.920	0.000	14.683	0.000	0.000	35.582	34.871	74.799	MWD+IFR1+MS
9800.000	0.000	0.000	9762.580	35.883	0.000	35.271	0.000	14.923	0.000	0.000	35.928	35.225	75.294	MWD+IFR1+MS
9900.000	0.000	0.000	9862.580	36.233	0.000	35.622	0.000	15.165	0.000	0.000	36.274	35.580	75.791	MWD+IFR1+MS
10000.000	0.000	0.000	9962.580	36.583	0.000	35.973	0.000	15.411	0.000	0.000	36.621	35.934	76.290	MWD+IFR1+MS
10100.000	0.000	0.000	10062.580	36.933	0.000	36.325	0.000	15.660	0.000	0.000	36.968	36.289	76.791	MWD+IFR1+MS
10200.000	0.000	0.000	10162.580	37.283	0.000	36.676	0.000	15.912	0.000	0.000	37.315	36.643	77.292	MWD+IFR1+MS
10300.000	0.000	0.000	10262.580	37.633	0.000	37.028	0.000	16.166	0.000	0.000	37.663	36.998	77.795	MWD+IFR1+MS
10400.000	0.000	0.000	10362.580	37.984	0.000	37.380	0.000	16.424	0.000	0.000	38.011	37.352	78.297	MWD+IFR1+MS
10500.000	0.000	0.000	10462.580	38.335	0.000	37.732	0.000	16.685	0.000	0.000	38.359	37.707	78.801	MWD+IFR1+MS
10600.000	0.000	0.000	10562.580	38.686	0.000	38.084	0.000	16.949	0.000	0.000	38.708	38.061	79.304	MWD+IFR1+MS
10700.000	0.000	0.000	10662.580	39.037	0.000	38.436	0.000	17.216	0.000	0.000	39.057	38.415	79.806	MWD+IFR1+MS
10800.000	0.000	0.000	10762.580	39.388	0.000	38.788	0.000	17.486	0.000	0.000	39.406	38.770	80.308	MWD+IFR1+MS
10900.000	0.000	0.000	10862.580	39.739	0.000	39.140	0.000	17.759	0.000	0.000	39.755	39.124	80.809	MWD+IFR1+MS
11000.000	0.000	0.000	10962.580	40.091	0.000	39.493	0.000	18.035	0.000	0.000	40.105	39.478	81.308	MWD+IFR1+MS
11100.000	0.000	0.000	11062.580	40.442	0.000	39.845	0.000	18.314	0.000	0.000	40.455	39.833	81.806	MWD+IFR1+MS
11156.220	0.000	0.000	11118.800	40.638	0.000	40.042	0.000	18.472	0.000	0.000	40.650	40.030	81.938	MWD+IFR1+MS
11200.000	3.502	179.677	11162.552	40.681	0.000	40.187	-0.000	18.596	0.000	0.000	40.804	40.176	82.068	MWD+IFR1+MS
11300.000	11.502	179.677	11261.616	40.838	0.000	40.504	-0.000	18.902	0.000	0.000	41.632	40.502	87.411	MWD+IFR1+MS
11400.000	19.502	179.677	11357.900	40.890	0.000	40.810	-0.000	19.327	0.000	0.000	42.867	40.810	90.333	MWD+IFR1+MS
11500.000	27.502	179.677	11449.529	40.367	0.000	41.098	-0.000	19.920	0.000	0.000	43.961	41.095	91.412	MWD+IFR1+MS
11600.000	35.502	179.677	11534.722	39.337	0.000	41.365	-0.000	20.720	0.000	0.000	44.891	41.359	92.006	MWD+IFR1+MS
11700.000	43.502	179.677	11611.819	37.899	0.000	41.610	-0.000	21.737	0.000	0.000	45.644	41.600	92.399	MWD+IFR1+MS
11800.000	51.502	179.677	11679.320	36.185	0.000	41.829	-0.000	22.958	0.000	0.000	46.219	41.816	92.682	MWD+IFR1+MS
11900.000	59.502	179.677	11735.911	34.364	0.000	42.021	-0.000	24.351	0.000	0.000	46.627	42.006	92.883	MWD+IFR1+MS
12000.000	67.502	179.677	11780.491	32.643	0.000	42.186	-0.000	25.870	0.000	0.000	46.885	42.170	92.999	MWD+IFR1+MS
12100.000	75.502	179.677	11812.192	31.260	0.000	42.323	-0.000	27.461	0.000	0.000	47.022	42.306	93.014	MWD+IFR1+MS

12200.000	83.502	179.677	11830.397	30.452	0.000	42.429	-0.000	29.070	0.000	0.000	47.073	42.413	92.894	MWD+IFR1+MS
12281.220	90.000	179.677	11834.997	29.968	0.000	42.491	-0.000	29.968	0.000	0.000	47.081	42.477	92.661	MWD+IFR1+MS
12281.240	90.000	179.677	11834.997	29.968	0.000	42.491	-0.000	29.968	0.000	0.000	47.082	42.477	92.660	MWD+IFR1+MS
12300.000	90.000	179.677	11834.997	29.993	0.000	42.502	-0.000	29.993	0.000	0.000	47.082	42.489	92.593	MWD+IFR1+MS
12400.000	90.000	179.677	11834.997	30.140	0.000	42.574	-0.000	30.140	0.000	0.000	47.085	42.564	92.236	MWD+IFR1+MS
12500.000	90.000	179.677	11834.997	30.310	0.000	42.662	-0.000	30.310	0.000	0.000	47.089	42.656	91.875	MWD+IFR1+MS
12600.000	90.000	179.677	11834.997	30.499	0.000	42.764	-0.000	30.499	0.000	0.000	47.094	42.760	91.506	MWD+IFR1+MS
12700.000	90.000	179.677	11834.997	30.708	0.000	42.880	-0.000	30.708	0.000	0.000	47.099	42.877	91.125	MWD+IFR1+MS
12800.000	90.000	179.677	11834.997	30.934	0.000	43.009	-0.000	30.934	0.000	0.000	47.106	43.007	90.727	MWD+IFR1+MS
12900.000	90.000	179.677	11834.997	31.179	0.000	43.151	-0.000	31.179	0.000	0.000	47.114	43.150	90.308	MWD+IFR1+MS
13000.000	90.000	179.677	11834.997	31.442	0.000	43.306	-0.000	31.442	0.000	0.000	47.123	43.305	89.862	MWD+IFR1+MS
13100.000	90.000	179.677	11834.997	31.722	0.000	43.473	-0.000	31.722	0.000	0.000	47.133	43.473	89.381	MWD+IFR1+MS
13200.000	90.000	179.677	11834.997	32.019	0.000	43.654	-0.000	32.019	0.000	0.000	47.144	43.653	88.856	MWD+IFR1+MS
13300.000	90.000	179.677	11834.997	32.332	0.000	43.848	-0.000	32.332	0.000	0.000	47.156	43.846	88.276	MWD+IFR1+MS
13400.000	90.000	179.677	11834.997	32.661	0.000	44.053	-0.000	32.661	0.000	0.000	47.170	44.049	87.624	MWD+IFR1+MS
13500.000	90.000	179.677	11834.997	33.005	0.000	44.271	-0.000	33.005	0.000	0.000	47.185	44.264	86.880	MWD+IFR1+MS
13600.000	90.000	179.677	11834.997	33.364	0.000	44.502	-0.000	33.364	0.000	0.000	47.202	44.490	86.016	MWD+IFR1+MS
13700.000	90.000	179.677	11834.997	33.738	0.000	44.744	-0.000	33.738	0.000	0.000	47.221	44.727	84.992	MWD+IFR1+MS
13800.000	90.000	179.677	11834.997	34.125	0.000	44.998	-0.000	34.125	0.000	0.000	47.243	44.973	83.751	MWD+IFR1+MS
13900.000	90.000	179.677	11834.997	34.526	0.000	45.263	-0.000	34.526	0.000	0.000	47.268	45.228	82.207	MWD+IFR1+MS
14000.000	90.000	179.677	11834.997	34.940	0.000	45.540	-0.000	34.940	0.000	0.000	47.297	45.490	80.230	MWD+IFR1+MS
14100.000	90.000	179.677	11834.997	35.367	0.000	45.828	-0.000	35.367	0.000	0.000	47.333	45.758	77.615	MWD+IFR1+MS
14200.000	90.000	179.677	11834.997	35.806	0.000	46.126	-0.000	35.806	0.000	0.000	47.379	46.027	74.037	MWD+IFR1+MS
14300.000	90.000	179.677	11834.997	36.256	0.000	46.436	-0.000	36.256	0.000	0.000	47.442	46.291	69.005	MWD+IFR1+MS
14400.000	90.000	179.677	11834.997	36.718	0.000	46.756	-0.000	36.718	0.000	0.000	47.531	46.539	61.931	MWD+IFR1+MS
14500.000	90.000	179.677	11834.997	37.191	0.000	47.086	-0.000	37.191	0.000	0.000	47.664	46.754	52.668	MWD+IFR1+MS
14600.000	90.000	179.677	11834.997	37.674	0.000	47.426	-0.000	37.674	0.000	0.000	47.855	46.922	42.507	MWD+IFR1+MS
14700.000	90.000	179.677	11834.997	38.167	0.000	47.776	-0.000	38.167	0.000	0.000	48.106	47.041	33.619	MWD+IFR1+MS
14800.000	90.000	179.677	11834.997	38.669	0.000	48.136	-0.000	38.669	0.000	0.000	48.402	47.124	26.979	MWD+IFR1+MS
14900.000	90.000	179.677	11834.997	39.181	0.000	48.505	-0.000	39.181	0.000	0.000	48.730	47.185	22.284	MWD+IFR1+MS
15000.000	90.000	179.677	11834.997	39.702	0.000	48.883	-0.000	39.702	0.000	0.000	49.081	47.234	18.941	MWD+IFR1+MS
15100.000	90.000	179.677	11834.997	40.231	0.000	49.271	-0.000	40.231	0.000	0.000	49.449	47.275	16.494	MWD+IFR1+MS
15200.000	90.000	179.677	11834.997	40.769	0.000	49.667	-0.000	40.769	0.000	0.000	49.831	47.311	14.643	MWD+IFR1+MS

15300.000	90.000	179.677	11834.997	41.314	0.000	50.072	-0.000	41.314	0.000	0.000	50.225	47.345	13.202	MWD+IFR1+MS
15400.000	90.000	179.677	11834.997	41.868	0.000	50.485	-0.000	41.868	0.000	0.000	50.629	47.376	12.050	MWD+IFR1+MS
15500.000	90.000	179.677	11834.997	42.428	0.000	50.906	-0.000	42.428	0.000	0.000	51.044	47.407	11.109	MWD+IFR1+MS
15600.000	90.000	179.677	11834.997	42.995	0.000	51.335	-0.000	42.995	0.000	0.000	51.467	47.437	10.325	MWD+IFR1+MS
15700.000	90.000	179.677	11834.997	43.570	0.000	51.772	-0.000	43.570	0.000	0.000	51.900	47.467	9.661	MWD+IFR1+MS
15800.000	90.000	179.677	11834.997	44.150	0.000	52.216	-0.000	44.150	0.000	0.000	52.340	47.497	9.092	MWD+IFR1+MS
15900.000	90.000	179.677	11834.997	44.737	0.000	52.668	-0.000	44.737	0.000	0.000	52.789	47.527	8.597	MWD+IFR1+MS
16000.000	90.000	179.677	11834.997	45.330	0.000	53.127	-0.000	45.330	0.000	0.000	53.245	47.557	8.163	MWD+IFR1+MS
16100.000	90.000	179.677	11834.997	45.929	0.000	53.594	-0.000	45.929	0.000	0.000	53.708	47.587	7.778	MWD+IFR1+MS
16200.000	90.000	179.677	11834.997	46.533	0.000	54.066	-0.000	46.533	0.000	0.000	54.179	47.617	7.435	MWD+IFR1+MS
16300.000	90.000	179.677	11834.997	47.142	0.000	54.546	-0.000	47.142	0.000	0.000	54.656	47.648	7.126	MWD+IFR1+MS
16400.000	90.000	179.677	11834.997	47.757	0.000	55.032	-0.000	47.757	0.000	0.000	55.140	47.679	6.846	MWD+IFR1+MS
16500.000	90.000	179.677	11834.997	48.377	0.000	55.524	-0.000	48.377	0.000	0.000	55.631	47.711	6.591	MWD+IFR1+MS
16600.000	90.000	179.677	11834.997	49.001	0.000	56.023	-0.000	49.001	0.000	0.000	56.128	47.743	6.358	MWD+IFR1+MS
16700.000	90.000	179.677	11834.997	49.630	0.000	56.527	-0.000	49.630	0.000	0.000	56.631	47.775	6.144	MWD+IFR1+MS
16800.000	90.000	179.677	11834.997	50.263	0.000	57.038	-0.000	50.263	0.000	0.000	57.140	47.808	5.946	MWD+IFR1+MS
16900.000	90.000	179.677	11834.997	50.901	0.000	57.553	-0.000	50.901	0.000	0.000	57.654	47.842	5.763	MWD+IFR1+MS
17000.000	90.000	179.677	11834.997	51.542	0.000	58.075	-0.000	51.542	0.000	0.000	58.175	47.876	5.592	MWD+IFR1+MS
17100.000	90.000	179.677	11834.997	52.187	0.000	58.602	-0.000	52.187	0.000	0.000	58.700	47.911	5.433	MWD+IFR1+MS
17200.000	90.000	179.677	11834.997	52.837	0.000	59.134	-0.000	52.837	0.000	0.000	59.231	47.946	5.284	MWD+IFR1+MS
17300.000	90.000	179.677	11834.997	53.490	0.000	59.671	-0.000	53.490	0.000	0.000	59.767	47.981	5.144	MWD+IFR1+MS
17400.000	90.000	179.677	11834.997	54.146	0.000	60.213	-0.000	54.146	0.000	0.000	60.308	48.018	5.012	MWD+IFR1+MS
17500.000	90.000	179.677	11834.997	54.806	0.000	60.760	-0.000	54.806	0.000	0.000	60.854	48.054	4.888	MWD+IFR1+MS
17600.000	90.000	179.677	11834.997	55.469	0.000	61.311	-0.000	55.469	0.000	0.000	61.405	48.092	4.771	MWD+IFR1+MS
17700.000	90.000	179.677	11834.997	56.135	0.000	61.867	-0.000	56.135	0.000	0.000	61.960	48.129	4.660	MWD+IFR1+MS
17800.000	90.000	179.677	11834.997	56.804	0.000	62.428	-0.000	56.804	0.000	0.000	62.520	48.168	4.554	MWD+IFR1+MS
17900.000	90.000	179.677	11834.997	57.476	0.000	62.993	-0.000	57.476	0.000	0.000	63.084	48.207	4.454	MWD+IFR1+MS
18000.000	90.000	179.677	11834.997	58.151	0.000	63.562	-0.000	58.151	0.000	0.000	63.652	48.246	4.358	MWD+IFR1+MS
18100.000	90.000	179.677	11834.997	58.828	0.000	64.135	-0.000	58.828	0.000	0.000	64.224	48.286	4.267	MWD+IFR1+MS
18200.000	90.000	179.677	11834.997	59.509	0.000	64.712	-0.000	59.509	0.000	0.000	64.800	48.327	4.180	MWD+IFR1+MS
18300.000	90.000	179.677	11834.997	60.192	0.000	65.293	-0.000	60.192	0.000	0.000	65.381	48.368	4.097	MWD+IFR1+MS
18400.000	90.000	179.677	11834.997	60.877	0.000	65.878	-0.000	60.877	0.000	0.000	65.965	48.410	4.018	MWD+IFR1+MS
18500.000	90.000	179.677	11834.997	61.564	0.000	66.466	-0.000	61.564	0.000	0.000	66.552	48.452	3.941	MWD+IFR1+MS

18600.000	90.000	179.677	11834.997	62.254	0.000	67.058	-0.000	62.254	0.000	0.000	67.144	48.495	3.868	MWD+IFR1+MS
18700.000	90.000	179.677	11834.997	62.947	0.000	67.653	-0.000	62.947	0.000	0.000	67.739	48.539	3.798	MWD+IFR1+MS
18800.000	90.000	179.677	11834.997	63.641	0.000	68.252	-0.000	63.641	0.000	0.000	68.337	48.583	3.730	MWD+IFR1+MS
18900.000	90.000	179.677	11834.997	64.337	0.000	68.854	-0.000	64.337	0.000	0.000	68.938	48.627	3.665	MWD+IFR1+MS
19000.000	90.000	179.677	11834.997	65.036	0.000	69.460	-0.000	65.036	0.000	0.000	69.543	48.672	3.602	MWD+IFR1+MS
19100.000	90.000	179.677	11834.997	65.736	0.000	70.068	-0.000	65.736	0.000	0.000	70.151	48.718	3.541	MWD+IFR1+MS
19200.000	90.000	179.677	11834.997	66.438	0.000	70.680	-0.000	66.438	0.000	0.000	70.762	48.764	3.483	MWD+IFR1+MS
19300.000	90.000	179.677	11834.997	67.142	0.000	71.295	-0.000	67.142	0.000	0.000	71.376	48.811	3.426	MWD+IFR1+MS
19400.000	90.000	179.677	11834.997	67.848	0.000	71.912	-0.000	67.848	0.000	0.000	71.993	48.858	3.372	MWD+IFR1+MS
19500.000	90.000	179.677	11834.997	68.556	0.000	72.532	-0.000	68.556	0.000	0.000	72.612	48.906	3.319	MWD+IFR1+MS
19600.000	90.000	179.677	11834.997	69.265	0.000	73.155	-0.000	69.265	0.000	0.000	73.235	48.954	3.268	MWD+IFR1+MS
19700.000	90.000	179.677	11834.997	69.976	0.000	73.781	-0.000	69.976	0.000	0.000	73.860	49.003	3.218	MWD+IFR1+MS
19800.000	90.000	179.677	11834.997	70.688	0.000	74.409	-0.000	70.688	0.000	0.000	74.488	49.053	3.170	MWD+IFR1+MS
19900.000	90.000	179.677	11834.997	71.402	0.000	75.040	-0.000	71.402	0.000	0.000	75.118	49.103	3.124	MWD+IFR1+MS
20000.000	90.000	179.677	11834.997	72.117	0.000	75.674	-0.000	72.117	0.000	0.000	75.751	49.154	3.078	MWD+IFR1+MS
20100.000	90.000	179.677	11834.997	72.834	0.000	76.309	-0.000	72.834	0.000	0.000	76.386	49.205	3.034	MWD+IFR1+MS
20200.000	90.000	179.677	11834.997	73.553	0.000	76.948	-0.000	73.553	0.000	0.000	77.024	49.256	2.992	MWD+IFR1+MS
20300.000	90.000	179.677	11834.997	74.272	0.000	77.588	-0.000	74.272	0.000	0.000	77.664	49.309	2.950	MWD+IFR1+MS
20400.000	90.000	179.677	11834.997	74.993	0.000	78.231	-0.000	74.993	0.000	0.000	78.306	49.361	2.910	MWD+IFR1+MS
20500.000	90.000	179.677	11834.997	75.715	0.000	78.876	-0.000	75.715	0.000	0.000	78.950	49.415	2.871	MWD+IFR1+MS
20600.000	90.000	179.677	11834.997	76.438	0.000	79.523	-0.000	76.438	0.000	0.000	79.597	49.469	2.832	MWD+IFR1+MS
20700.000	90.000	179.677	11834.997	77.163	0.000	80.172	-0.000	77.163	0.000	0.000	80.245	49.523	2.795	MWD+IFR1+MS
20800.000	90.000	179.677	11834.997	77.889	0.000	80.823	-0.000	77.889	0.000	0.000	80.896	49.578	2.759	MWD+IFR1+MS
20900.000	90.000	179.677	11834.997	78.616	0.000	81.476	-0.000	78.616	0.000	0.000	81.549	49.633	2.723	MWD+IFR1+MS
21000.000	90.000	179.677	11834.997	79.344	0.000	82.131	-0.000	79.344	0.000	0.000	82.203	49.689	2.689	MWD+IFR1+MS
21100.000	90.000	179.677	11834.997	80.073	0.000	82.788	-0.000	80.073	0.000	0.000	82.860	49.746	2.655	MWD+IFR1+MS
21200.000	90.000	179.677	11834.997	80.803	0.000	83.447	-0.000	80.803	0.000	0.000	83.518	49.803	2.623	MWD+IFR1+MS
21300.000	90.000	179.677	11834.997	81.534	0.000	84.108	-0.000	81.534	0.000	0.000	84.178	49.860	2.590	MWD+IFR1+MS
21400.000	90.000	179.677	11834.997	82.266	0.000	84.770	-0.000	82.266	0.000	0.000	84.840	49.919	2.559	MWD+IFR1+MS
21500.000	90.000	179.677	11834.997	82.999	0.000	85.434	-0.000	82.999	0.000	0.000	85.504	49.977	2.529	MWD+IFR1+MS
21600.000	90.000	179.677	11834.997	83.733	0.000	86.100	-0.000	83.733	0.000	0.000	86.169	50.036	2.499	MWD+IFR1+MS
21700.000	90.000	179.677	11834.997	84.468	0.000	86.768	-0.000	84.468	0.000	0.000	86.836	50.096	2.469	MWD+IFR1+MS
21800.000	90.000	179.677	11834.997	85.204	0.000	87.437	-0.000	85.204	0.000	0.000	87.505	50.156	2.441	MWD+IFR1+MS

21900.000	90.000	179.677	11834.997	85.940	0.000	88.107	-0.000	85.940	0.000	0.000	88.175	50.217	2.413	MWD+IFR1+MS
22000.000	90.000	179.677	11834.997	86.678	0.000	88.780	-0.000	86.678	0.000	0.000	88.847	50.278	2.386	MWD+IFR1+MS
22100.000	90.000	179.677	11834.997	87.416	0.000	89.453	-0.000	87.416	0.000	0.000	89.520	50.340	2.359	MWD+IFR1+MS
22200.000	90.000	179.677	11834.997	88.155	0.000	90.128	-0.000	88.155	0.000	0.000	90.195	50.402	2.333	MWD+IFR1+MS
22300.000	90.000	179.677	11834.997	88.895	0.000	90.805	-0.000	88.895	0.000	0.000	90.871	50.464	2.307	MWD+IFR1+MS
22400.000	90.000	179.677	11834.997	89.636	0.000	91.483	-0.000	89.636	0.000	0.000	91.549	50.528	2.282	MWD+IFR1+MS
22500.000	90.000	179.677	11834.997	90.377	0.000	92.162	-0.000	90.377	0.000	0.000	92.228	50.591	2.257	MWD+IFR1+MS
22600.000	90.000	179.677	11834.997	91.120	0.000	92.843	-0.000	91.120	0.000	0.000	92.908	50.656	2.233	MWD+IFR1+MS
22700.000	90.000	179.677	11834.997	91.862	0.000	93.525	-0.000	91.862	0.000	0.000	93.590	50.720	2.209	MWD+IFR1+MS
22800.000	90.000	179.677	11834.997	92.606	0.000	94.208	-0.000	92.606	0.000	0.000	94.273	50.786	2.186	MWD+IFR1+MS
22900.000	90.000	179.677	11834.997	93.350	0.000	94.893	-0.000	93.350	0.000	0.000	94.957	50.851	2.163	MWD+IFR1+MS
23000.000	90.000	179.677	11834.997	94.095	0.000	95.579	-0.000	94.095	0.000	0.000	95.642	50.917	2.141	MWD+IFR1+MS
23100.000	90.000	179.677	11834.997	94.841	0.000	96.266	-0.000	94.841	0.000	0.000	96.329	50.984	2.119	MWD+IFR1+MS
23200.000	90.000	179.677	11834.997	95.587	0.000	96.954	-0.000	95.587	0.000	0.000	97.017	51.051	2.098	MWD+IFR1+MS
23300.000	90.000	179.677	11834.997	96.334	0.000	97.643	-0.000	96.334	0.000	0.000	97.706	51.119	2.077	MWD+IFR1+MS
23400.000	90.000	179.677	11834.997	97.081	0.000	98.334	-0.000	97.081	0.000	0.000	98.396	51.187	2.056	MWD+IFR1+MS
23500.000	90.000	179.677	11834.997	97.829	0.000	99.025	-0.000	97.829	0.000	0.000	99.087	51.256	2.036	MWD+IFR1+MS
23600.000	90.000	179.677	11834.997	98.577	0.000	99.718	-0.000	98.577	0.000	0.000	99.779	51.325	2.016	MWD+IFR1+MS
23700.000	90.000	179.677	11834.997	99.326	0.000	100.412	-0.000	99.326	0.000	0.000	100.472	51.394	1.996	MWD+IFR1+MS
23800.000	90.000	179.677	11834.997	100.076	0.000	101.106	-0.000	100.076	0.000	0.000	101.167	51.465	1.977	MWD+IFR1+MS
23900.000	90.000	179.677	11834.997	100.826	0.000	101.802	-0.000	100.826	0.000	0.000	101.862	51.535	1.958	MWD+IFR1+MS
24000.000	90.000	179.677	11834.997	101.577	0.000	102.499	-0.000	101.577	0.000	0.000	102.559	51.606	1.939	MWD+IFR1+MS
24100.000	90.000	179.677	11834.997	102.328	0.000	103.197	-0.000	102.328	0.000	0.000	103.256	51.678	1.921	MWD+IFR1+MS
24200.000	90.000	179.677	11834.997	103.080	0.000	103.895	-0.000	103.080	0.000	0.000	103.954	51.750	1.903	MWD+IFR1+MS
24300.000	90.000	179.677	11834.997	103.832	0.000	104.595	-0.000	103.832	0.000	0.000	104.654	51.822	1.885	MWD+IFR1+MS
24400.000	90.000	179.677	11834.997	104.585	0.000	105.295	-0.000	104.585	0.000	0.000	105.354	51.895	1.868	MWD+IFR1+MS
24500.000	90.000	179.677	11834.997	105.338	0.000	105.997	-0.000	105.338	0.000	0.000	106.055	51.968	1.851	MWD+IFR1+MS
24600.000	90.000	179.677	11834.997	106.092	0.000	106.699	-0.000	106.092	0.000	0.000	106.757	52.042	1.834	MWD+IFR1+MS
24700.000	90.000	179.677	11834.997	106.846	0.000	107.402	-0.000	106.846	0.000	0.000	107.460	52.116	1.817	MWD+IFR1+MS
24800.000	90.000	179.677	11834.997	107.600	0.000	108.106	-0.000	107.600	0.000	0.000	108.163	52.191	1.801	MWD+IFR1+MS
24900.000	90.000	179.677	11834.997	108.355	0.000	108.811	-0.000	108.355	0.000	0.000	108.868	52.266	1.785	MWD+IFR1+MS
25000.000	90.000	179.677	11834.997	109.110	0.000	109.517	-0.000	109.110	0.000	0.000	109.573	52.342	1.769	MWD+IFR1+MS
25100.000	90.000	179.677	11834.997	109.866	0.000	110.223	-0.000	109.866	0.000	0.000	110.279	52.418	1.754	MWD+IFR1+MS

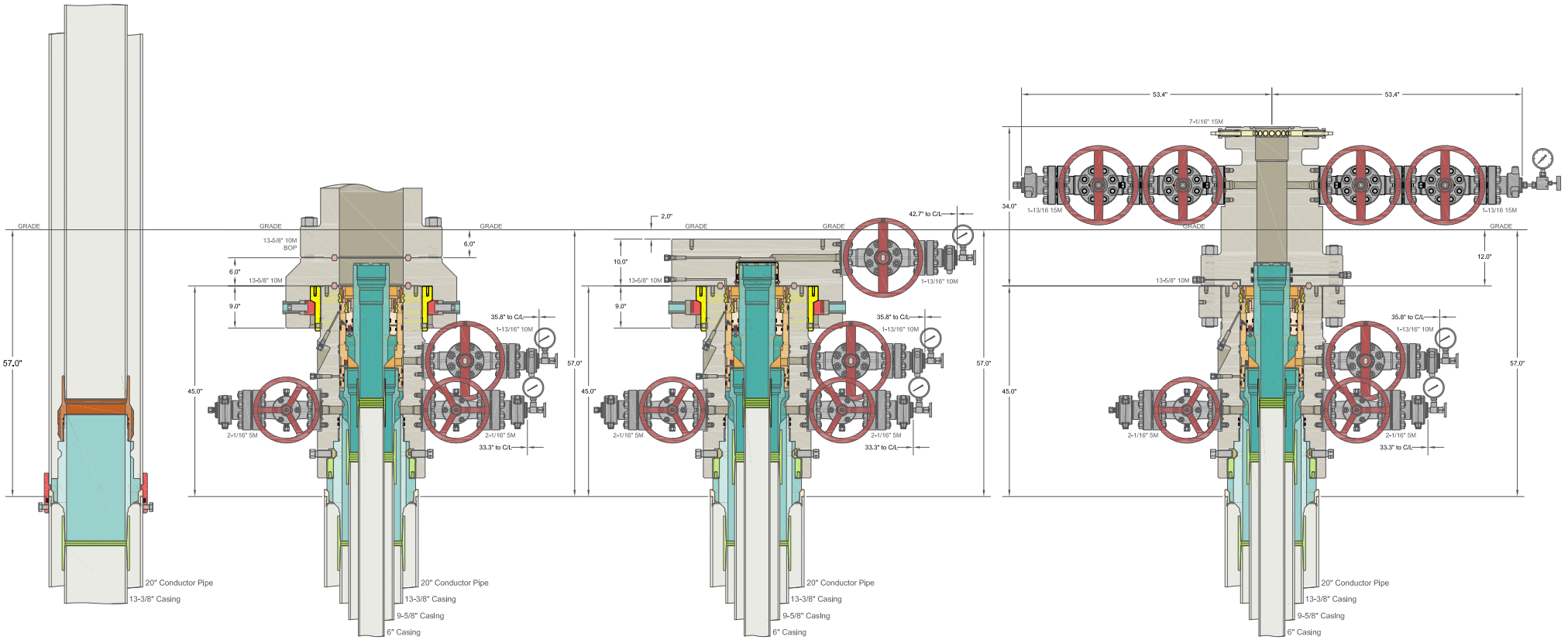
25200.000	90.000	179.677	11834.997	110.622	0.000	110.931	-0.000	110.622	0.000	0.000	110.986	52.495	1.738	MWD+IFR1+MS
25300.000	90.000	179.677	11834.997	111.379	0.000	111.639	-0.000	111.379	0.000	0.000	111.694	52.572	1.723	MWD+IFR1+MS
25400.000	90.000	179.677	11834.997	112.136	0.000	112.348	-0.000	112.136	0.000	0.000	112.403	52.649	1.709	MWD+IFR1+MS
25500.000	90.000	179.677	11834.997	112.893	0.000	113.057	-0.000	112.893	0.000	0.000	113.112	52.727	1.694	MWD+IFR1+MS
25600.000	90.000	179.677	11834.997	113.651	0.000	113.767	-0.000	113.651	0.000	0.000	113.822	52.805	1.680	MWD+IFR1+MS
25700.000	90.000	179.677	11834.997	114.409	0.000	114.478	-0.000	114.409	0.000	0.000	114.532	52.884	1.665	MWD+IFR1+MS
25800.000	90.000	179.677	11834.997	115.167	0.000	115.190	-0.000	115.167	0.000	0.000	115.244	52.963	1.651	MWD+IFR1+MS
25900.000	90.000	179.677	11834.997	115.926	0.000	115.902	-0.000	115.926	0.000	0.000	115.956	53.043	1.638	MWD+IFR1+MS
26000.000	90.000	179.677	11834.997	116.685	0.000	116.615	-0.000	116.685	0.000	0.000	116.669	53.123	1.624	MWD+IFR1+MS
26100.000	90.000	179.677	11834.997	117.445	0.000	117.329	-0.000	117.445	0.000	0.000	117.382	53.204	1.611	MWD+IFR1+MS
26200.000	90.000	179.677	11834.997	118.204	0.000	118.043	-0.000	118.204	0.000	0.000	118.096	53.284	1.597	MWD+IFR1+MS
26300.000	90.000	179.677	11834.997	118.965	0.000	118.758	-0.000	118.965	0.000	0.000	118.811	53.366	1.584	MWD+IFR1+MS
26400.000	90.000	179.677	11834.997	119.725	0.000	119.474	-0.000	119.725	0.000	0.000	119.526	53.448	1.572	MWD+IFR1+MS
26500.000	90.000	179.677	11834.997	120.486	0.000	120.190	-0.000	120.486	0.000	0.000	120.242	53.530	1.559	MWD+IFR1+MS
26600.000	90.000	179.677	11834.997	121.247	0.000	120.907	-0.000	121.247	0.000	0.000	120.959	53.613	1.546	MWD+IFR1+MS
26700.000	90.000	179.677	11834.997	122.008	0.000	121.624	-0.000	122.008	0.000	0.000	121.676	53.696	1.534	MWD+IFR1+MS
26800.000	90.000	179.677	11834.997	122.770	0.000	122.342	-0.000	122.770	0.000	0.000	122.394	53.779	1.522	MWD+IFR1+MS
26900.000	90.000	179.677	11834.997	123.532	0.000	123.061	-0.000	123.532	0.000	0.000	123.112	53.863	1.510	MWD+IFR1+MS
27000.000	90.000	179.677	11834.997	124.294	0.000	123.780	-0.000	124.294	0.000	0.000	123.831	53.947	1.498	MWD+IFR1+MS
27100.000	90.000	179.677	11834.997	125.056	0.000	124.500	-0.000	125.056	0.000	0.000	124.550	54.032	1.486	MWD+IFR1+MS
27200.000	90.000	179.677	11834.997	125.819	0.000	125.220	-0.000	125.819	0.000	0.000	125.270	54.117	1.475	MWD+IFR1+MS
27300.000	90.000	179.677	11834.997	126.582	0.000	125.941	-0.000	126.582	0.000	0.000	125.991	54.203	1.464	MWD+IFR1+MS
27400.000	90.000	179.677	11834.997	127.346	0.000	126.662	-0.000	127.346	0.000	0.000	126.712	54.289	1.452	MWD+IFR1+MS
27500.000	90.000	179.677	11834.997	128.109	0.000	127.384	-0.000	128.109	0.000	0.000	127.433	54.375	1.441	MWD+IFR1+MS
27600.000	90.000	179.677	11834.997	128.873	0.000	128.106	-0.000	128.873	0.000	0.000	128.155	54.462	1.430	MWD+IFR1+MS
27700.000	90.000	179.677	11834.997	129.637	0.000	128.829	-0.000	129.637	0.000	0.000	128.878	54.549	1.420	MWD+IFR1+MS
27800.000	90.000	179.677	11834.997	130.401	0.000	129.552	-0.000	130.401	0.000	0.000	129.601	54.637	1.409	MWD+IFR1+MS
27900.000	90.000	179.677	11834.997	131.166	0.000	130.276	-0.000	131.166	0.000	0.000	130.325	54.725	1.398	MWD+IFR1+MS
28000.000	90.000	179.677	11834.997	131.931	0.000	131.000	-0.000	131.931	0.000	0.000	131.049	54.813	1.388	MWD+IFR1+MS
28100.000	90.000	179.677	11834.997	132.696	0.000	131.725	-0.000	132.696	0.000	0.000	131.773	54.902	1.378	MWD+IFR1+MS
28200.000	90.000	179.677	11834.997	133.461	0.000	132.450	-0.000	133.461	0.000	0.000	132.498	54.991	1.368	MWD+IFR1+MS
28300.000	90.000	179.677	11834.997	134.226	0.000	133.176	-0.000	134.226	0.000	0.000	133.223	55.080	1.358	MWD+IFR1+MS
28325.990	90.000	179.677	11835.000	134.425	0.000	133.364	-0.000	134.425	0.000	0.000	133.412	55.104	1.355	MWD+IFR1+MS

28400.000	90.000	178.197	11835.000	134.991	0.000	133.782	-0.000	134.991	0.000	0.000	133.950	55.170	1.345	MWD+IFR1+MS
28500.000	90.000	176.197	11835.000	135.757	0.000	134.246	-0.000	135.757	0.000	0.000	134.693	55.260	1.319	MWD+IFR1+MS
28600.000	90.000	174.197	11835.000	136.523	0.000	134.581	-0.000	136.523	0.000	0.000	135.442	55.351	1.280	MWD+IFR1+MS
28706.039	90.000	172.076	11835.000	137.336	0.000	134.794	-0.000	137.336	0.000	0.000	136.238	55.447	1.224	MWD+IFR1+MS
28800.000	90.000	172.076	11835.000	138.056	0.000	135.494	-0.000	138.056	0.000	0.000	136.931	55.532	1.171	MWD+IFR1+MS
28900.000	90.000	172.076	11835.000	138.822	0.000	136.233	-0.000	138.822	0.000	0.000	137.662	55.623	1.115	MWD+IFR1+MS
29000.000	90.000	172.076	11835.000	139.589	0.000	136.972	-0.000	139.589	0.000	0.000	138.394	55.715	1.061	MWD+IFR1+MS
29100.000	90.000	172.076	11835.000	140.357	0.000	137.712	-0.000	140.357	0.000	0.000	139.126	55.806	1.007	MWD+IFR1+MS
29200.000	90.000	172.076	11835.000	141.124	0.000	138.452	-0.000	141.124	0.000	0.000	139.859	55.898	0.953	MWD+IFR1+MS
29300.000	90.000	172.076	11835.000	141.891	0.000	139.193	-0.000	141.891	0.000	0.000	140.592	55.991	0.901	MWD+IFR1+MS
29400.000	90.000	172.076	11835.000	142.659	0.000	139.935	-0.000	142.659	0.000	0.000	141.326	56.083	0.848	MWD+IFR1+MS
29500.000	90.000	172.076	11835.000	143.427	0.000	140.676	-0.000	143.427	0.000	0.000	142.061	56.176	0.797	MWD+IFR1+MS
29600.000	90.000	172.076	11835.000	144.195	0.000	141.419	-0.000	144.195	0.000	0.000	142.796	56.270	0.746	MWD+IFR1+MS
29700.000	90.000	172.076	11835.000	144.964	0.000	142.162	-0.000	144.964	0.000	0.000	143.532	56.364	0.696	MWD+IFR1+MS
29800.000	90.000	172.076	11835.000	145.732	0.000	142.905	-0.000	145.732	0.000	0.000	144.268	56.458	0.646	MWD+IFR1+MS
29900.000	90.000	172.076	11835.000	146.501	0.000	143.649	-0.000	146.501	0.000	0.000	145.005	56.552	0.597	MWD+IFR1+MS
29966.689	90.000	172.076	11835.000	147.013	0.000	144.145	-0.000	147.013	0.000	0.000	145.496	56.616	0.564	MWD+IFR1+MS
30000.000	90.000	172.742	11835.000	147.269	0.000	144.595	-0.000	147.269	0.000	0.000	145.741	56.647	0.549	MWD+IFR1+MS
30100.000	90.000	174.742	11835.000	148.037	0.000	145.856	-0.000	148.037	0.000	0.000	146.486	56.743	0.509	MWD+IFR1+MS
30200.000	90.000	176.742	11835.000	148.806	0.000	146.974	-0.000	148.806	0.000	0.000	147.240	56.840	0.481	MWD+IFR1+MS
30300.000	90.000	178.742	11835.000	149.575	0.000	147.936	-0.000	149.575	0.000	0.000	147.993	56.937	0.465	MWD+IFR1+MS
30383.780	90.000	180.418	11835.000	150.220	0.000	148.617	0.000	150.220	0.000	0.000	148.617	57.019	0.460	MWD+IFR1+MS
30400.000	90.000	180.418	11835.000	150.344	0.000	148.735	0.000	150.344	0.000	0.000	148.735	57.035	0.460	MWD+IFR1+MS
30500.000	90.000	180.418	11835.000	151.113	0.000	149.466	0.000	151.113	0.000	0.000	149.466	57.132	0.461	MWD+IFR1+MS
30600.000	90.000	180.418	11835.000	151.883	0.000	150.199	0.000	151.883	0.000	0.000	150.199	57.230	0.461	MWD+IFR1+MS
30700.000	90.000	180.418	11835.000	152.653	0.000	150.931	0.000	152.653	0.000	0.000	150.931	57.329	0.461	MWD+IFR1+MS
30800.000	90.000	180.418	11835.000	153.423	0.000	151.664	0.000	153.423	0.000	0.000	151.664	57.427	0.462	MWD+IFR1+MS
30900.000	90.000	180.418	11835.000	154.193	0.000	152.397	0.000	154.193	0.000	0.000	152.397	57.526	0.462	MWD+IFR1+MS
31000.000	90.000	180.418	11835.000	154.964	0.000	153.131	0.000	154.964	0.000	0.000	153.131	57.626	0.462	MWD+IFR1+MS
31100.000	90.000	180.418	11835.000	155.734	0.000	153.865	0.000	155.734	0.000	0.000	153.865	57.725	0.463	MWD+IFR1+MS
31200.000	90.000	180.418	11835.000	156.505	0.000	154.599	0.000	156.505	0.000	0.000	154.599	57.825	0.463	MWD+IFR1+MS
31300.000	90.000	180.418	11835.000	157.276	0.000	155.333	0.000	157.276	0.000	0.000	155.333	57.926	0.463	MWD+IFR1+MS
31400.000	90.000	180.418	11835.000	158.046	0.000	156.068	0.000	158.046	0.000	0.000	156.068	58.027	0.464	MWD+IFR1+MS

31500.000	90.000	180.418	11835.000	158.818	0.000	156.803	0.000	158.818	0.000	0.000	156.803	58.128	0.464	MWD+IFR1+MS
31600.000	90.000	180.418	11835.000	159.589	0.000	157.538	0.000	159.589	0.000	0.000	157.538	58.229	0.464	MWD+IFR1+MS
31700.000	90.000	180.418	11835.000	160.360	0.000	158.274	0.000	160.360	0.000	0.000	158.274	58.331	0.465	MWD+IFR1+MS
31800.000	90.000	180.418	11835.000	161.132	0.000	159.009	0.000	161.132	0.000	0.000	159.010	58.433	0.465	MWD+IFR1+MS
31900.000	90.000	180.418	11835.000	161.903	0.000	159.746	0.000	161.903	0.000	0.000	159.746	58.535	0.465	MWD+IFR1+MS
32000.000	90.000	180.418	11835.000	162.675	0.000	160.482	0.000	162.675	0.000	0.000	160.482	58.638	0.465	MWD+IFR1+MS
32100.000	90.000	180.418	11835.000	163.447	0.000	161.218	0.000	163.447	0.000	0.000	161.219	58.741	0.466	MWD+IFR1+MS
32200.000	90.000	180.418	11835.000	164.219	0.000	161.955	0.000	164.219	0.000	0.000	161.955	58.844	0.466	MWD+IFR1+MS
32300.000	90.000	180.418	11835.000	164.991	0.000	162.692	0.000	164.991	0.000	0.000	162.692	58.948	0.466	MWD+IFR1+MS
32327.802	90.000	180.418	11835.000	165.205	0.000	162.897	0.000	165.205	0.000	0.000	162.897	58.976	0.466	MWD+IFR1+MS
32400.000	90.000	180.418	11835.000	165.762	0.000	163.428	0.000	165.762	0.000	0.000	163.429	59.052	0.466	MWD+IFR1+MS
32427.887	90.000	180.418	11835.000	165.977	0.000	163.634	0.000	165.977	0.000	0.000	163.634	59.081	0.466	MWD+IFR1+MS

Plan Targets Poker Lake Unit 20 DTD South 409H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 22	11997.49	440402.40	634558.80	8513.00	RECTANGLE
SHL 23	12351.75	440172.33	635210.61	8305.79	RECTANGLE
MP2 409H	29966.69	422014.30	634854.50	8513.00	CIRCLE
MP1 409H	28325.99	423641.70	634653.40	8513.00	CIRCLE
LTP 22	32327.80	419654.50	634867.60	8513.00	RECTANGLE
BHL 22	32429.22	419554.40	634868.20	8513.00	RECTANGLE



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

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

DRAWN	DLE	04NOV22
APPRV		
DRAWING NO.	HBE0000833	

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

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

Background

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

Supporting Documentation

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

Figure 1: Winch System attached to BOP Stack

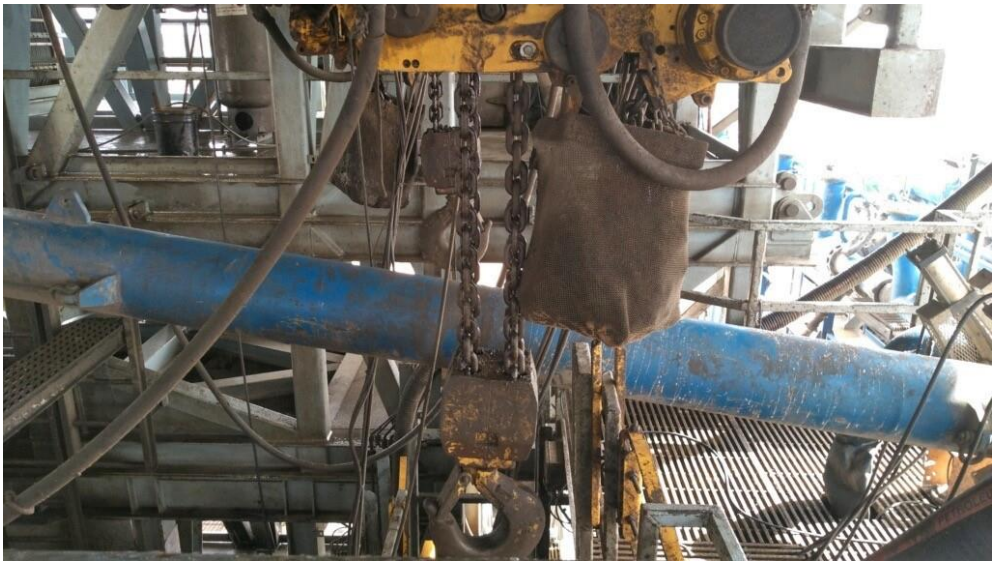


Figure 2: BOP Winch System

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

62 API STANDARD 53

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

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

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

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

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

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

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

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

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

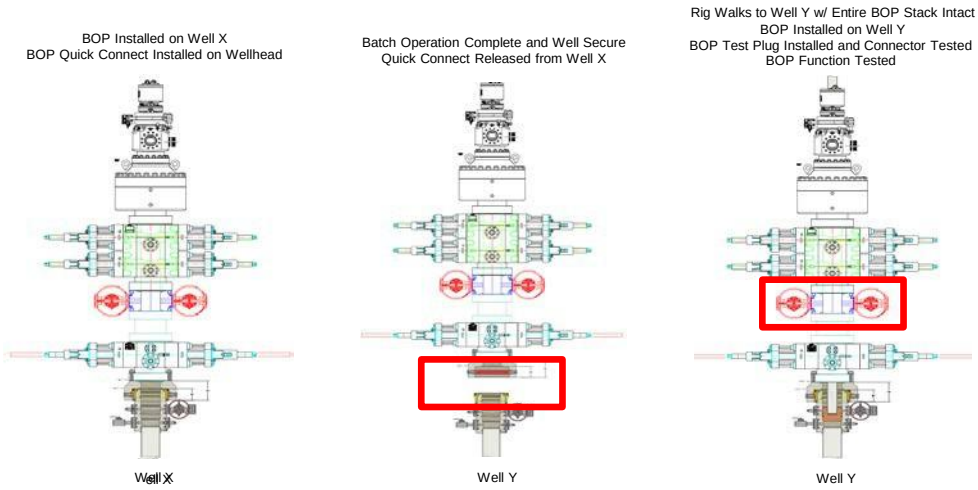
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often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

Procedures

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

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

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



Summary

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

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

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

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

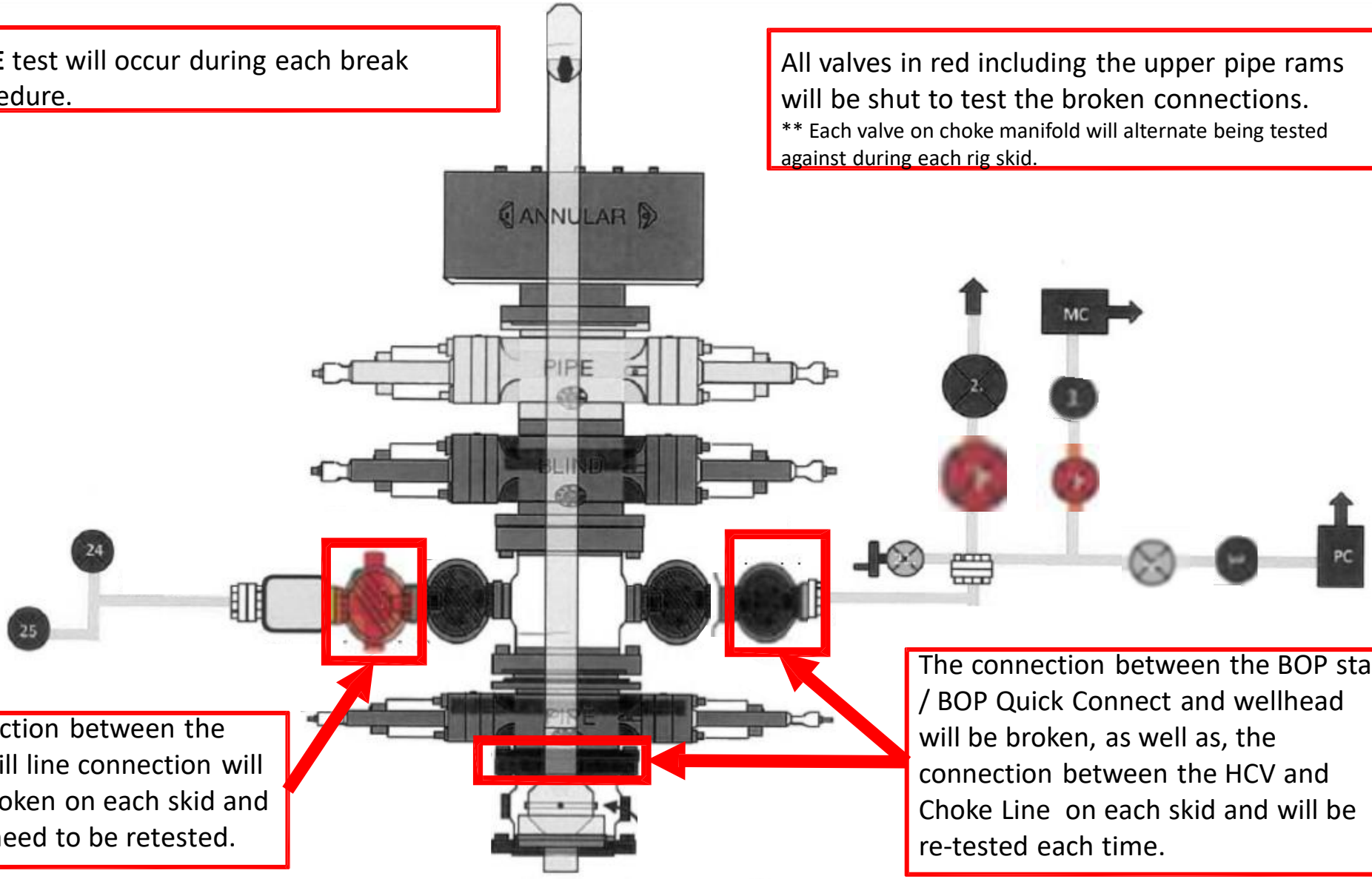
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

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

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

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

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



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

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

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

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

<u>General Procedure While Drilling</u>

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

h. Regroup and identify forward plan

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

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

CONDITIONS

Action 342912

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 342912
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	6/7/2024