

Well Name: POKER LAKE UNIT 20 DTD	Well Location: T24S / R30E / SEC 20 / NWNE / 32.207596 / -103.901586	County or Parish/State: EDDY / NM
Well Number: 321H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM02860	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number:	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2781336

Type of Submission: Notice of Intent

Date Sundry Submitted: 03/24/2024

Date proposed operation will begin: 07/01/2024

Type of Action: APD Change

Time Sundry Submitted: 09:59

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: 1027' FNL & 2071' FEL of Section 20-T24S-R30E 877' FNL & 2072' FEL of Section 20-T24S-R30E FTP: 100' FSL & 2090' FEL of Section 20-T24S-R30E 100' FNL & 2219' FEL of Section 20-T24S-R30E LTP: 330' FNL & 2090' FWL of Section 32-T23S-R30E 2564' FNL & 2221' FEL of Section 5-T25S-R30E BHL: 200' FNL & 2090' FWL of Section 32-T23S-R30E 2614' FNL & 2221' FEL of Section 5-T25S-R30E Proposed total depth will change from 31989' MD; 10694' TVD (Wolfcamp) to 27650' MD; TVD 9521' (Bone Spring). See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Drilling Plan, MBS, BOP Variance, Well Control Plan

NOI Attachments

Procedure Description

PLU_20_DTD_321H_BLM_APD_Change_Sundry_Attachments_20240324095917.pdf

Received by OCD: 6/27/2024 12:33:55 PM

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US Well Number:	Operator: XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

Sec_20_24S_30E_NMP_Sundry_2781336_Poker_Lake_Unit_20_DTD_321H_COAs_20240404144243.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 09:59 AM

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: CODY LAYTON

BLM POC Title: Assistant Field Manager Lands & Minerals

BLM POC Phone: 5752345959

BLM POC Email Address: clayton@blm.gov

Disposition: Approved

Disposition Date: 06/26/2024

Signature: Cody R. Layton

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Serial No.	
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	
8. Well Name and No.	
9. API Well No.	
10. Field and Pool or Exploratory Area	
11. Country or Parish, State	

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

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

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

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

Location of Well

0. SHL: NWNE / 1027 FNL / 2071 FEL / TWSP: 24S / RANGE: 30E / SECTION: 20 / LAT: 32.207596 / LONG: -103.901586 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 330 FSL / 2090 FWL / TWSP: 24S / RANGE: 30E / SECTION: 8 / LAT: 32.22547 / LONG: -103.90547 (TVD: 10694 feet, MD: 16500 feet)

PPP: SESW / 100 FSL / 2090 FWL / TWSP: 24S / RANGE: 30E / SECTION: 17 / LAT: 32.210673 / LONG: -103.905453 (TVD: 10694 feet, MD: 11200 feet)

PPP: SESW / 330 FSL / 2090 FWL / TWSP: 24S / RANGE: 30E / SECTION: 5 / LAT: 32.23999 / LONG: -103.90547 (TVD: 10694 feet, MD: 21800 feet)

BHL: NENW / 200 FNL / 2090 FWL / TWSP: 23S / RANGE: 30E / SECTION: 32 / LAT: 32.268031 / LONG: -103.905448 (TVD: 10694 feet, MD: 31989 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 20 321H
LOCATION:	Sec 20-24S-30E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2781336** on 04/04/2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

H₂S	<input checked="" type="radio"/> No	<input type="radio"/> Yes		
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input checked="" type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Variance	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
Variance	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> Batch APD / Sundry				

A. HYDROGEN SULFIDE

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

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately 700 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. ***Set depth adjusted per BLM geologist.***
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead

- cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is:
- Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

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

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

3. The minimum required fill of cement behind the **6** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

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

BOPE Break Testing Variance

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

Offline Cementing

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

GENERAL REQUIREMENTS

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

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

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

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

Lea County (API No. / US Well No. contains 30-025-#####)

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240; (575) 689-5981

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

A. CASING

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

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

B. PRESSURE CONTROL

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

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

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

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

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

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

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

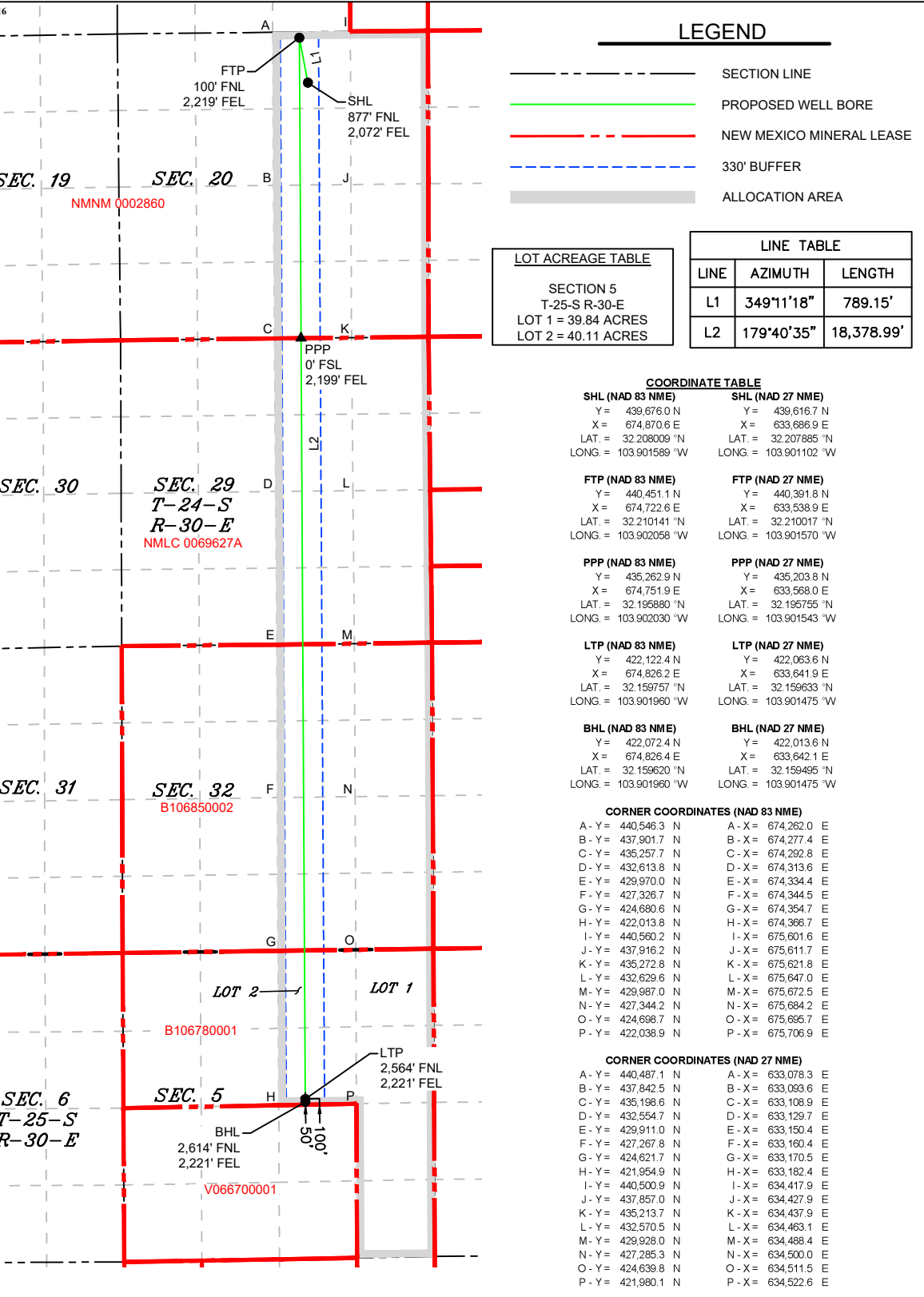
¹ APD ID Number 10400089211	⁴ Pool Code 97814	³ Pool Name Wildcat; Bone Spring
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 20 DTD	
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC	
		⁶ Well Number 321H
		⁹ Elevation 3,264'

¹⁰ Surface Location									
UL or lot no. B	Section 20	Township 24S	Range 30E	Lot Idn	Feet from the 877	North/South line NORTH	Feet from the 2,072	East/West line EAST	County EDDY

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. G	Section 5	Township 25S	Range 30E	Lot Idn	Feet from the 2,614	North/South line NORTH	Feet from the 2,221	East/West line EAST	County EDDY

¹² Dedicated Acres 1,199.95	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



17 OPERATOR CERTIFICATION

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

Richard L Redus 3/24/2024
Signature Date

Richard L Redus
Printed Name

richard.l.redus@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 23786
Certificate Number

RP/DB 618.013003.06-49

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

XTO Energy Inc.

PLU 20 Dog Town Draw 321H

Projected TD: 27650.36' MD / 9521' TVD

SHL: 877' FNL & 2072' FEL , Section 20, T24S, R30E

BHL: 2614' FNL & 2221' 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	873'	Water
Top of Salt	1276'	Water
Base of Salt	3469'	Water
Delaware	3663'	Water
Brushy Canyon	6161'	Water/Oil/Gas
Bone Spring	7457'	Water
1st Bone Spring	8443'	Water/Oil/Gas
2nd Bone Spring	9261'	Water/Oil/Gas
Target/Land Curve	9521'	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 @ 973' (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 8663' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 27650.36 MD/TD and 6 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8363 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 973'	13.375	54.5	J-55	BTC	New	1.33	2.66	17.14
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	3.28	2.31	3.65
12.25	4000' – 8663'	9.625	40	HC L-80	BTC	New	2.39	2.02	4.91
8.5	0' – 8563'	6	26	P-110	Semi-Premium	New	1.17	3.35	1.78
8.5	8563' - 27650.36'	6	26	P-110	Semi-Premium	New	1.17	3.01	1.99

- 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 +/- 973'

Lead: 500 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 +/- 8663'

1st Stage

Optional Lead: 1040 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 720 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6161

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: 2170 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 (6161') 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 +/- 27650.36'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 8363 feet

Tail: 3190 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 8863 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 3M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 2411 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13.375, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nipping up on the 9.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M 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' - 973'	17.5	FW/Native	8.4-8.9	35-40	NC
973' - 8663'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
8663' - 27650.36'	8.5	OBM	9.1-9.6	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 160 to 180 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 4505 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 321H

Measured Depth:	27650.36 ft
TVD RKB:	9521.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439616.70 ft
Easting:	633686.90 ft
RKB:	3296.00 ft
Ground Level:	3264.00 ft
North Reference:	Grid
Convergence Angle:	0.23 Deg

Plan SectionsPoker Lake Unit 20 DTD South 321H

Measured	TVD					Build	Turn	Dogleg		
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target	
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)		
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00		
1534.34	8.69	349.19	1532.67	32.28	-6.16	2.00	0.00	2.00		
6323.93	8.69	349.19	6267.33	742.82	-141.84	0.00	0.00	0.00		
6758.27	0.00	0.00	6700.00	775.10	-148.00	-2.00	0.00	2.00		
8863.07	0.00	0.00	8804.80	775.10	-148.00	0.00	0.00	0.00		
9988.07	90.00	179.68	9521.00	58.91	-143.98	8.00	0.00	8.00		
27600.35	90.00	179.68	9521.00	-17553.09	-45.00	0.00	0.00	0.00	LTP	15
27650.36	90.00	179.68	9521.00	-17603.10	-44.71	0.00	0.00	0.00	BHL	15

Position UncertaintyPoker Lake Unit 20 DTD South 321H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	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	2.373	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.406	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	2.442	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.484	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.530	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	2.579	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.632	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	349.190	1199.980	4.793	0.000	4.752	0.000	2.688	0.000	0.000	5.250	4.244	122.956	MWD+IFR1+MS
1300.000	4.000	349.190	1299.838	5.616	0.000	5.100	0.000	2.748	0.000	0.000	5.969	4.692	112.003	MWD+IFR1+MS
1400.000	6.000	349.190	1399.452	6.346	0.000	5.449	0.000	2.813	0.000	0.000	6.666	5.074	106.521	MWD+IFR1+MS
1500.000	8.000	349.190	1498.702	7.011	0.000	5.798	0.000	2.886	0.000	0.000	7.326	5.435	103.468	MWD+IFR1+MS
1534.335	8.687	349.190	1532.673	7.118	0.000	5.909	0.000	2.905	0.000	0.000	7.438	5.552	103.299	MWD+IFR1+MS
1600.000	8.687	349.190	1597.585	7.311	0.000	6.123	0.000	2.950	0.000	0.000	7.625	5.776	103.276	MWD+IFR1+MS
1700.000	8.687	349.190	1696.438	7.611	0.000	6.468	0.000	3.022	0.000	0.000	7.924	6.125	103.598	MWD+IFR1+MS
1800.000	8.687	349.190	1795.291	7.925	0.000	6.823	0.000	3.099	0.000	0.000	8.241	6.477	104.068	MWD+IFR1+MS
1900.000	8.687	349.190	1894.143	8.244	0.000	7.179	0.000	3.177	0.000	0.000	8.563	6.831	104.512	MWD+IFR1+MS
2000.000	8.687	349.190	1992.996	8.568	0.000	7.537	0.000	3.259	0.000	0.000	8.888	7.186	104.931	MWD+IFR1+MS
2100.000	8.687	349.190	2091.849	8.895	0.000	7.895	0.000	3.342	0.000	0.000	9.217	7.543	105.327	MWD+IFR1+MS
2200.000	8.687	349.190	2190.702	9.226	0.000	8.255	0.000	3.428	0.000	0.000	9.549	7.900	105.702	MWD+IFR1+MS
2300.000	8.687	349.190	2289.555	9.560	0.000	8.614	0.000	3.516	0.000	0.000	9.884	8.257	106.056	MWD+IFR1+MS
2400.000	8.687	349.190	2388.408	9.897	0.000	8.975	0.000	3.606	0.000	0.000	10.221	8.616	106.391	MWD+IFR1+MS
2500.000	8.687	349.190	2487.261	10.237	0.000	9.336	0.000	3.698	0.000	0.000	10.561	8.975	106.708	MWD+IFR1+MS
2600.000	8.687	349.190	2586.114	10.579	0.000	9.698	0.000	3.791	0.000	0.000	10.903	9.335	107.009	MWD+IFR1+MS
2700.000	8.687	349.190	2684.967	10.923	0.000	10.060	0.000	3.886	0.000	0.000	11.246	9.695	107.293	MWD+IFR1+MS
2800.000	8.687	349.190	2783.819	11.269	0.000	10.422	0.000	3.983	0.000	0.000	11.592	10.055	107.562	MWD+IFR1+MS
2900.000	8.687	349.190	2882.672	11.617	0.000	10.785	0.000	4.082	0.000	0.000	11.939	10.416	107.817	MWD+IFR1+MS

3000.000	8.687	349.190	2981.525	11.966	0.000	11.148	0.000	4.182	0.000	0.000	12.287	10.778	108.058	MWD+IFR1+MS
3100.000	8.687	349.190	3080.378	12.317	0.000	11.511	0.000	4.283	0.000	0.000	12.637	11.139	108.287	MWD+IFR1+MS
3200.000	8.687	349.190	3179.231	12.669	0.000	11.875	0.000	4.386	0.000	0.000	12.988	11.501	108.504	MWD+IFR1+MS
3300.000	8.687	349.190	3278.084	13.023	0.000	12.238	0.000	4.491	0.000	0.000	13.340	11.864	108.710	MWD+IFR1+MS
3400.000	8.687	349.190	3376.937	13.377	0.000	12.602	0.000	4.597	0.000	0.000	13.692	12.226	108.905	MWD+IFR1+MS
3500.000	8.687	349.190	3475.790	13.733	0.000	12.967	0.000	4.705	0.000	0.000	14.046	12.589	109.090	MWD+IFR1+MS
3600.000	8.687	349.190	3574.643	14.089	0.000	13.331	0.000	4.814	0.000	0.000	14.401	12.952	109.266	MWD+IFR1+MS
3700.000	8.687	349.190	3673.496	14.447	0.000	13.696	0.000	4.924	0.000	0.000	14.756	13.316	109.432	MWD+IFR1+MS
3800.000	8.687	349.190	3772.348	14.805	0.000	14.060	0.000	5.036	0.000	0.000	15.113	13.679	109.590	MWD+IFR1+MS
3900.000	8.687	349.190	3871.201	15.164	0.000	14.425	0.000	5.150	0.000	0.000	15.470	14.043	109.739	MWD+IFR1+MS
4000.000	8.687	349.190	3970.054	15.524	0.000	14.790	0.000	5.265	0.000	0.000	15.827	14.407	109.881	MWD+IFR1+MS
4100.000	8.687	349.190	4068.907	15.884	0.000	15.155	0.000	5.381	0.000	0.000	16.185	14.771	110.016	MWD+IFR1+MS
4200.000	8.687	349.190	4167.760	16.245	0.000	15.520	0.000	5.500	0.000	0.000	16.544	15.135	110.143	MWD+IFR1+MS
4300.000	8.687	349.190	4266.613	16.607	0.000	15.886	0.000	5.619	0.000	0.000	16.903	15.500	110.264	MWD+IFR1+MS
4400.000	8.687	349.190	4365.466	16.969	0.000	16.251	0.000	5.741	0.000	0.000	17.263	15.864	110.379	MWD+IFR1+MS
4500.000	8.687	349.190	4464.319	17.331	0.000	16.617	0.000	5.864	0.000	0.000	17.623	16.229	110.487	MWD+IFR1+MS
4600.000	8.687	349.190	4563.172	17.695	0.000	16.982	0.000	5.988	0.000	0.000	17.984	16.594	110.590	MWD+IFR1+MS
4700.000	8.687	349.190	4662.025	18.058	0.000	17.348	0.000	6.115	0.000	0.000	18.344	16.959	110.687	MWD+IFR1+MS
4800.000	8.687	349.190	4760.877	18.422	0.000	17.714	0.000	6.243	0.000	0.000	18.706	17.324	110.779	MWD+IFR1+MS
4900.000	8.687	349.190	4859.730	18.787	0.000	18.079	0.000	6.372	0.000	0.000	19.068	17.689	110.866	MWD+IFR1+MS
5000.000	8.687	349.190	4958.583	19.151	0.000	18.445	0.000	6.504	0.000	0.000	19.430	18.054	110.948	MWD+IFR1+MS
5100.000	8.687	349.190	5057.436	19.516	0.000	18.811	0.000	6.637	0.000	0.000	19.792	18.419	111.025	MWD+IFR1+MS
5200.000	8.687	349.190	5156.289	19.882	0.000	19.177	0.000	6.772	0.000	0.000	20.155	18.785	111.098	MWD+IFR1+MS
5300.000	8.687	349.190	5255.142	20.248	0.000	19.543	0.000	6.909	0.000	0.000	20.517	19.150	111.167	MWD+IFR1+MS
5400.000	8.687	349.190	5353.995	20.614	0.000	19.909	0.000	7.047	0.000	0.000	20.881	19.516	111.232	MWD+IFR1+MS
5500.000	8.687	349.190	5452.848	20.980	0.000	20.275	0.000	7.188	0.000	0.000	21.244	19.881	111.292	MWD+IFR1+MS
5600.000	8.687	349.190	5551.701	21.347	0.000	20.642	0.000	7.331	0.000	0.000	21.608	20.247	111.349	MWD+IFR1+MS
5700.000	8.687	349.190	5650.554	21.714	0.000	21.008	0.000	7.475	0.000	0.000	21.972	20.613	111.403	MWD+IFR1+MS
5800.000	8.687	349.190	5749.406	22.081	0.000	21.374	0.000	7.622	0.000	0.000	22.336	20.979	111.452	MWD+IFR1+MS
5900.000	8.687	349.190	5848.259	22.448	0.000	21.740	0.000	7.770	0.000	0.000	22.700	21.344	111.499	MWD+IFR1+MS
6000.000	8.687	349.190	5947.112	22.816	0.000	22.107	0.000	7.921	0.000	0.000	23.065	21.710	111.542	MWD+IFR1+MS
6100.000	8.687	349.190	6045.965	23.184	0.000	22.473	0.000	8.073	0.000	0.000	23.430	22.077	111.582	MWD+IFR1+MS
6200.000	8.687	349.190	6144.818	23.552	0.000	22.840	0.000	8.228	0.000	0.000	23.795	22.443	111.619	MWD+IFR1+MS

6300.000	8.687	349.190	6243.671	23.920	0.000	23.206	0.000	8.385	0.000	0.000	24.160	22.809	111.653	MWD+IFR1+MS
6323.931	8.687	349.190	6267.327	24.006	0.000	23.292	0.000	8.422	0.000	0.000	24.244	22.896	111.630	MWD+IFR1+MS
6400.000	7.165	349.190	6342.667	24.301	0.000	23.565	0.000	8.543	0.000	0.000	24.521	23.174	111.428	MWD+IFR1+MS
6500.000	5.165	349.190	6442.084	24.731	0.000	23.925	0.000	8.704	0.000	0.000	24.949	23.542	110.260	MWD+IFR1+MS
6600.000	3.165	349.190	6541.815	25.150	0.000	24.283	0.000	8.862	0.000	0.000	25.395	23.907	108.959	MWD+IFR1+MS
6700.000	1.165	349.190	6641.738	25.533	0.000	24.636	0.000	9.016	0.000	0.000	25.835	24.266	107.837	MWD+IFR1+MS
6758.266	0.000	0.000	6700.000	25.908	0.000	24.619	0.000	9.105	0.000	0.000	26.050	24.469	107.669	MWD+IFR1+MS
6800.000	0.000	0.000	6741.734	26.048	0.000	24.763	0.000	9.168	0.000	0.000	26.189	24.613	107.668	MWD+IFR1+MS
6900.000	0.000	0.000	6841.734	26.382	0.000	25.110	0.000	9.322	0.000	0.000	26.523	24.960	107.760	MWD+IFR1+MS
7000.000	0.000	0.000	6941.734	26.719	0.000	25.461	0.000	9.478	0.000	0.000	26.863	25.309	107.953	MWD+IFR1+MS
7100.000	0.000	0.000	7041.734	27.057	0.000	25.812	0.000	9.638	0.000	0.000	27.203	25.658	108.144	MWD+IFR1+MS
7200.000	0.000	0.000	7141.734	27.396	0.000	26.164	0.000	9.799	0.000	0.000	27.544	26.008	108.333	MWD+IFR1+MS
7300.000	0.000	0.000	7241.734	27.735	0.000	26.516	0.000	9.964	0.000	0.000	27.885	26.357	108.518	MWD+IFR1+MS
7400.000	0.000	0.000	7341.734	28.075	0.000	26.868	0.000	10.131	0.000	0.000	28.227	26.707	108.701	MWD+IFR1+MS
7500.000	0.000	0.000	7441.734	28.415	0.000	27.220	0.000	10.302	0.000	0.000	28.569	27.057	108.881	MWD+IFR1+MS
7600.000	0.000	0.000	7541.734	28.755	0.000	27.572	0.000	10.475	0.000	0.000	28.912	27.407	109.058	MWD+IFR1+MS
7700.000	0.000	0.000	7641.734	29.096	0.000	27.924	0.000	10.650	0.000	0.000	29.255	27.758	109.233	MWD+IFR1+MS
7800.000	0.000	0.000	7741.734	29.438	0.000	28.277	0.000	10.829	0.000	0.000	29.599	28.108	109.405	MWD+IFR1+MS
7900.000	0.000	0.000	7841.734	29.780	0.000	28.629	0.000	11.010	0.000	0.000	29.942	28.459	109.575	MWD+IFR1+MS
8000.000	0.000	0.000	7941.734	30.122	0.000	28.982	0.000	11.195	0.000	0.000	30.287	28.810	109.743	MWD+IFR1+MS
8100.000	0.000	0.000	8041.734	30.464	0.000	29.335	0.000	11.382	0.000	0.000	30.631	29.161	109.907	MWD+IFR1+MS
8200.000	0.000	0.000	8141.734	30.807	0.000	29.688	0.000	11.572	0.000	0.000	30.976	29.512	110.070	MWD+IFR1+MS
8300.000	0.000	0.000	8241.734	31.150	0.000	30.042	0.000	11.765	0.000	0.000	31.321	29.864	110.230	MWD+IFR1+MS
8400.000	0.000	0.000	8341.734	31.494	0.000	30.395	0.000	11.961	0.000	0.000	31.667	30.215	110.388	MWD+IFR1+MS
8500.000	0.000	0.000	8441.734	31.838	0.000	30.748	0.000	12.160	0.000	0.000	32.012	30.567	110.544	MWD+IFR1+MS
8600.000	0.000	0.000	8541.734	32.182	0.000	31.102	0.000	12.362	0.000	0.000	32.359	30.919	110.697	MWD+IFR1+MS
8700.000	0.000	0.000	8641.734	32.527	0.000	31.456	0.000	12.567	0.000	0.000	32.705	31.270	110.848	MWD+IFR1+MS
8800.000	0.000	0.000	8741.734	32.872	0.000	31.810	0.000	12.775	0.000	0.000	33.052	31.622	110.997	MWD+IFR1+MS
8863.066	0.000	0.000	8804.800	33.087	0.000	32.031	0.000	12.907	0.000	0.000	33.267	31.844	111.029	MWD+IFR1+MS
8900.000	2.955	179.678	8841.718	33.034	0.000	32.158	-0.000	12.985	0.000	0.000	33.388	31.967	110.967	MWD+IFR1+MS
9000.000	10.955	179.678	8940.902	33.103	0.000	32.462	-0.000	13.221	0.000	0.000	34.220	32.309	105.889	MWD+IFR1+MS
9100.000	18.955	179.678	9037.436	33.322	0.000	32.748	-0.000	13.619	0.000	0.000	35.596	32.625	101.177	MWD+IFR1+MS
9200.000	26.955	179.678	9129.443	33.040	0.000	33.009	-0.000	14.253	0.000	0.000	36.808	32.894	99.285	MWD+IFR1+MS

9300.000	34.955	179.678	9215.130	32.328	0.000	33.243	-0.000	15.175	0.000	0.000	37.825	33.128	98.380	MWD+IFR1+MS
9400.000	42.955	179.678	9292.831	31.282	0.000	33.450	-0.000	16.386	0.000	0.000	38.639	33.332	97.940	MWD+IFR1+MS
9500.000	50.955	179.678	9361.034	30.028	0.000	33.628	-0.000	17.855	0.000	0.000	39.252	33.505	97.761	MWD+IFR1+MS
9600.000	58.955	179.678	9418.409	28.722	0.000	33.777	-0.000	19.523	0.000	0.000	39.679	33.648	97.742	MWD+IFR1+MS
9700.000	66.955	179.678	9463.842	27.550	0.000	33.899	-0.000	21.326	0.000	0.000	39.943	33.764	97.818	MWD+IFR1+MS
9800.000	74.955	179.678	9496.447	26.714	0.000	33.992	-0.000	23.194	0.000	0.000	40.078	33.852	97.935	MWD+IFR1+MS
9900.000	82.955	179.678	9515.590	26.403	0.000	34.057	-0.000	25.065	0.000	0.000	40.125	33.915	98.033	MWD+IFR1+MS
9988.066	90.000	179.678	9520.997	26.351	0.000	34.090	-0.000	26.351	0.000	0.000	40.130	33.948	98.041	MWD+IFR1+MS
10000.000	90.000	179.678	9520.997	26.374	0.000	34.092	-0.000	26.374	0.000	0.000	40.130	33.950	98.034	MWD+IFR1+MS
10100.000	90.000	179.678	9520.997	26.549	0.000	34.125	-0.000	26.549	0.000	0.000	40.130	33.985	98.003	MWD+IFR1+MS
10200.000	90.000	179.678	9520.997	26.750	0.000	34.179	-0.000	26.750	0.000	0.000	40.131	34.041	97.996	MWD+IFR1+MS
10300.000	90.000	179.678	9520.997	26.972	0.000	34.250	-0.000	26.972	0.000	0.000	40.133	34.113	98.009	MWD+IFR1+MS
10400.000	90.000	179.678	9520.997	27.215	0.000	34.338	-0.000	27.215	0.000	0.000	40.136	34.202	98.044	MWD+IFR1+MS
10500.000	90.000	179.678	9520.997	27.479	0.000	34.443	-0.000	27.479	0.000	0.000	40.139	34.307	98.102	MWD+IFR1+MS
10600.000	90.000	179.678	9520.997	27.762	0.000	34.564	-0.000	27.762	0.000	0.000	40.144	34.429	98.183	MWD+IFR1+MS
10700.000	90.000	179.678	9520.997	28.064	0.000	34.702	-0.000	28.064	0.000	0.000	40.149	34.567	98.291	MWD+IFR1+MS
10800.000	90.000	179.678	9520.997	28.385	0.000	34.856	-0.000	28.385	0.000	0.000	40.155	34.720	98.427	MWD+IFR1+MS
10900.000	90.000	179.678	9520.997	28.723	0.000	35.026	-0.000	28.723	0.000	0.000	40.162	34.890	98.595	MWD+IFR1+MS
11000.000	90.000	179.678	9520.997	29.079	0.000	35.212	-0.000	29.079	0.000	0.000	40.170	35.075	98.799	MWD+IFR1+MS
11100.000	90.000	179.678	9520.997	29.452	0.000	35.413	-0.000	29.452	0.000	0.000	40.180	35.275	99.044	MWD+IFR1+MS
11200.000	90.000	179.678	9520.997	29.840	0.000	35.630	-0.000	29.840	0.000	0.000	40.190	35.489	99.338	MWD+IFR1+MS
11300.000	90.000	179.678	9520.997	30.244	0.000	35.862	-0.000	30.244	0.000	0.000	40.201	35.718	99.690	MWD+IFR1+MS
11400.000	90.000	179.678	9520.997	30.663	0.000	36.109	-0.000	30.663	0.000	0.000	40.214	35.961	100.109	MWD+IFR1+MS
11500.000	90.000	179.678	9520.997	31.095	0.000	36.370	-0.000	31.095	0.000	0.000	40.228	36.218	100.613	MWD+IFR1+MS
11600.000	90.000	179.678	9520.997	31.542	0.000	36.645	-0.000	31.542	0.000	0.000	40.244	36.487	101.221	MWD+IFR1+MS
11700.000	90.000	179.678	9520.997	32.001	0.000	36.934	-0.000	32.001	0.000	0.000	40.262	36.769	101.960	MWD+IFR1+MS
11800.000	90.000	179.678	9520.997	32.473	0.000	37.236	-0.000	32.473	0.000	0.000	40.283	37.062	102.870	MWD+IFR1+MS
11900.000	90.000	179.678	9520.997	32.957	0.000	37.552	-0.000	32.957	0.000	0.000	40.307	37.365	104.004	MWD+IFR1+MS
12000.000	90.000	179.678	9520.997	33.452	0.000	37.881	-0.000	33.452	0.000	0.000	40.335	37.678	105.443	MWD+IFR1+MS
12100.000	90.000	179.678	9520.997	33.958	0.000	38.222	-0.000	33.958	0.000	0.000	40.369	37.998	107.304	MWD+IFR1+MS
12200.000	90.000	179.678	9520.997	34.475	0.000	38.575	-0.000	34.475	0.000	0.000	40.411	38.323	109.765	MWD+IFR1+MS
12300.000	90.000	179.678	9520.997	35.001	0.000	38.940	-0.000	35.001	0.000	0.000	40.465	38.647	113.092	MWD+IFR1+MS
12400.000	90.000	179.678	9520.997	35.537	0.000	39.317	-0.000	35.537	0.000	0.000	40.539	38.964	117.660	MWD+IFR1+MS

12500.000	90.000	179.678	9520.997	36.082	0.000	39.704	-0.000	36.082	0.000	0.000	40.643	39.263	123.883	MWD+IFR1+MS
12600.000	90.000	179.678	9520.997	36.636	0.000	40.103	-0.000	36.636	0.000	0.000	40.795	39.526	131.865	MWD+IFR1+MS
12700.000	90.000	179.678	9520.997	37.198	0.000	40.512	-0.000	37.198	0.000	0.000	41.008	39.738	-39.204	MWD+IFR1+MS
12800.000	90.000	179.678	9520.997	37.768	0.000	40.932	-0.000	37.768	0.000	0.000	41.288	39.894	-30.893	MWD+IFR1+MS
12900.000	90.000	179.678	9520.997	38.346	0.000	41.361	-0.000	38.346	0.000	0.000	41.623	40.005	-24.254	MWD+IFR1+MS
13000.000	90.000	179.678	9520.997	38.931	0.000	41.800	-0.000	38.931	0.000	0.000	41.999	40.085	-19.337	MWD+IFR1+MS
13100.000	90.000	179.678	9520.997	39.523	0.000	42.248	-0.000	39.523	0.000	0.000	42.404	40.147	-15.754	MWD+IFR1+MS
13200.000	90.000	179.678	9520.997	40.122	0.000	42.705	-0.000	40.122	0.000	0.000	42.831	40.196	-13.108	MWD+IFR1+MS
13300.000	90.000	179.678	9520.997	40.726	0.000	43.171	-0.000	40.726	0.000	0.000	43.274	40.237	-11.111	MWD+IFR1+MS
13400.000	90.000	179.678	9520.997	41.337	0.000	43.646	-0.000	41.337	0.000	0.000	43.732	40.274	-9.566	MWD+IFR1+MS
13500.000	90.000	179.678	9520.997	41.954	0.000	44.129	-0.000	41.954	0.000	0.000	44.201	40.307	-8.344	MWD+IFR1+MS
13600.000	90.000	179.678	9520.997	42.576	0.000	44.619	-0.000	42.576	0.000	0.000	44.681	40.338	-7.359	MWD+IFR1+MS
13700.000	90.000	179.678	9520.997	43.204	0.000	45.117	-0.000	43.204	0.000	0.000	45.171	40.368	-6.550	MWD+IFR1+MS
13800.000	90.000	179.678	9520.997	43.836	0.000	45.623	-0.000	43.836	0.000	0.000	45.670	40.396	-5.878	MWD+IFR1+MS
13900.000	90.000	179.678	9520.997	44.474	0.000	46.136	-0.000	44.474	0.000	0.000	46.177	40.424	-5.310	MWD+IFR1+MS
14000.000	90.000	179.678	9520.997	45.116	0.000	46.656	-0.000	45.116	0.000	0.000	46.691	40.452	-4.826	MWD+IFR1+MS
14100.000	90.000	179.678	9520.997	45.762	0.000	47.182	-0.000	45.762	0.000	0.000	47.214	40.479	-4.409	MWD+IFR1+MS
14200.000	90.000	179.678	9520.997	46.413	0.000	47.715	-0.000	46.413	0.000	0.000	47.743	40.507	-4.047	MWD+IFR1+MS
14300.000	90.000	179.678	9520.997	47.068	0.000	48.254	-0.000	47.068	0.000	0.000	48.279	40.534	-3.730	MWD+IFR1+MS
14400.000	90.000	179.678	9520.997	47.726	0.000	48.799	-0.000	47.726	0.000	0.000	48.822	40.561	-3.451	MWD+IFR1+MS
14500.000	90.000	179.678	9520.997	48.389	0.000	49.350	-0.000	48.389	0.000	0.000	49.371	40.589	-3.203	MWD+IFR1+MS
14600.000	90.000	179.678	9520.997	49.055	0.000	49.907	-0.000	49.055	0.000	0.000	49.925	40.616	-2.982	MWD+IFR1+MS
14700.000	90.000	179.678	9520.997	49.725	0.000	50.469	-0.000	49.725	0.000	0.000	50.486	40.644	-2.784	MWD+IFR1+MS
14800.000	90.000	179.678	9520.997	50.398	0.000	51.037	-0.000	50.398	0.000	0.000	51.052	40.673	-2.606	MWD+IFR1+MS
14900.000	90.000	179.678	9520.997	51.074	0.000	51.609	-0.000	51.074	0.000	0.000	51.623	40.701	-2.445	MWD+IFR1+MS
15000.000	90.000	179.678	9520.997	51.753	0.000	52.187	-0.000	51.753	0.000	0.000	52.199	40.730	-2.299	MWD+IFR1+MS
15100.000	90.000	179.678	9520.997	52.435	0.000	52.769	-0.000	52.435	0.000	0.000	52.780	40.760	-2.166	MWD+IFR1+MS
15200.000	90.000	179.678	9520.997	53.120	0.000	53.356	-0.000	53.120	0.000	0.000	53.366	40.789	-2.045	MWD+IFR1+MS
15300.000	90.000	179.678	9520.997	53.808	0.000	53.948	-0.000	53.808	0.000	0.000	53.957	40.820	-1.934	MWD+IFR1+MS
15400.000	90.000	179.678	9520.997	54.498	0.000	54.543	-0.000	54.498	0.000	0.000	54.552	40.850	-1.832	MWD+IFR1+MS
15500.000	90.000	179.678	9520.997	55.191	0.000	55.143	-0.000	55.191	0.000	0.000	55.151	40.881	-1.738	MWD+IFR1+MS
15600.000	90.000	179.678	9520.997	55.886	0.000	55.747	-0.000	55.886	0.000	0.000	55.754	40.912	-1.651	MWD+IFR1+MS
15700.000	90.000	179.678	9520.997	56.584	0.000	56.355	-0.000	56.584	0.000	0.000	56.362	40.944	-1.571	MWD+IFR1+MS

15800.000	90.000	179.678	9520.997	57.284	0.000	56.967	-0.000	57.284	0.000	0.000	56.973	40.977	-1.496	MWD+IFR1+MS
15900.000	90.000	179.678	9520.997	57.986	0.000	57.583	-0.000	57.986	0.000	0.000	57.588	41.009	-1.427	MWD+IFR1+MS
16000.000	90.000	179.678	9520.997	58.690	0.000	58.202	-0.000	58.690	0.000	0.000	58.206	41.042	-1.363	MWD+IFR1+MS
16100.000	90.000	179.678	9520.997	59.396	0.000	58.824	-0.000	59.396	0.000	0.000	58.829	41.076	-1.303	MWD+IFR1+MS
16200.000	90.000	179.678	9520.997	60.104	0.000	59.450	-0.000	60.104	0.000	0.000	59.454	41.110	-1.247	MWD+IFR1+MS
16300.000	90.000	179.678	9520.997	60.814	0.000	60.079	-0.000	60.814	0.000	0.000	60.083	41.145	-1.195	MWD+IFR1+MS
16400.000	90.000	179.678	9520.997	61.526	0.000	60.711	-0.000	61.526	0.000	0.000	60.714	41.180	-1.146	MWD+IFR1+MS
16500.000	90.000	179.678	9520.997	62.240	0.000	61.346	-0.000	62.240	0.000	0.000	61.349	41.215	-1.100	MWD+IFR1+MS
16600.000	90.000	179.678	9520.997	62.955	0.000	61.984	-0.000	62.955	0.000	0.000	61.987	41.251	-1.057	MWD+IFR1+MS
16700.000	90.000	179.678	9520.997	63.672	0.000	62.625	-0.000	63.672	0.000	0.000	62.628	41.288	-1.016	MWD+IFR1+MS
16800.000	90.000	179.678	9520.997	64.390	0.000	63.269	-0.000	64.390	0.000	0.000	63.272	41.324	-0.978	MWD+IFR1+MS
16900.000	90.000	179.678	9520.997	65.110	0.000	63.916	-0.000	65.110	0.000	0.000	63.918	41.362	-0.942	MWD+IFR1+MS
17000.000	90.000	179.678	9520.997	65.832	0.000	64.565	-0.000	65.832	0.000	0.000	64.567	41.400	-0.908	MWD+IFR1+MS
17100.000	90.000	179.678	9520.997	66.555	0.000	65.216	-0.000	66.555	0.000	0.000	65.218	41.438	-0.876	MWD+IFR1+MS
17200.000	90.000	179.678	9520.997	67.279	0.000	65.870	-0.000	67.279	0.000	0.000	65.872	41.477	-0.846	MWD+IFR1+MS
17300.000	90.000	179.678	9520.997	68.005	0.000	66.527	-0.000	68.005	0.000	0.000	66.528	41.516	-0.818	MWD+IFR1+MS
17400.000	90.000	179.678	9520.997	68.732	0.000	67.186	-0.000	68.732	0.000	0.000	67.187	41.555	-0.791	MWD+IFR1+MS
17500.000	90.000	179.678	9520.997	69.460	0.000	67.847	-0.000	69.460	0.000	0.000	67.848	41.596	-0.765	MWD+IFR1+MS
17600.000	90.000	179.678	9520.997	70.189	0.000	68.510	-0.000	70.189	0.000	0.000	68.511	41.636	-0.741	MWD+IFR1+MS
17700.000	90.000	179.678	9520.997	70.920	0.000	69.175	-0.000	70.920	0.000	0.000	69.176	41.677	-0.718	MWD+IFR1+MS
17800.000	90.000	179.678	9520.997	71.652	0.000	69.842	-0.000	71.652	0.000	0.000	69.843	41.719	-0.696	MWD+IFR1+MS
17900.000	90.000	179.678	9520.997	72.385	0.000	70.512	-0.000	72.385	0.000	0.000	70.512	41.761	-0.675	MWD+IFR1+MS
18000.000	90.000	179.678	9520.997	73.119	0.000	71.183	-0.000	73.119	0.000	0.000	71.184	41.803	-0.655	MWD+IFR1+MS
18100.000	90.000	179.678	9520.997	73.854	0.000	71.856	-0.000	73.854	0.000	0.000	71.857	41.846	-0.636	MWD+IFR1+MS
18200.000	90.000	179.678	9520.997	74.590	0.000	72.531	-0.000	74.590	0.000	0.000	72.532	41.889	-0.618	MWD+IFR1+MS
18300.000	90.000	179.678	9520.997	75.327	0.000	73.208	-0.000	75.327	0.000	0.000	73.208	41.933	-0.601	MWD+IFR1+MS
18400.000	90.000	179.678	9520.997	76.065	0.000	73.886	-0.000	76.065	0.000	0.000	73.887	41.978	-0.585	MWD+IFR1+MS
18500.000	90.000	179.678	9520.997	76.803	0.000	74.566	-0.000	76.803	0.000	0.000	74.567	42.022	-0.570	MWD+IFR1+MS
18600.000	90.000	179.678	9520.997	77.543	0.000	75.248	-0.000	77.543	0.000	0.000	75.249	42.068	-0.555	MWD+IFR1+MS
18700.000	90.000	179.678	9520.997	78.284	0.000	75.932	-0.000	78.284	0.000	0.000	75.932	42.113	-0.541	MWD+IFR1+MS
18800.000	90.000	179.678	9520.997	79.025	0.000	76.617	-0.000	79.025	0.000	0.000	76.617	42.159	-0.527	MWD+IFR1+MS
18900.000	90.000	179.678	9520.997	79.768	0.000	77.303	-0.000	79.768	0.000	0.000	77.304	42.206	-0.514	MWD+IFR1+MS
19000.000	90.000	179.678	9520.997	80.511	0.000	77.991	-0.000	80.511	0.000	0.000	77.991	42.253	-0.502	MWD+IFR1+MS

19100.000	90.000	179.678	9520.997	81.255	0.000	78.681	-0.000	81.255	0.000	0.000	78.681	42.301	-0.490	MWD+IFR1+MS
19200.000	90.000	179.678	9520.997	81.999	0.000	79.371	-0.000	81.999	0.000	0.000	79.372	42.349	-0.479	MWD+IFR1+MS
19300.000	90.000	179.678	9520.997	82.745	0.000	80.064	-0.000	82.745	0.000	0.000	80.064	42.397	-0.468	MWD+IFR1+MS
19400.000	90.000	179.678	9520.997	83.491	0.000	80.757	-0.000	83.491	0.000	0.000	80.757	42.446	-0.458	MWD+IFR1+MS
19500.000	90.000	179.678	9520.997	84.238	0.000	81.452	-0.000	84.238	0.000	0.000	81.452	42.495	-0.448	MWD+IFR1+MS
19600.000	90.000	179.678	9520.997	84.985	0.000	82.148	-0.000	84.985	0.000	0.000	82.148	42.545	-0.438	MWD+IFR1+MS
19700.000	90.000	179.678	9520.997	85.734	0.000	82.845	-0.000	85.734	0.000	0.000	82.845	42.595	-0.429	MWD+IFR1+MS
19800.000	90.000	179.678	9520.997	86.483	0.000	83.543	-0.000	86.483	0.000	0.000	83.544	42.646	-0.420	MWD+IFR1+MS
19900.000	90.000	179.678	9520.997	87.232	0.000	84.243	-0.000	87.232	0.000	0.000	84.243	42.697	-0.412	MWD+IFR1+MS
20000.000	90.000	179.678	9520.997	87.982	0.000	84.944	-0.000	87.982	0.000	0.000	84.944	42.748	-0.404	MWD+IFR1+MS
20100.000	90.000	179.678	9520.997	88.733	0.000	85.646	-0.000	88.733	0.000	0.000	85.646	42.800	-0.396	MWD+IFR1+MS
20200.000	90.000	179.678	9520.997	89.484	0.000	86.349	-0.000	89.484	0.000	0.000	86.349	42.853	-0.388	MWD+IFR1+MS
20300.000	90.000	179.678	9520.997	90.236	0.000	87.053	-0.000	90.236	0.000	0.000	87.053	42.905	-0.381	MWD+IFR1+MS
20400.000	90.000	179.678	9520.997	90.988	0.000	87.758	-0.000	90.988	0.000	0.000	87.758	42.959	-0.374	MWD+IFR1+MS
20500.000	90.000	179.678	9520.997	91.741	0.000	88.464	-0.000	91.741	0.000	0.000	88.464	43.012	-0.368	MWD+IFR1+MS
20600.000	90.000	179.678	9520.997	92.495	0.000	89.171	-0.000	92.495	0.000	0.000	89.171	43.066	-0.361	MWD+IFR1+MS
20700.000	90.000	179.678	9520.997	93.249	0.000	89.879	-0.000	93.249	0.000	0.000	89.879	43.121	-0.355	MWD+IFR1+MS
20800.000	90.000	179.678	9520.997	94.003	0.000	90.588	-0.000	94.003	0.000	0.000	90.588	43.176	-0.349	MWD+IFR1+MS
20900.000	90.000	179.678	9520.997	94.758	0.000	91.298	-0.000	94.758	0.000	0.000	91.298	43.231	-0.344	MWD+IFR1+MS
21000.000	90.000	179.678	9520.997	95.514	0.000	92.008	-0.000	95.514	0.000	0.000	92.008	43.287	-0.338	MWD+IFR1+MS
21100.000	90.000	179.678	9520.997	96.270	0.000	92.720	-0.000	96.270	0.000	0.000	92.720	43.343	-0.333	MWD+IFR1+MS
21200.000	90.000	179.678	9520.997	97.026	0.000	93.432	-0.000	97.026	0.000	0.000	93.432	43.400	-0.328	MWD+IFR1+MS
21300.000	90.000	179.678	9520.997	97.783	0.000	94.146	-0.000	97.783	0.000	0.000	94.146	43.457	-0.323	MWD+IFR1+MS
21400.000	90.000	179.678	9520.997	98.540	0.000	94.860	-0.000	98.540	0.000	0.000	94.860	43.515	-0.318	MWD+IFR1+MS
21500.000	90.000	179.678	9520.997	99.298	0.000	95.575	-0.000	99.298	0.000	0.000	95.575	43.573	-0.314	MWD+IFR1+MS
21600.000	90.000	179.678	9520.997	100.056	0.000	96.290	-0.000	100.056	0.000	0.000	96.290	43.631	-0.309	MWD+IFR1+MS
21700.000	90.000	179.678	9520.997	100.815	0.000	97.007	-0.000	100.815	0.000	0.000	97.007	43.690	-0.305	MWD+IFR1+MS
21800.000	90.000	179.678	9520.997	101.574	0.000	97.724	-0.000	101.574	0.000	0.000	97.724	43.749	-0.301	MWD+IFR1+MS
21900.000	90.000	179.678	9520.997	102.333	0.000	98.442	-0.000	102.333	0.000	0.000	98.442	43.809	-0.297	MWD+IFR1+MS
22000.000	90.000	179.678	9520.997	103.093	0.000	99.160	-0.000	103.093	0.000	0.000	99.160	43.869	-0.293	MWD+IFR1+MS
22100.000	90.000	179.678	9520.997	103.853	0.000	99.880	-0.000	103.853	0.000	0.000	99.880	43.929	-0.290	MWD+IFR1+MS
22200.000	90.000	179.678	9520.997	104.613	0.000	100.600	-0.000	104.613	0.000	0.000	100.600	43.990	-0.286	MWD+IFR1+MS
22300.000	90.000	179.678	9520.997	105.374	0.000	101.321	-0.000	105.374	0.000	0.000	101.321	44.051	-0.283	MWD+IFR1+MS

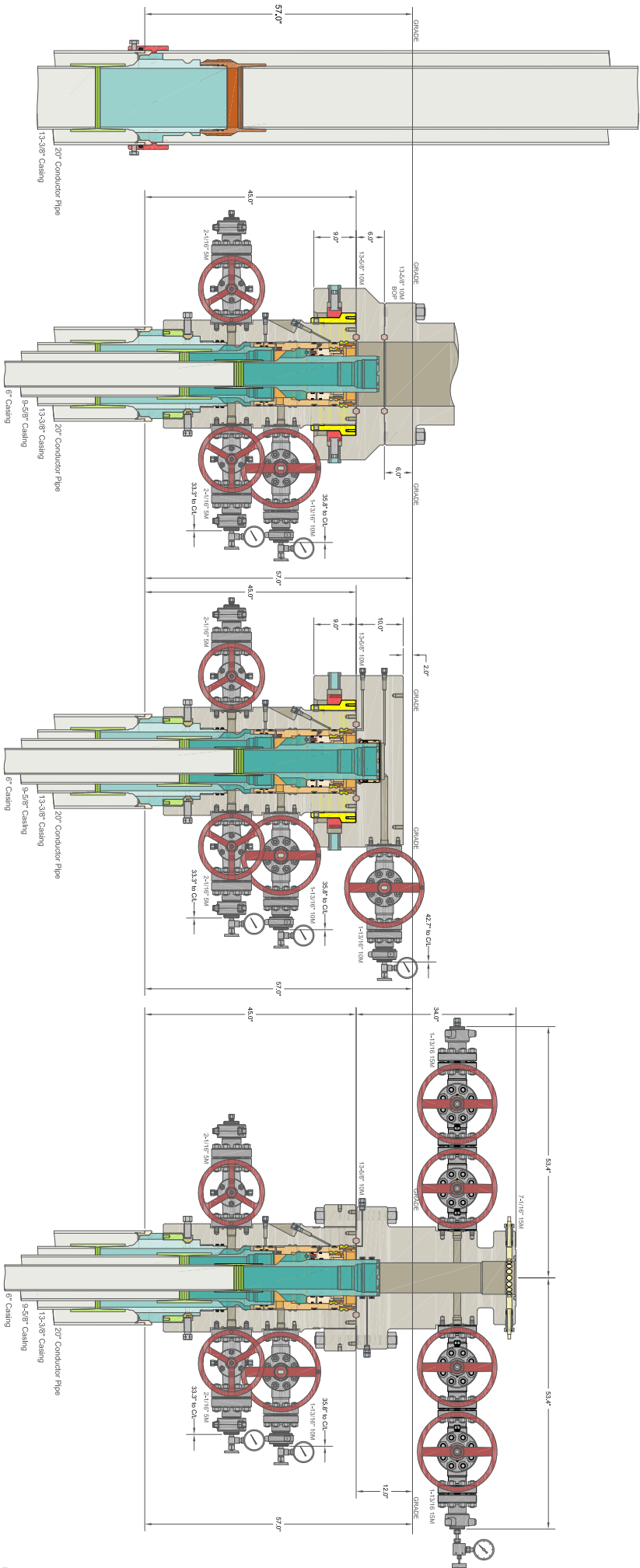
22400.000	90.000	179.678	9520.997	106.135	0.000	102.042	-0.000	106.135	0.000	0.000	102.042	44.113	-0.280	MWD+IFR1+MS
22500.000	90.000	179.678	9520.997	106.897	0.000	102.764	-0.000	106.897	0.000	0.000	102.764	44.175	-0.276	MWD+IFR1+MS
22600.000	90.000	179.678	9520.997	107.658	0.000	103.486	-0.000	107.658	0.000	0.000	103.486	44.237	-0.273	MWD+IFR1+MS
22700.000	90.000	179.678	9520.997	108.421	0.000	104.210	-0.000	108.421	0.000	0.000	104.210	44.300	-0.270	MWD+IFR1+MS
22800.000	90.000	179.678	9520.997	109.183	0.000	104.933	-0.000	109.183	0.000	0.000	104.933	44.363	-0.267	MWD+IFR1+MS
22900.000	90.000	179.678	9520.997	109.946	0.000	105.658	-0.000	109.946	0.000	0.000	105.658	44.427	-0.265	MWD+IFR1+MS
23000.000	90.000	179.678	9520.997	110.709	0.000	106.383	-0.000	110.709	0.000	0.000	106.383	44.491	-0.262	MWD+IFR1+MS
23100.000	90.000	179.678	9520.997	111.472	0.000	107.108	-0.000	111.472	0.000	0.000	107.108	44.555	-0.259	MWD+IFR1+MS
23200.000	90.000	179.678	9520.997	112.236	0.000	107.834	-0.000	112.236	0.000	0.000	107.835	44.620	-0.257	MWD+IFR1+MS
23300.000	90.000	179.678	9520.997	113.000	0.000	108.561	-0.000	113.000	0.000	0.000	108.561	44.685	-0.255	MWD+IFR1+MS
23400.000	90.000	179.678	9520.997	113.764	0.000	109.288	-0.000	113.764	0.000	0.000	109.288	44.751	-0.252	MWD+IFR1+MS
23500.000	90.000	179.678	9520.997	114.529	0.000	110.016	-0.000	114.529	0.000	0.000	110.016	44.817	-0.250	MWD+IFR1+MS
23600.000	90.000	179.678	9520.997	115.294	0.000	110.744	-0.000	115.294	0.000	0.000	110.744	44.883	-0.248	MWD+IFR1+MS
23700.000	90.000	179.678	9520.997	116.059	0.000	111.473	-0.000	116.059	0.000	0.000	111.473	44.950	-0.246	MWD+IFR1+MS
23800.000	90.000	179.678	9520.997	116.824	0.000	112.202	-0.000	116.824	0.000	0.000	112.202	45.017	-0.244	MWD+IFR1+MS
23900.000	90.000	179.678	9520.997	117.590	0.000	112.932	-0.000	117.590	0.000	0.000	112.932	45.084	-0.242	MWD+IFR1+MS
24000.000	90.000	179.678	9520.997	118.356	0.000	113.662	-0.000	118.356	0.000	0.000	113.662	45.152	-0.240	MWD+IFR1+MS
24100.000	90.000	179.678	9520.997	119.122	0.000	114.393	-0.000	119.122	0.000	0.000	114.393	45.220	-0.238	MWD+IFR1+MS
24200.000	90.000	179.678	9520.997	119.888	0.000	115.124	-0.000	119.888	0.000	0.000	115.124	45.289	-0.236	MWD+IFR1+MS
24300.000	90.000	179.678	9520.997	120.655	0.000	115.855	-0.000	120.655	0.000	0.000	115.855	45.358	-0.235	MWD+IFR1+MS
24400.000	90.000	179.678	9520.997	121.421	0.000	116.587	-0.000	121.421	0.000	0.000	116.587	45.427	-0.233	MWD+IFR1+MS
24500.000	90.000	179.678	9520.997	122.188	0.000	117.319	-0.000	122.188	0.000	0.000	117.320	45.497	-0.231	MWD+IFR1+MS
24600.000	90.000	179.678	9520.997	122.956	0.000	118.052	-0.000	122.956	0.000	0.000	118.052	45.567	-0.230	MWD+IFR1+MS
24700.000	90.000	179.678	9520.997	123.723	0.000	118.785	-0.000	123.723	0.000	0.000	118.786	45.637	-0.228	MWD+IFR1+MS
24800.000	90.000	179.678	9520.997	124.491	0.000	119.519	-0.000	124.491	0.000	0.000	119.519	45.708	-0.227	MWD+IFR1+MS
24900.000	90.000	179.678	9520.997	125.259	0.000	120.253	-0.000	125.259	0.000	0.000	120.253	45.779	-0.226	MWD+IFR1+MS
25000.000	90.000	179.678	9520.997	126.027	0.000	120.987	-0.000	126.027	0.000	0.000	120.988	45.851	-0.224	MWD+IFR1+MS
25100.000	90.000	179.678	9520.997	126.795	0.000	121.722	-0.000	126.795	0.000	0.000	121.722	45.923	-0.223	MWD+IFR1+MS
25200.000	90.000	179.678	9520.997	127.564	0.000	122.457	-0.000	127.564	0.000	0.000	122.458	45.995	-0.222	MWD+IFR1+MS
25300.000	90.000	179.678	9520.997	128.332	0.000	123.193	-0.000	128.332	0.000	0.000	123.193	46.067	-0.220	MWD+IFR1+MS
25400.000	90.000	179.678	9520.997	129.101	0.000	123.929	-0.000	129.101	0.000	0.000	123.929	46.140	-0.219	MWD+IFR1+MS
25500.000	90.000	179.678	9520.997	129.870	0.000	124.665	-0.000	129.870	0.000	0.000	124.665	46.214	-0.218	MWD+IFR1+MS
25600.000	90.000	179.678	9520.997	130.640	0.000	125.402	-0.000	130.640	0.000	0.000	125.402	46.287	-0.217	MWD+IFR1+MS

25700.000	90.000	179.678	9520.997	131.409	0.000	126.139	-0.000	131.409	0.000	0.000	126.139	46.361	-0.216	MWD+IFR1+MS
25800.000	90.000	179.678	9520.997	132.179	0.000	126.876	-0.000	132.179	0.000	0.000	126.876	46.436	-0.215	MWD+IFR1+MS
25900.000	90.000	179.678	9520.997	132.949	0.000	127.614	-0.000	132.949	0.000	0.000	127.614	46.510	-0.214	MWD+IFR1+MS
26000.000	90.000	179.678	9520.997	133.719	0.000	128.352	-0.000	133.719	0.000	0.000	128.352	46.585	-0.213	MWD+IFR1+MS
26100.000	90.000	179.678	9520.997	134.489	0.000	129.090	-0.000	134.489	0.000	0.000	129.090	46.661	-0.212	MWD+IFR1+MS
26200.000	90.000	179.678	9520.997	135.259	0.000	129.828	-0.000	135.259	0.000	0.000	129.829	46.736	-0.211	MWD+IFR1+MS
26300.000	90.000	179.678	9520.997	136.030	0.000	130.567	-0.000	136.030	0.000	0.000	130.568	46.812	-0.210	MWD+IFR1+MS
26400.000	90.000	179.678	9520.997	136.800	0.000	131.307	-0.000	136.800	0.000	0.000	131.307	46.889	-0.209	MWD+IFR1+MS
26500.000	90.000	179.678	9520.997	137.571	0.000	132.046	-0.000	137.571	0.000	0.000	132.046	46.965	-0.209	MWD+IFR1+MS
26600.000	90.000	179.678	9520.997	138.342	0.000	132.786	-0.000	138.342	0.000	0.000	132.786	47.042	-0.208	MWD+IFR1+MS
26700.000	90.000	179.678	9520.997	139.113	0.000	133.526	-0.000	139.113	0.000	0.000	133.526	47.120	-0.207	MWD+IFR1+MS
26800.000	90.000	179.678	9520.997	139.885	0.000	134.266	-0.000	139.885	0.000	0.000	134.267	47.198	-0.206	MWD+IFR1+MS
26900.000	90.000	179.678	9520.997	140.656	0.000	135.007	-0.000	140.656	0.000	0.000	135.007	47.276	-0.206	MWD+IFR1+MS
27000.000	90.000	179.678	9520.997	141.428	0.000	135.748	-0.000	141.428	0.000	0.000	135.748	47.354	-0.205	MWD+IFR1+MS
27100.000	90.000	179.678	9520.997	142.199	0.000	136.489	-0.000	142.199	0.000	0.000	136.489	47.433	-0.204	MWD+IFR1+MS
27200.000	90.000	179.678	9520.997	142.971	0.000	137.231	-0.000	142.971	0.000	0.000	137.231	47.512	-0.204	MWD+IFR1+MS
27300.000	90.000	179.678	9520.997	143.743	0.000	137.972	-0.000	143.743	0.000	0.000	137.973	47.591	-0.203	MWD+IFR1+MS
27400.000	90.000	179.678	9520.997	144.515	0.000	138.714	-0.000	144.515	0.000	0.000	138.715	47.671	-0.203	MWD+IFR1+MS
27500.000	90.000	179.678	9520.997	145.288	0.000	139.457	-0.000	145.288	0.000	0.000	139.457	47.751	-0.202	MWD+IFR1+MS
27600.346	90.000	179.678	9520.997	146.063	0.000	140.202	-0.000	146.063	0.000	0.000	140.202	47.831	-0.202	MWD+IFR1+MS
27650.359	90.000	179.678	9520.997	146.449	0.000	140.573	-0.000	146.449	0.000	0.000	140.573	47.871	-0.201	MWD+IFR1+MS

Plan Targets

Poker Lake Unit 20 DTD South 321H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 15	9698.21	440391.80	633538.90	6225.00	RECTANGLE
SHL 18	10503.40	439616.99	633716.78	5754.85	RECTANGLE
LTP 15	27600.36	422063.60	633641.90	6225.00	RECTANGLE
BHL 15	27650.36	422013.60	633642.10	6225.00	RECTANGLE



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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

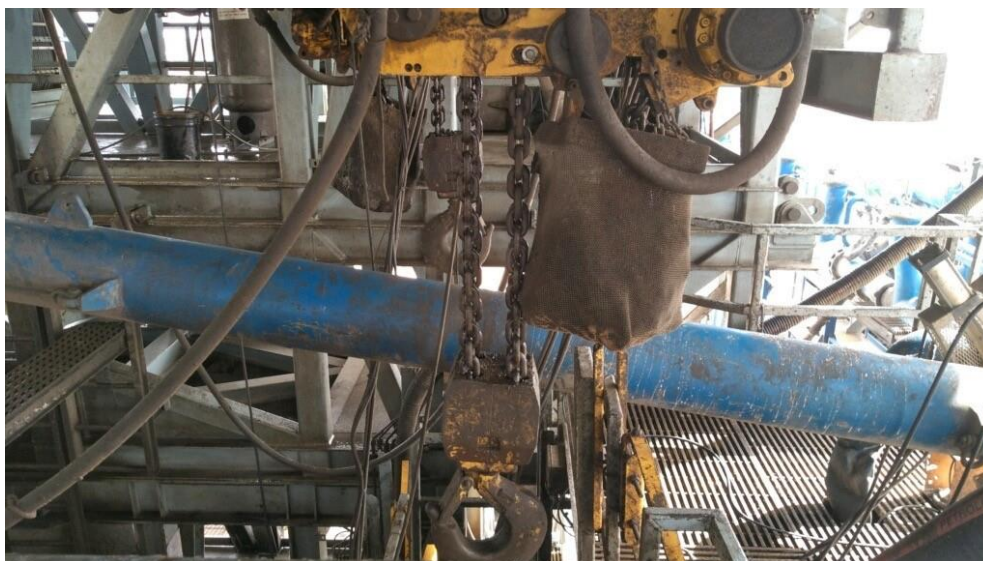


Figure 2: BOP Winch System

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 3170 recognizes 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.

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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 ^a	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 ^a	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^a	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

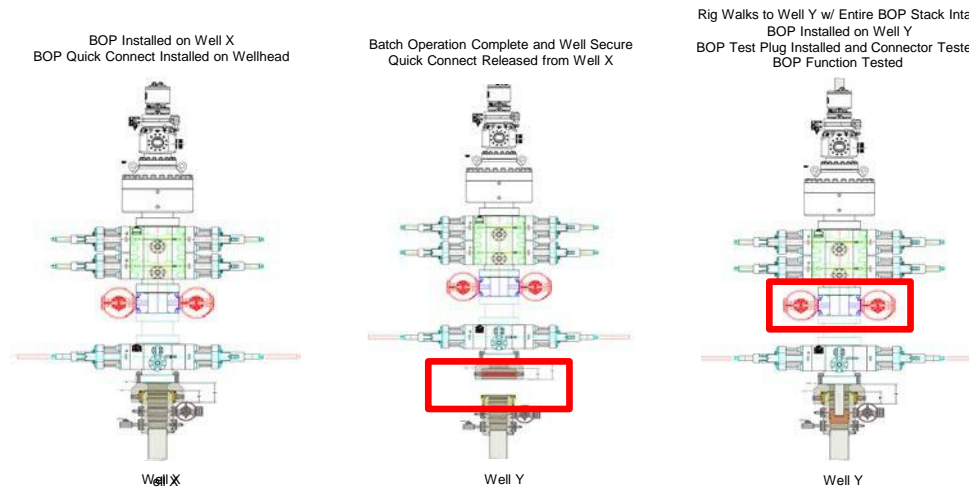
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

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.

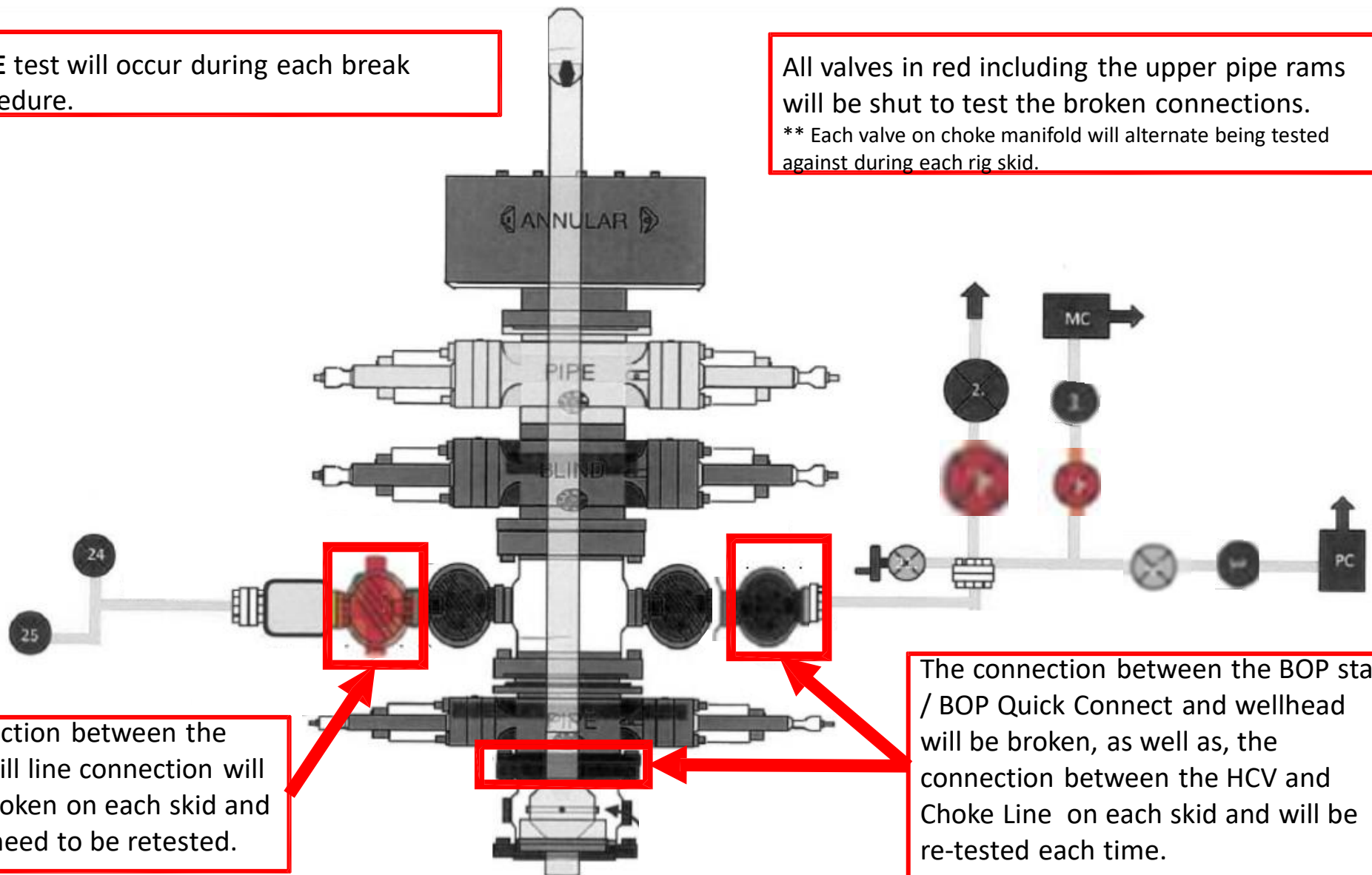
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.

General Procedure While Drilling

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

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

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

CONDITIONS

Action 359222

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 359222
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

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