

Well Name: BIG EDDY UNIT DI 5 WEST 27-20	Well Location: T20S / R31E / SEC 27 / SWNE / 32.54674 / -103.855778	County or Parish/State: EDDY / NM
Well Number: 2H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMLC065944A	Unit or CA Name: BIG EDDY	Unit or CA Number: NMNM68294X
US Well Number:	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2831238

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 01/10/2025	Time Sundry Submitted: 03:53
Date proposed operation will begin: 01/17/2025	

**Procedure Description:** Big Eddy Unit DI 5 West 27-20 2H APD ID# 10400093609 SUNDRY LANGUAGE XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, KOP, FTP, LTP, BHL, casing design, cement program, mud circulation system, proposed total depth and pool. FROM: TO: SHL: 1745' FNL & 2260' FEL OF SECTION 27-T20S-R31E 1670' FNL & 2170' FEL OF SECTION 27-T20S-R31E KOP: 1745' FNL & 2260' FEL OF SECTION 27-T20S-R31E 1307' FSL & 1964' FEL OF SECTION 22-T20S-R31E FTP: 1650' FSL & 1980' FEL OF SECTION 22-T20S-R31E 1305' FSL & 2581' FWL OF SECTION 22-T20S-R31E LTP: 1650' FSL & 100' FWL OF SECTION 20-T20S-R31E 1305' FSL & 100' FWL OF SECTION 20-T20S-R31E BHL: 1650' FSL & 50' FWL OF SECTION 20-T20S-R31E 1305' FSL & 50' FWL OF SECTION 20-T20S-R31E The proposed total depth is changing from 24513' MD/9518' TVD to 24205.23' MD/9576' TVD. The pool name is changing from WC-015 G-06 S203127G; Bone Spring to WC Williams Sink; Bone Spring. There are no changes requested to the facilities/surface usage that was approved along with the APD. See attached drilling program for the updated casing design, cement program and the mud circulation system. Attachments: C-102, Drilling Program, Directional Plan, Choke Manifold Diagram, BOP Diagram, MBS diagram.

NOI Attachments

Procedure Description

Sundry\_Attachments\_\_\_BEU\_DI\_5\_West\_27\_20\_2H\_20250217070334.pdf

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US Well Number:	Operator: XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

BIG\_EDDY\_UNIT\_DI\_5\_WEST\_27\_20\_2H\_COA\_20250227165938.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: SRINIVAS LAGHUVARAPU

Signed on: FEB 17, 2025 07:03 AM

Name: XTO PERMIAN OPERATING LLC

Title: REGULATORY ANALYST

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRINGState: TX

Phone: (720) 539-1673

Email address: SRINIVAS.N.LAGHUVARAPU@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City:State:Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 02/28/2025

Signature: Chris Walls

Form 3160-5 (June 2019)	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT	FORM APPROVED OMB No. 1004-0137 Expires: October 31, 2021
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> <i>Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.</i>		5. Lease Serial No.
		6. If Indian, Allottee or Tribe Name

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No.
2. Name of Operator		9. API Well No.
3a. Address	3b. Phone No. (include area code)	10. Field and Pool or Exploratory Area
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State

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

<b>THE SPACE FOR FEDERAL OR STATE OFFICE USE</b>		
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

BHL: 1650' FSL & 50' FWL OF SECTION 20-T20S-R31E 1305' FSL & 50' FWL OF SECTION 20-T20S-R31E

The proposed total depth is changing from 24513 MD/9518 TVD to 24205.23 MD/9576 TVD.

The pool name is changing from WC-015 G-06 S203127G; Bone Spring to WC Williams Sink; Bone Spring.

There are no changes requested to the facilities/surface usage that was approved along with the APD.

See attached drilling program for the updated casing design, cement program and the mud circulation system.

Attachments: C-102, Drilling Program, Directional Plan, Choke Manifold Diagram, BOP Diagram, MBS diagram.

### Location of Well

0. SHL: SWNE / 1745 FNL / 2260 FEL / TWSP: 20S / RANGE: 31E / SECTION: 27 / LAT: 32.54674 / LONG: -103.855778 ( TVD: 0 feet, MD: 0 feet )

PPP: NESE / 1647 FSL / 0 FWL / TWSP: 20S / RANGE: 31E / SECTION: 20 / LAT: 32.556103 / LONG: -103.882739 ( TVD: 9518 feet, MD: 20000 feet )

PPP: NWSE / 1642 FSL / 1327 FEL / TWSP: 20S / RANGE: 31E / SECTION: 21 / LAT: 32.556088 / LONG: -103.869825 ( TVD: 9518 feet, MD: 16000 feet )

PPP: NESE / 1637 FSL / 0 FWL / TWSP: 20S / RANGE: 31E / SECTION: 21 / LAT: 32.556082 / LONG: -103.865518 ( TVD: 9518 feet, MD: 14700 feet )

PPP: NESW / 1648 FSL / 2630 FEL / TWSP: 20S / RANGE: 31E / SECTION: 22 / LAT: 32.556071 / LONG: -103.856979 ( TVD: 9518 feet, MD: 12100 feet )

PPP: NWSE / 1650 FSL / 1980 FEL / TWSP: 20S / RANGE: 31E / SECTION: 22 / LAT: 32.556069 / LONG: -103.85487 ( TVD: 9518 feet, MD: 10700 feet )

BHL: NWSW / 1650 FSL / 50 FWL / TWSP: 20S / RANGE: 31E / SECTION: 20 / LAT: 32.55612 / LONG: -103.899806 ( TVD: 9518 feet, MD: 24513 feet )

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	XTO
<b>LEASE NO.:</b>	NMLC065944A
<b>LOCATION:</b>	Sec. 27, T.20 S, R 31 E
<b>COUNTY:</b>	Eddy County, New Mexico ▼
<b>WELL NAME &amp; NO.:</b>	Big Eddy Unit DI 5 West 27-20 2H
<b>SURFACE HOLE FOOTAGE:</b>	1745'/N & 2260'/E
<b>BOTTOM HOLE FOOTAGE:</b>	1650'/S & 50'/W

*Changes approved through engineering via **Sundry 2831238** on 2/27/2025. Any previous COAs not addressed within the updated COAs still apply.*

COA

H <sub>2</sub> S	<input checked="" type="radio"/> No		<input type="radio"/> Yes	
<b>Potash / WIPP</b>	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-Q	<input checked="" type="checkbox"/> Open Annulus <span style="color: red;">4-String Design: Open 1st Int x 2nd Annulus (ICP 2 below Relief Zone)</span> <input type="checkbox"/> WIPP
<b>Cave / Karst</b>	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
<b>Cementing</b>	<input type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
<b>Special Req</b>	<input checked="" type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
<b>Waste Prev.</b>	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
<b>Additional Language</b>	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> Break Testing
	<input checked="" type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H<sub>2</sub>S) monitors shall be installed prior to drilling out the surface shoe. If H<sub>2</sub>S 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.

***APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.***

### B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **850** 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.
  - 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 1<sup>st</sup> Intermediate casing shall be set at **2700ft**:
    - 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.**

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:  
**(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the Capitan interval)**

    - Switch to freshwater mud to protect the Capitan Reef and use freshwater mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
    - Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.
  3. The minimum required fill of cement behind the **7-5/8** inch 2<sup>nd</sup> Intermediate casing is:
    - Cement to surface. If cement does not circulate see B.1.a, c-d above. If cement does not circulate, contact the appropriate BLM office.

**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.**
  4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
    - Cement should tie-back **500 feet** into the previous casing but not higher than **USGS Marker Bed No. 126**. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. Operator shall provide method of verification. **Excess calculates to -10%. Additional cement maybe required.**

## 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).
1. 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. **(This is not necessary for secondary recovery unit wells)**

### BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 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 43 CFR 3172.
- 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.

Engineer may elect to vary this language. Speak with Chris about implementing changes and whether that change seems reasonable.

### **Casing Clearance**

String does not meet 0.422" clearance requirement per 43 CFR 3172. Cement tieback requirement increased 100' for Production casing tieback. Operator may contact approving engineer to discuss changing casing set depth or grade to meet clearance requirement.

## 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)

### Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;  
[BLM\\_NM\\_CFO\\_DrillingNotifications@BLM.GOV](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

### 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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 3172**.
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:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
  - i. 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).
  - ii. 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.)

- iii. 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 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.

**Approved by Zota Stevens on 2/27/2025**  
575-234-5998 / zstevens@blm.gov

C-102  Sumbit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024	
		Submittal Type:	<input type="checkbox"/> Initial Submittal
			<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number <b>30-015-</b>	Pool Code <b>97650</b>	Pool Name <b>WC WILLIAMS SINK; BONE SPRING</b>	
Property Code	Property Name <b>BIG EDDY UNIT DI 5 WEST 27-20</b>	Well Number <b>2H</b>	
OGRID No. <b>373075</b>	Operator Name <b>XTO PERMIAN OPERATING, LLC.</b>	Ground Level Elevation <b>3,525'</b>	
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

Surface Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	27	20S	31E		1,670 FNL	2,170 FEL	32.546946	-103.855483	EDDY

Bottom Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	20	20S	31E		1,305 FSL	50 FWL	32.555173	-103.899805	EDDY


Dedicated Acres <b>800.00</b>	Infill or Defining Well <b>DEFINING</b>	Defining Well API	Overlapping Spacing Unit (Y/N) <b>N</b>	Consolidation Code <b>U</b>
Order Numbers.			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	22	20S	31E		1,307 FSL	1,964 FEL	32.555126	-103.854818	EDDY

First Take Point (FTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	22	20S	31E		1,305 FSL	2,581 FWL	32.555129	-103.857143	EDDY

Last Take Point (LTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	20	20S	31E		1,305 FSL	100 FWL	32.555173	-103.899643	EDDY

Unitized Area or Area of Interest <b>NMNM-105467880</b>	Spacing Unit Type : <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Elevation <b>3,525'</b>
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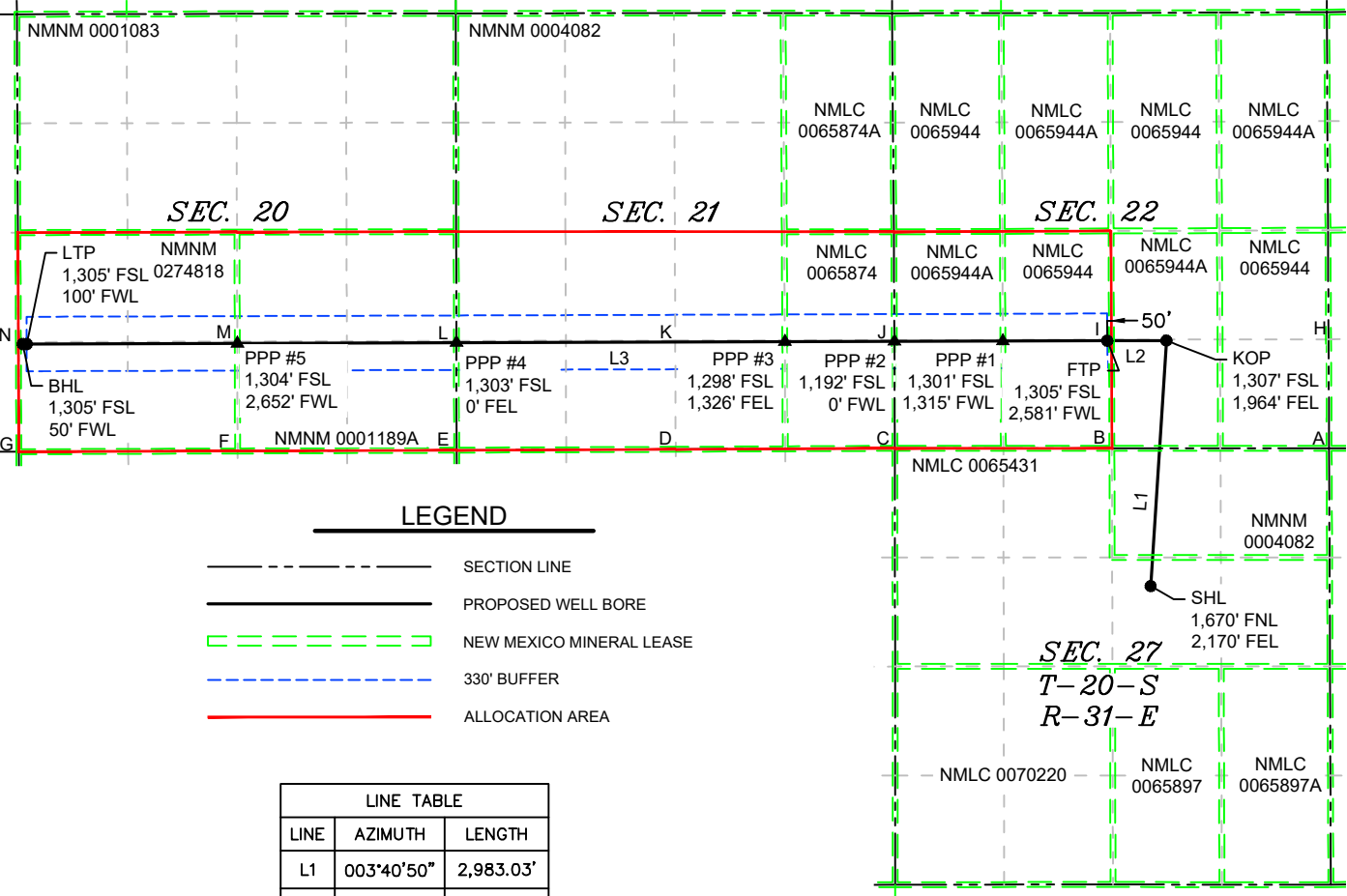
<div>OPERATOR CERTIFICATIONS</div> <div><p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of heretofore entered by the division.</i></p><p><i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i></p><div><div>Srinivas Naveen</div><div>1/6/25</div></div><div>SignatureDate</div><div>Srinivas Naveen Laghuvarapu</div><div>Printed Name</div><div>srinivas.n.laghuvarapu@exxonmobil.com</div><div>Email Address</div></div>	<div>SURVEYOR CERTIFICATIONS</div> <div><p><i>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</i></p><div><div></div><div>Signature and Seal of Professional Surveyor</div></div><div><div>MARK DILLON HARP 23786</div><div>1/3/2025</div></div><div>Certificate NumberDate of Survey</div><div>KT618.013004.04-02</div></div>
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Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is a directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other then the First Take Point and Last Take Point) that is closest to any outer boundary of the tract.

Surveyor shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land in not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



COORDINATE TABLE															
SHL (NAD 83 NME)			KOP (NAD 83 NME)			FTP (NAD 83 NME)			PPP #1 (NAD 83 NME)			PPP #2 (NAD 83 NME)			
Y =	563,040.0	N	Y =	566,016.8	N	Y =	566,014.8	N	Y =	566,010.9	N	Y =	566,006.9	N	
X =	688,580.0	E	X =	688,771.5	E	X =	688,055.2	E	X =	686,789.9	E	X =	685,474.7	E	
LAT. =	32.546946	°N	LAT. =	32.555126	°N	LAT. =	32.555129	°N	LAT. =	32.555134	°N	LAT. =	32.555139	°N	
LONG. =	103.855483	°W	LONG. =	103.854818	°W	LONG. =	103.857143	°W	LONG. =	103.861250	°W	LONG. =	103.865518	°W	
PPP #3 (NAD 83 NME)			PPP #4 (NAD 83 NME)			PPP #5 (NAD 83 NME)			LTP (NAD 83 NME)			BHL (NAD 83 NME)			
Y =	566,002.9	N	Y =	565,990.7	N	Y =	565,982.6	N	Y =	565,974.9	N	Y =	565,974.7	N	
X =	684,147.2	E	X =	680,168.0	E	X =	677,512.7	E	X =	674,960.6	E	X =	674,910.6	E	
LAT. =	32.555144	°N	LAT. =	32.555157	°N	LAT. =	32.555166	°N	LAT. =	32.555173	°N	LAT. =	32.555173	°N	
LONG. =	103.869827	°W	LONG. =	103.882742	°W	LONG. =	103.891360	°W	LONG. =	103.899643	°W	LONG. =	103.899805	°W	
SHL (NAD 27 NME)			KOP (NAD 27 NME)			FTP (NAD 27 NME)			PPP #1 (NAD 27 NME)			PPP #2 (NAD 27 NME)			
Y =	562,978.3	N	Y =	565,955.1	N	Y =	565,953.0	N	Y =	565,949.1	N	Y =	565,945.1	N	
X =	647,400.4	E	X =	647,592.0	E	X =	646,875.7	E	X =	645,610.5	E	X =	644,295.2	E	
LAT. =	32.546825	°N	LAT. =	32.555006	°N	LAT. =	32.555009	°N	LAT. =	32.555014	°N	LAT. =	32.555019	°N	
LONG. =	103.854982	°W	LONG. =	103.854317	°W	LONG. =	103.856641	°W	LONG. =	103.860748	°W	LONG. =	103.865016	°W	
PPP #3 (NAD 27 NME)			PPP #4 (NAD 27 NME)			PPP #5 (NAD 27 NME)			LTP (NAD 27 NME)			BHL (NAD 27 NME)			
Y =	565,941.1	N	Y =	565,928.9	N	Y =	565,920.8	N	Y =	565,913.1	N	Y =	565,912.9	N	
X =	642,967.7	E	X =	638,988.5	E	X =	636,333.2	E	X =	633,781.1	E	X =	633,731.1	E	
LAT. =	32.555023	°N	LAT. =	32.555037	°N	LAT. =	32.555045	°N	LAT. =	32.555053	°N	LAT. =	32.555053	°N	
LONG. =	103.869325	°W	LONG. =	103.882239	°W	LONG. =	103.890857	°W	LONG. =	103.899140	°W	LONG. =	103.899302	°W	
CORNER COORDINATES (NAD 83 NME)						CORNER COORDINATES (NAD 27 NME)									
A - Y =	564,709.8	N	A - X =	690,742.9	E					A - Y =	564,648.1	N	A - X =	649,563.3	E
B - Y =	564,709.7	N	B - X =	688,110.4	E					B - Y =	564,648.0	N	B - X =	646,930.9	E
C - Y =	564,710.2	N	C - X =	685,481.1	E					C - Y =	564,648.5	N	C - X =	644,301.6	E
D - Y =	564,698.7	N	D - X =	682,824.9	E					D - Y =	564,636.9	N	D - X =	641,645.5	E
E - Y =	564,687.3	N	E - X =	680,170.9	E					E - Y =	564,625.5	N	E - X =	638,991.3	E
F - Y =	564,678.7	N	F - X =	677,516.4	E					F - Y =	564,616.9	N	F - X =	636,336.9	E
G - Y =	564,669.5	N	G - X =	674,866.4	E					G - Y =	564,607.8	N	G - X =	633,686.8	E
H - Y =	566,032.2	N	H - X =	690,735.6	E					H - Y =	565,970.4	N	H - X =	649,556.1	E
I - Y =	566,027.3	N	I - X =	688,105.1	E					I - Y =	565,965.6	N	I - X =	646,925.7	E
J - Y =	566,022.8	N	J - X =	685,474.6	E					J - Y =	565,961.1	N	J - X =	644,295.1	E
K - Y =	566,017.4	N	K - X =	682,819.6	E					K - Y =	565,955.7	N	K - X =	641,640.2	E
L - Y =	566,012.1	N	L - X =	680,167.9	E					L - Y =	565,950.3	N	L - X =	638,988.4	E
M - Y =	566,005.0	N	M - X =	677,512.7	E					M - Y =	565,943.2	N	M - X =	636,333.1	E
N - Y =	565,997.6	N	N - X =	674,860.5	E					N - Y =	565,935.8	N	N - X =	633,681.0	E

\\618.013 XTO Energy - NM\004 Big Eddy Unit - Eddy Lea\04 - BEU DI 5 - EDDY\Wells\02 - West 27-20 2H\DWG\DI 5 WEST 27-20 2H C-102.dwg



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

XTO Energy Inc.  
BIG EDDY UNIT DI 5 WEST 27-20 2H  
Projected TD: 24205.23' MD / 9576' TVD  
SHL: 1670' FNL & 2170' FEL , Section 27, T20S, R31E  
BHL: 1305' FSL & 50' FWL , Section 20, T20S, R31E  
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	674'	Water
Top of Salt	950'	Water
Base of Salt	2202'	Water
Capitan	2862'	Water
Delaware	3937'	Water
Brushy Canyon	5894'	Water/Oil/Gas
Bone Spring	7470'	Water
Avalon	7665'	Water/Oil/Gas
1st Bone Spring	8403'	Water/Oil/Gas
2nd Bone Spring	9105'	Water/Oil/Gas
Target/Land Curve	9576'	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 surface casing @ 850' (100' above the salt) and circulating cement back to surface. The salt will be isolated by setting first intermediate casing at 2302' and circulating cement to surface. The second intermediate will isolate Capitan Reef to ~50' inside Delaware formation and cemented to surface a. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 24205.23 MD/TD and 5.5 inch production casing will be set at TD and cemented to a estimated TOC 7470 feet

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 850'	13.375	54.5	J-55	BTC	New	3.97	3.04	19.62
12.25	0' – 2302'	9.625	40	J-55	BTC	New	4.17	3.93	6.84
8.75	0' – 2402'	7.625	29.7	HC L-80	Flush Joint	New	2.20	5.05	3.43
8.75	2402' – 3987'	7.625	29.7	HC L-80	Flush Joint	New	2.20	8.53	9.21
6.75	0' – 3887'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	5.23	2.05
6.75	3887' - 24205.23'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	2.12	2.72

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry

**Wellhead:***Permanent Wellhead*

Multibowl System for 4 String desing as per attachment.

**4. Cement Program**

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.

**Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 850'**

Optional Lead: 570 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft3/sx, 10.13 gal/sx water)

Tail: 310 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 250 psi 24 hr = 500 psi

**1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 2302'**

Lead: 450 sxs Class C (mixed at 14.8 ppg, 2.06 ft3/sx, 10.13 gal/sx water)

Tail: 60 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

**2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 3987'**

Lead: 90 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: 0

Tail: 210 sxs Class C (mixed at 14.8 ppg, 1.27 ft3/sx, 6.39 gal/sx water)

TOC: @ 2862

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a single stage cement job on the second intermediate casing string, with slurries pumped conventionally with the first slurry top of cement at Capitan Reef (2862') and the second slurry performed with planned cement from the Capitan Reef to surface.

**Production Casing: 5.5, 20 New Semi-Flush / Talon, RY P-110 casing to be set at +/- 24205.23'**

Lead: 80 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 7470 feet

Tail: 900 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9935.58 feet

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

XTO requests to pump a single stage cement job on the 5.5" Production casing string with two slurries pumped conventionally, the first slurry with calculated top of cement at KOP @ 9936' MD, and the second slurry with planned cement from KOP base of brushy Canyon.

A post completion bradenhead squeeze will be performed to tied back the 2nd intermediate x production casing annulus TOC into the 2nd intermediate shoe but below of potash interval

**5. Pressure Control Equipment**

Once the permanent WH is installed on the casing, the blow out preventer equipment (BOP) will consist of a 5M Hydril and a 10M Triple Ram BOP.

All BOP testing will be done by an independent service company. Operator will test as per CFR 43-3172

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold.

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 break testing 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.

**6. Proposed Mud Circulation System**

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss	<b>Additional Comments.</b>
			(ppg)	(sec/qt)	(cc)	
0' - 850'	17.5	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
850' - 2302'	12.25	Sat Brine	10-10.5	30-32	NC	Fully saturated brine across salado / salt
2302' to 3987'	8.75	FW	8.8-9.3	30-32	NC	FW across Cap Reef
3987' to 24205.23'	6.75	OBM	10.5-11	50-60	NC - 20	OBM or Brine depending well conditions.

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 surface casing a fully saturated brine 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 EDR system 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 5228 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 - BEU DI 5 27-20 2H

Measured Depth: 24205.23 ft

TVD RKB: 9576.00 ft

### Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 562978.30 ft

Easting: 647400.40 ft

RKB: 3556.00 ft

Ground Level: 3524.00 ft

North Reference: Grid

Convergence Angle: 0.26 Deg

### Plan Sections BEU DI 5 22-20 2H

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			
2300.00	0.00	0.00	2300.00	0.00	0.00	0.00	0.00	0.00			
4962.03	53.24	3.68	4595.14	1147.96	73.85	2.00	0.00	2.00			
5813.75	53.24	3.68	5104.86	1828.92	117.65	0.00	0.00	0.00			
8475.78	0.00	0.00	7400.00	2976.88	191.49	-2.00	0.00	2.00			
9935.58	0.00	0.00	8859.80	2976.88	191.49	0.00	0.00	0.00			
11060.58	90.00	269.83	9576.00	2974.70	-524.70	8.00	0.00	8.00	FTP 3		
24155.24	90.00	269.83	9576.00	2934.80	-13619.30	0.00	0.00	0.00	LTP 3		
24205.23	90.00	269.83	9576.00	2934.65	-13669.29	0.00	0.00	0.00	BHL 3		

### Position Uncertainty

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	XOMR2_OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.000	0.358	0.179	90.000	XOMR2_OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.310	0.000	0.000	0.717	0.538	90.000	XOMR2_OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.326	0.000	0.000	1.075	0.896	90.000	XOMR2_OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.348	0.000	0.000	1.434	1.255	90.000	XOMR2_OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.375	0.000	0.000	1.792	1.613	90.000	XOMR2_OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.408	0.000	0.000	2.151	1.972	90.000	XOMR2_OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.446	0.000	0.000	2.509	2.330	90.000	XOMR2_OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.488	0.000	0.000	2.868	2.689	90.000	XOMR2_OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.534	0.000	0.000	3.226	3.047	90.000	XOMR2_OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.585	0.000	0.000	3.585	3.405	90.000	XOMR2_OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.638	0.000	0.000	3.943	3.764	90.000	XOMR2_OWSG MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.302	0.000	4.122	0.000	2.696	0.000	0.000	4.302	4.122	90.000	XOMR2_OWSG MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	4.660	0.000	4.481	0.000	2.756	0.000	0.000	4.660	4.481	90.000	XOMR2_OWSG MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.019	0.000	4.839	0.000	2.819	0.000	0.000	5.019	4.839	90.000	XOMR2_OWSG MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.377	0.000	5.198	0.000	2.884	0.000	0.000	5.377	5.198	90.000	XOMR2_OWSG MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	5.736	0.000	5.556	0.000	2.952	0.000	0.000	5.736	5.556	90.000	XOMR2_OWSG MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.094	0.000	5.915	0.000	3.022	0.000	0.000	6.094	5.915	90.000	XOMR2_OWSG MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.452	0.000	6.273	0.000	3.094	0.000	0.000	6.452	6.273	90.000	XOMR2_OWSG MWD+IFR1+MS



1900.000	0.000	0.000	1900.000	6.811	0.000	6.632	0.000	3.167	0.000	0.000	6.811	6.632	90.000	XOMR2_OWSG MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.169	0.000	6.990	0.000	3.243	0.000	0.000	7.169	6.990	90.000	XOMR2_OWSG MWD+IFR1+MS
2100.000	0.000	0.000	2100.000	7.528	0.000	7.349	0.000	3.320	0.000	0.000	7.528	7.349	90.000	XOMR2_OWSG MWD+IFR1+MS
2200.000	0.000	0.000	2200.000	7.886	0.000	7.707	0.000	3.399	0.000	0.000	7.886	7.707	90.000	XOMR2_OWSG MWD+IFR1+MS
2300.000	0.000	0.000	2300.000	8.245	0.000	8.066	0.000	3.479	0.000	0.000	8.245	8.066	90.000	XOMR2_OWSG MWD+IFR1+MS
2400.000	2.000	3.681	2399.980	8.598	0.000	8.424	0.000	3.560	0.000	0.000	8.603	8.423	90.013	XOMR2_OWSG MWD+IFR1+MS
2500.000	4.000	3.681	2499.838	8.942	0.000	8.781	0.000	3.641	0.000	0.000	8.962	8.780	90.056	XOMR2_OWSG MWD+IFR1+MS
2600.000	6.000	3.681	2599.452	9.276	0.000	9.135	0.000	3.722	0.000	0.000	9.320	9.135	90.113	XOMR2_OWSG MWD+IFR1+MS
2700.000	8.000	3.681	2698.702	9.600	0.000	9.489	0.000	3.803	0.000	0.000	9.677	9.488	90.175	XOMR2_OWSG MWD+IFR1+MS
2800.000	10.000	3.681	2797.465	9.913	0.000	9.841	0.000	3.885	0.000	0.000	10.032	9.841	90.235	XOMR2_OWSG MWD+IFR1+MS
2900.000	12.000	3.681	2895.623	10.215	0.000	10.193	0.000	3.967	0.000	0.000	10.387	10.192	90.285	XOMR2_OWSG MWD+IFR1+MS
3000.000	14.000	3.681	2993.055	10.507	0.000	10.544	0.000	4.051	0.000	0.000	10.740	10.543	90.320	XOMR2_OWSG MWD+IFR1+MS
3100.000	16.000	3.681	3089.643	10.788	0.000	10.895	0.000	4.138	0.000	0.000	11.091	10.894	90.336	XOMR2_OWSG MWD+IFR1+MS
3200.000	18.000	3.681	3185.268	11.060	0.000	11.247	0.000	4.228	0.000	0.000	11.441	11.246	90.324	XOMR2_OWSG MWD+IFR1+MS
3300.000	20.000	3.681	3279.816	11.323	0.000	11.599	0.000	4.323	0.000	0.000	11.790	11.599	90.276	XOMR2_OWSG MWD+IFR1+MS
3400.000	22.000	3.681	3373.169	11.577	0.000	11.954	0.000	4.424	0.000	0.000	12.138	11.953	90.179	XOMR2_OWSG MWD+IFR1+MS
3500.000	24.000	3.681	3465.215	11.823	0.000	12.310	0.000	4.533	0.000	0.000	12.484	12.310	90.011	XOMR2_OWSG MWD+IFR1+MS
3600.000	26.000	3.681	3555.841	12.062	0.000	12.670	0.000	4.651	0.000	0.000	12.830	12.669	89.733	XOMR2_OWSG MWD+IFR1+MS
3700.000	28.000	3.681	3644.937	12.293	0.000	13.033	0.000	4.780	0.000	0.000	13.174	13.032	89.269	XOMR2_OWSG MWD+IFR1+MS
3800.000	30.000	3.681	3732.394	12.520	0.000	13.400	0.000	4.923	0.000	0.000	13.517	13.399	88.446	XOMR2_OWSG MWD+IFR1+MS

3900.000	32.000	3.681	3818.107	12.741	0.000	13.771	0.000	5.080	0.000	0.000	13.858	13.770	86.763	XOMR2_OWSG MWD+IFR1+MS
4000.000	34.000	3.681	3901.970	12.957	0.000	14.148	0.000	5.254	0.000	0.000	14.198	14.146	82.023	XOMR2_OWSG MWD+IFR1+MS
4100.000	36.000	3.681	3983.881	13.170	0.000	14.531	0.000	5.447	0.000	0.000	14.542	14.522	51.807	XOMR2_OWSG MWD+IFR1+MS
4200.000	38.000	3.681	4063.740	13.381	0.000	14.919	0.000	5.661	0.000	0.000	14.921	14.865	13.953	XOMR2_OWSG MWD+IFR1+MS
4300.000	40.000	3.681	4141.451	13.590	0.000	15.315	0.000	5.897	0.000	0.000	15.316	15.198	8.314	XOMR2_OWSG MWD+IFR1+MS
4400.000	42.000	3.681	4216.918	13.798	0.000	15.718	0.000	6.157	0.000	0.000	15.718	15.525	6.425	XOMR2_OWSG MWD+IFR1+MS
4500.000	44.000	3.681	4290.050	14.005	0.000	16.128	0.000	6.442	0.000	0.000	16.128	15.848	5.507	XOMR2_OWSG MWD+IFR1+MS
4600.000	46.000	3.681	4360.757	14.212	0.000	16.546	0.000	6.753	0.000	0.000	16.546	16.166	4.977	XOMR2_OWSG MWD+IFR1+MS
4700.000	48.000	3.681	4428.953	14.421	0.000	16.973	0.000	7.091	0.000	0.000	16.973	16.478	4.639	XOMR2_OWSG MWD+IFR1+MS
4800.000	50.000	3.681	4494.556	14.631	0.000	17.408	0.000	7.456	0.000	0.000	17.408	16.784	4.410	XOMR2_OWSG MWD+IFR1+MS
4900.000	52.000	3.681	4557.485	14.843	0.000	17.851	0.000	7.848	0.000	0.000	17.851	17.081	4.247	XOMR2_OWSG MWD+IFR1+MS
4962.026	53.241	3.681	4595.140	14.976	0.000	18.129	0.000	8.103	0.000	0.000	18.129	17.263	4.170	XOMR2_OWSG MWD+IFR1+MS
5000.000	53.241	3.681	4617.865	15.177	0.000	18.301	0.000	8.265	0.000	0.000	18.301	17.372	4.129	XOMR2_OWSG MWD+IFR1+MS
5100.000	53.241	3.681	4677.711	15.713	0.000	18.763	0.000	8.710	0.000	0.000	18.763	17.659	4.040	XOMR2_OWSG MWD+IFR1+MS
5200.000	53.241	3.681	4737.557	16.258	0.000	19.235	0.000	9.164	0.000	0.000	19.235	17.952	3.975	XOMR2_OWSG MWD+IFR1+MS
5300.000	53.241	3.681	4797.402	16.813	0.000	19.716	0.000	9.628	0.000	0.000	19.716	18.249	3.924	XOMR2_OWSG MWD+IFR1+MS
5400.000	53.241	3.681	4857.248	17.375	0.000	20.204	0.000	10.099	0.000	0.000	20.204	18.550	3.884	XOMR2_OWSG MWD+IFR1+MS
5500.000	53.241	3.681	4917.094	17.945	0.000	20.701	0.000	10.577	0.000	0.000	20.701	18.856	3.851	XOMR2_OWSG MWD+IFR1+MS
5600.000	53.241	3.681	4976.939	18.521	0.000	21.204	0.000	11.061	0.000	0.000	21.204	19.166	3.825	XOMR2_OWSG MWD+IFR1+MS
5700.000	53.241	3.681	5036.785	19.103	0.000	21.714	0.000	11.550	0.000	0.000	21.714	19.480	3.802	XOMR2_OWSG MWD+IFR1+MS

5800.000	53.241	3.681	5096.631	19.690	0.000	22.230	0.000	12.043	0.000	0.000	22.230	19.798	3.783	XOMR2_OWSG MWD+IFR1+MS
5813.751	53.241	3.681	5104.860	19.771	0.000	22.301	0.000	12.111	0.000	0.000	22.301	19.842	3.781	XOMR2_OWSG MWD+IFR1+MS
5900.000	51.516	3.681	5157.509	20.523	0.000	22.750	0.000	12.537	0.000	0.000	22.750	20.122	3.767	XOMR2_OWSG MWD+IFR1+MS
6000.000	49.516	3.681	5221.092	21.370	0.000	23.273	0.000	13.019	0.000	0.000	23.273	20.461	3.753	XOMR2_OWSG MWD+IFR1+MS
6100.000	47.516	3.681	5287.331	22.190	0.000	23.797	0.000	13.485	0.000	0.000	23.797	20.815	3.741	XOMR2_OWSG MWD+IFR1+MS
6200.000	45.516	3.681	5356.143	22.980	0.000	24.320	0.000	13.933	0.000	0.000	24.320	21.184	3.731	XOMR2_OWSG MWD+IFR1+MS
6300.000	43.516	3.681	5427.445	23.738	0.000	24.841	0.000	14.361	0.000	0.000	24.841	21.565	3.721	XOMR2_OWSG MWD+IFR1+MS
6400.000	41.516	3.681	5501.151	24.463	0.000	25.358	0.000	14.770	0.000	0.000	25.358	21.958	3.712	XOMR2_OWSG MWD+IFR1+MS
6500.000	39.516	3.681	5577.170	25.152	0.000	25.869	0.000	15.158	0.000	0.000	25.869	22.361	3.705	XOMR2_OWSG MWD+IFR1+MS
6600.000	37.516	3.681	5655.410	25.804	0.000	26.375	0.000	15.525	0.000	0.000	26.375	22.772	3.697	XOMR2_OWSG MWD+IFR1+MS
6700.000	35.516	3.681	5735.776	26.417	0.000	26.873	0.000	15.870	0.000	0.000	26.873	23.189	3.691	XOMR2_OWSG MWD+IFR1+MS
6800.000	33.516	3.681	5818.169	26.991	0.000	27.363	0.000	16.195	0.000	0.000	27.363	23.612	3.684	XOMR2_OWSG MWD+IFR1+MS
6900.000	31.516	3.681	5902.489	27.523	0.000	27.845	0.000	16.500	0.000	0.000	27.845	24.037	3.679	XOMR2_OWSG MWD+IFR1+MS
7000.000	29.516	3.681	5988.634	28.013	0.000	28.316	0.000	16.783	0.000	0.000	28.316	24.464	3.673	XOMR2_OWSG MWD+IFR1+MS
7100.000	27.516	3.681	6076.498	28.460	0.000	28.777	0.000	17.047	0.000	0.000	28.777	24.891	3.668	XOMR2_OWSG MWD+IFR1+MS
7200.000	25.516	3.681	6165.975	28.863	0.000	29.226	0.000	17.292	0.000	0.000	29.226	25.316	3.663	XOMR2_OWSG MWD+IFR1+MS
7300.000	23.516	3.681	6256.955	29.221	0.000	29.664	0.000	17.518	0.000	0.000	29.664	25.738	3.659	XOMR2_OWSG MWD+IFR1+MS
7400.000	21.516	3.681	6349.328	29.534	0.000	30.090	0.000	17.726	0.000	0.000	30.090	26.155	3.655	XOMR2_OWSG MWD+IFR1+MS
7500.000	19.516	3.681	6442.981	29.800	0.000	30.503	0.000	17.917	0.000	0.000	30.503	26.565	3.651	XOMR2_OWSG MWD+IFR1+MS
7600.000	17.516	3.681	6537.800	30.021	0.000	30.903	0.000	18.093	0.000	0.000	30.903	26.968	3.648	XOMR2_OWSG MWD+IFR1+MS

7700.000	15.516	3.681	6633.669	30.195	0.000	31.289	0.000	18.254	0.000	0.000	31.289	27.361	3.644	XOMR2_OWSG MWD+IFR1+MS
7800.000	13.516	3.681	6730.472	30.323	0.000	31.662	0.000	18.401	0.000	0.000	31.662	27.745	3.642	XOMR2_OWSG MWD+IFR1+MS
7900.000	11.516	3.681	6828.091	30.405	0.000	32.021	0.000	18.536	0.000	0.000	32.021	28.117	3.639	XOMR2_OWSG MWD+IFR1+MS
8000.000	9.516	3.681	6926.407	30.441	0.000	32.366	0.000	18.661	0.000	0.000	32.366	28.477	3.637	XOMR2_OWSG MWD+IFR1+MS
8100.000	7.516	3.681	7025.299	30.431	0.000	32.696	0.000	18.775	0.000	0.000	32.696	28.824	3.635	XOMR2_OWSG MWD+IFR1+MS
8200.000	5.516	3.681	7124.648	30.376	0.000	33.012	0.000	18.881	0.000	0.000	33.012	29.157	3.633	XOMR2_OWSG MWD+IFR1+MS
8300.000	3.516	3.681	7224.333	30.277	0.000	33.314	0.000	18.981	0.000	0.000	33.314	29.476	3.632	XOMR2_OWSG MWD+IFR1+MS
8400.000	1.516	3.681	7324.231	30.135	0.000	33.601	0.000	19.075	0.000	0.000	33.601	29.779	3.631	XOMR2_OWSG MWD+IFR1+MS
8475.778	0.000	0.000	7400.000	30.016	0.000	33.795	0.000	19.144	0.000	0.000	33.809	29.999	3.633	XOMR2_OWSG MWD+IFR1+MS
8500.000	0.000	0.000	7424.222	30.085	0.000	33.860	0.000	19.165	0.000	0.000	33.875	30.068	3.634	XOMR2_OWSG MWD+IFR1+MS
8600.000	0.000	0.000	7524.222	30.370	0.000	34.131	0.000	19.256	0.000	0.000	34.145	30.354	3.638	XOMR2_OWSG MWD+IFR1+MS
8700.000	0.000	0.000	7624.222	30.657	0.000	34.403	0.000	19.350	0.000	0.000	34.417	30.641	3.642	XOMR2_OWSG MWD+IFR1+MS
8800.000	0.000	0.000	7724.222	30.946	0.000	34.676	0.000	19.447	0.000	0.000	34.690	30.930	3.646	XOMR2_OWSG MWD+IFR1+MS
8900.000	0.000	0.000	7824.222	31.236	0.000	34.951	0.000	19.546	0.000	0.000	34.966	31.220	3.650	XOMR2_OWSG MWD+IFR1+MS
9000.000	0.000	0.000	7924.222	31.527	0.000	35.228	0.000	19.649	0.000	0.000	35.242	31.511	3.653	XOMR2_OWSG MWD+IFR1+MS
9100.000	0.000	0.000	8024.222	31.820	0.000	35.506	0.000	19.754	0.000	0.000	35.520	31.804	3.657	XOMR2_OWSG MWD+IFR1+MS
9200.000	0.000	0.000	8124.222	32.114	0.000	35.785	0.000	19.863	0.000	0.000	35.800	32.098	3.661	XOMR2_OWSG MWD+IFR1+MS
9300.000	0.000	0.000	8224.222	32.409	0.000	36.066	0.000	19.975	0.000	0.000	36.081	32.393	3.665	XOMR2_OWSG MWD+IFR1+MS
9400.000	0.000	0.000	8324.222	32.706	0.000	36.349	0.000	20.090	0.000	0.000	36.363	32.690	3.669	XOMR2_OWSG MWD+IFR1+MS
9500.000	0.000	0.000	8424.222	33.004	0.000	36.632	0.000	20.208	0.000	0.000	36.646	32.988	3.672	XOMR2_OWSG MWD+IFR1+MS

9600.000	0.000	0.000	8524.222	33.303	0.000	36.917	0.000	20.329	0.000	0.000	36.931	33.287	3.676	XOMR2_OWSG MWD+IFR1+MS
9700.000	0.000	0.000	8624.222	33.603	0.000	37.203	0.000	20.453	0.000	0.000	37.217	33.587	3.680	XOMR2_OWSG MWD+IFR1+MS
9800.000	0.000	0.000	8724.222	33.905	0.000	37.491	0.000	20.581	0.000	0.000	37.505	33.889	3.683	XOMR2_OWSG MWD+IFR1+MS
9900.000	0.000	0.000	8824.222	34.207	0.000	37.779	0.000	20.712	0.000	0.000	37.793	34.191	3.687	XOMR2_OWSG MWD+IFR1+MS
9935.580	0.000	0.000	8859.803	34.315	0.000	37.882	0.000	20.760	0.000	0.000	37.896	34.299	3.688	XOMR2_OWSG MWD+IFR1+MS
10000.000	5.154	269.825	8924.136	37.887	-0.000	34.507	0.000	20.847	0.000	0.000	38.080	34.489	3.722	XOMR2_OWSG MWD+IFR1+MS
10100.000	13.154	269.825	9022.782	37.477	-0.000	34.793	0.000	20.996	0.000	0.000	38.355	34.774	3.843	XOMR2_OWSG MWD+IFR1+MS
10200.000	21.154	269.825	9118.256	36.593	-0.000	35.073	0.000	21.170	0.000	0.000	38.614	35.054	3.977	XOMR2_OWSG MWD+IFR1+MS
10300.000	29.154	269.825	9208.700	35.291	-0.000	35.346	0.000	21.385	0.000	0.000	38.850	35.326	4.075	XOMR2_OWSG MWD+IFR1+MS
10400.000	37.154	269.825	9292.353	33.650	-0.000	35.609	0.000	21.652	0.000	0.000	39.056	35.589	4.068	XOMR2_OWSG MWD+IFR1+MS
10500.000	45.154	269.825	9367.586	31.778	-0.000	35.861	0.000	21.978	0.000	0.000	39.228	35.844	3.872	XOMR2_OWSG MWD+IFR1+MS
10600.000	53.154	269.825	9432.937	29.814	-0.000	36.104	0.000	22.367	0.000	0.000	39.362	36.091	3.386	XOMR2_OWSG MWD+IFR1+MS
10700.000	61.154	269.825	9487.131	27.926	-0.000	36.338	0.000	22.818	0.000	0.000	39.461	36.331	2.484	XOMR2_OWSG MWD+IFR1+MS
10800.000	69.154	269.825	9529.116	26.316	-0.000	36.565	0.000	23.324	0.000	0.000	39.527	36.564	1.016	XOMR2_OWSG MWD+IFR1+MS
10900.000	77.154	269.825	9558.073	25.192	-0.000	36.784	0.000	23.875	0.000	0.000	39.569	36.783	-1.196	XOMR2_OWSG MWD+IFR1+MS
11000.000	85.154	269.825	9573.439	24.730	-0.000	36.994	0.000	24.455	0.000	0.000	39.602	36.980	-4.314	XOMR2_OWSG MWD+IFR1+MS
11060.580	90.000	269.825	9576.000	24.814	0.000	37.114	0.000	24.814	0.000	0.000	39.626	37.080	-6.672	XOMR2_OWSG MWD+IFR1+MS
11100.000	90.000	269.825	9576.000	25.050	0.000	37.193	0.000	25.050	0.000	0.000	39.645	37.140	-8.349	XOMR2_OWSG MWD+IFR1+MS
11200.000	90.000	269.825	9576.000	25.654	0.000	37.418	0.000	25.654	0.000	0.000	39.715	37.297	-12.913	XOMR2_OWSG MWD+IFR1+MS
11300.000	90.000	269.825	9576.000	26.268	0.000	37.675	0.000	26.268	0.000	0.000	39.819	37.450	-17.879	XOMR2_OWSG MWD+IFR1+MS

11400.000	90.000	269.825	9576.000	26.891	0.000	37.964	0.000	26.891	0.000	0.000	39.963	37.593	-23.140	XOMR2_OWSG MWD+IFR1+MS
11500.000	90.000	269.825	9576.000	27.522	0.000	38.283	0.000	27.522	0.000	0.000	40.152	37.723	-28.504	XOMR2_OWSG MWD+IFR1+MS
11600.000	90.000	269.825	9576.000	28.161	0.000	38.632	0.000	28.161	0.000	0.000	40.387	37.834	-33.738	XOMR2_OWSG MWD+IFR1+MS
11700.000	90.000	269.825	9576.000	28.807	0.000	39.011	0.000	28.807	0.000	0.000	40.670	37.927	-38.633	XOMR2_OWSG MWD+IFR1+MS
11800.000	90.000	269.825	9576.000	29.459	0.000	39.418	0.000	29.459	0.000	0.000	40.998	38.003	-43.055	XOMR2_OWSG MWD+IFR1+MS
11900.000	90.000	269.825	9576.000	30.118	0.000	39.852	0.000	30.118	0.000	0.000	41.368	38.064	133.045	XOMR2_OWSG MWD+IFR1+MS
12000.000	90.000	269.825	9576.000	30.783	0.000	40.313	0.000	30.783	0.000	0.000	41.776	38.113	129.652	XOMR2_OWSG MWD+IFR1+MS
12100.000	90.000	269.825	9576.000	31.454	0.000	40.800	0.000	31.454	0.000	0.000	42.219	38.152	126.715	XOMR2_OWSG MWD+IFR1+MS
12200.000	90.000	269.825	9576.000	32.130	0.000	41.312	0.000	32.130	0.000	0.000	42.694	38.184	124.172	XOMR2_OWSG MWD+IFR1+MS
12300.000	90.000	269.825	9576.000	32.810	0.000	41.847	0.000	32.810	0.000	0.000	43.198	38.210	121.963	XOMR2_OWSG MWD+IFR1+MS
12400.000	90.000	269.825	9576.000	33.495	0.000	42.406	0.000	33.495	0.000	0.000	43.730	38.233	120.033	XOMR2_OWSG MWD+IFR1+MS
12500.000	90.000	269.825	9576.000	34.184	0.000	42.986	0.000	34.184	0.000	0.000	44.286	38.253	118.335	XOMR2_OWSG MWD+IFR1+MS
12600.000	90.000	269.825	9576.000	34.878	0.000	43.588	0.000	34.878	0.000	0.000	44.866	38.270	116.832	XOMR2_OWSG MWD+IFR1+MS
12700.000	90.000	269.825	9576.000	35.575	0.000	44.210	0.000	35.575	0.000	0.000	45.468	38.286	115.492	XOMR2_OWSG MWD+IFR1+MS
12800.000	90.000	269.825	9576.000	36.276	0.000	44.851	0.000	36.276	0.000	0.000	46.091	38.300	114.290	XOMR2_OWSG MWD+IFR1+MS
12900.000	90.000	269.825	9576.000	36.980	0.000	45.511	0.000	36.980	0.000	0.000	46.734	38.314	113.205	XOMR2_OWSG MWD+IFR1+MS
13000.000	90.000	269.825	9576.000	37.687	0.000	46.189	0.000	37.687	0.000	0.000	47.395	38.328	112.221	XOMR2_OWSG MWD+IFR1+MS
13100.000	90.000	269.825	9576.000	38.398	0.000	46.884	0.000	38.398	0.000	0.000	48.074	38.341	111.324	XOMR2_OWSG MWD+IFR1+MS
13200.000	90.000	269.825	9576.000	39.111	0.000	47.596	0.000	39.111	0.000	0.000	48.770	38.355	110.503	XOMR2_OWSG MWD+IFR1+MS
13300.000	90.000	269.825	9576.000	39.827	0.000	48.323	0.000	39.827	0.000	0.000	49.482	38.368	109.747	XOMR2_OWSG MWD+IFR1+MS



13400.000	90.000	269.825	9576.000	40.545	0.000	49.065	0.000	40.545	0.000	0.000	50.209	38.382	109.048	XOMR2_OWSG MWD+IFR1+MS
13500.000	90.000	269.825	9576.000	41.266	0.000	49.821	0.000	41.266	0.000	0.000	50.951	38.396	108.401	XOMR2_OWSG MWD+IFR1+MS
13600.000	90.000	269.825	9576.000	41.989	0.000	50.591	0.000	41.989	0.000	0.000	51.706	38.410	107.800	XOMR2_OWSG MWD+IFR1+MS
13700.000	90.000	269.825	9576.000	42.714	0.000	51.374	0.000	42.714	0.000	0.000	52.475	38.425	107.239	XOMR2_OWSG MWD+IFR1+MS
13800.000	90.000	269.825	9576.000	43.442	0.000	52.169	0.000	43.442	0.000	0.000	53.257	38.440	106.714	XOMR2_OWSG MWD+IFR1+MS
13900.000	90.000	269.825	9576.000	44.171	0.000	52.976	0.000	44.171	0.000	0.000	54.050	38.455	106.222	XOMR2_OWSG MWD+IFR1+MS
14000.000	90.000	269.825	9576.000	44.902	0.000	53.795	0.000	44.902	0.000	0.000	54.855	38.471	105.760	XOMR2_OWSG MWD+IFR1+MS
14100.000	90.000	269.825	9576.000	45.635	0.000	54.624	0.000	45.635	0.000	0.000	55.671	38.488	105.325	XOMR2_OWSG MWD+IFR1+MS
14200.000	90.000	269.825	9576.000	46.370	0.000	55.463	0.000	46.370	0.000	0.000	56.498	38.505	104.914	XOMR2_OWSG MWD+IFR1+MS
14300.000	90.000	269.825	9576.000	47.106	0.000	56.313	0.000	47.106	0.000	0.000	57.335	38.523	104.526	XOMR2_OWSG MWD+IFR1+MS
14400.000	90.000	269.825	9576.000	47.844	0.000	57.172	0.000	47.844	0.000	0.000	58.181	38.541	104.158	XOMR2_OWSG MWD+IFR1+MS
14500.000	90.000	269.825	9576.000	48.584	0.000	58.040	0.000	48.584	0.000	0.000	59.036	38.560	103.809	XOMR2_OWSG MWD+IFR1+MS
14600.000	90.000	269.825	9576.000	49.324	0.000	58.916	0.000	49.324	0.000	0.000	59.901	38.580	103.477	XOMR2_OWSG MWD+IFR1+MS
14700.000	90.000	269.825	9576.000	50.066	0.000	59.801	0.000	50.066	0.000	0.000	60.773	38.600	103.162	XOMR2_OWSG MWD+IFR1+MS
14800.000	90.000	269.825	9576.000	50.810	0.000	60.694	0.000	50.810	0.000	0.000	61.654	38.621	102.861	XOMR2_OWSG MWD+IFR1+MS
14900.000	90.000	269.825	9576.000	51.554	0.000	61.594	0.000	51.554	0.000	0.000	62.542	38.642	102.575	XOMR2_OWSG MWD+IFR1+MS
15000.000	90.000	269.825	9576.000	52.300	0.000	62.501	0.000	52.300	0.000	0.000	63.438	38.664	102.301	XOMR2_OWSG MWD+IFR1+MS
15100.000	90.000	269.825	9576.000	53.047	0.000	63.415	0.000	53.047	0.000	0.000	64.341	38.686	102.039	XOMR2_OWSG MWD+IFR1+MS
15200.000	90.000	269.825	9576.000	53.795	0.000	64.336	0.000	53.795	0.000	0.000	65.251	38.709	101.788	XOMR2_OWSG MWD+IFR1+MS
15300.000	90.000	269.825	9576.000	54.544	0.000	65.263	0.000	54.544	0.000	0.000	66.167	38.733	101.547	XOMR2_OWSG MWD+IFR1+MS

15400.000	90.000	269.825	9576.000	55.294	0.000	66.197	0.000	55.294	0.000	0.000	67.090	38.757	101.317	XOMR2_OWSG MWD+IFR1+MS
15500.000	90.000	269.825	9576.000	56.045	0.000	67.136	0.000	56.045	0.000	0.000	68.018	38.782	101.095	XOMR2_OWSG MWD+IFR1+MS
15600.000	90.000	269.825	9576.000	56.797	0.000	68.080	0.000	56.797	0.000	0.000	68.952	38.808	100.883	XOMR2_OWSG MWD+IFR1+MS
15700.000	90.000	269.825	9576.000	57.549	0.000	69.030	0.000	57.549	0.000	0.000	69.892	38.834	100.678	XOMR2_OWSG MWD+IFR1+MS
15800.000	90.000	269.825	9576.000	58.303	0.000	69.985	0.000	58.303	0.000	0.000	70.837	38.860	100.481	XOMR2_OWSG MWD+IFR1+MS
15900.000	90.000	269.825	9576.000	59.057	0.000	70.945	0.000	59.057	0.000	0.000	71.787	38.888	100.291	XOMR2_OWSG MWD+IFR1+MS
16000.000	90.000	269.825	9576.000	59.813	0.000	71.910	0.000	59.813	0.000	0.000	72.742	38.915	100.108	XOMR2_OWSG MWD+IFR1+MS
16100.000	90.000	269.825	9576.000	60.568	0.000	72.879	0.000	60.568	0.000	0.000	73.702	38.944	99.931	XOMR2_OWSG MWD+IFR1+MS
16200.000	90.000	269.825	9576.000	61.325	0.000	73.853	0.000	61.325	0.000	0.000	74.666	38.973	99.761	XOMR2_OWSG MWD+IFR1+MS
16300.000	90.000	269.825	9576.000	62.082	0.000	74.830	0.000	62.082	0.000	0.000	75.634	39.002	99.596	XOMR2_OWSG MWD+IFR1+MS
16400.000	90.000	269.825	9576.000	62.840	0.000	75.812	0.000	62.840	0.000	0.000	76.607	39.032	99.437	XOMR2_OWSG MWD+IFR1+MS
16500.000	90.000	269.825	9576.000	63.599	0.000	76.798	0.000	63.599	0.000	0.000	77.584	39.063	99.283	XOMR2_OWSG MWD+IFR1+MS
16600.000	90.000	269.825	9576.000	64.358	0.000	77.787	0.000	64.358	0.000	0.000	78.564	39.094	99.134	XOMR2_OWSG MWD+IFR1+MS
16700.000	90.000	269.825	9576.000	65.118	0.000	78.780	0.000	65.118	0.000	0.000	79.549	39.126	98.990	XOMR2_OWSG MWD+IFR1+MS
16800.000	90.000	269.825	9576.000	65.879	0.000	79.777	0.000	65.879	0.000	0.000	80.537	39.158	98.850	XOMR2_OWSG MWD+IFR1+MS
16900.000	90.000	269.825	9576.000	66.640	0.000	80.776	0.000	66.640	0.000	0.000	81.528	39.191	98.714	XOMR2_OWSG MWD+IFR1+MS
17000.000	90.000	269.825	9576.000	67.402	0.000	81.779	0.000	67.402	0.000	0.000	82.523	39.225	98.583	XOMR2_OWSG MWD+IFR1+MS
17100.000	90.000	269.825	9576.000	68.164	0.000	82.785	0.000	68.164	0.000	0.000	83.521	39.259	98.455	XOMR2_OWSG MWD+IFR1+MS
17200.000	90.000	269.825	9576.000	68.926	0.000	83.794	0.000	68.926	0.000	0.000	84.522	39.293	98.331	XOMR2_OWSG MWD+IFR1+MS
17300.000	90.000	269.825	9576.000	69.689	0.000	84.806	0.000	69.689	0.000	0.000	85.526	39.328	98.211	XOMR2_OWSG MWD+IFR1+MS



17400.000	90.000	269.825	9576.000	70.453	0.000	85.820	0.000	70.453	0.000	0.000	86.533	39.364	98.094	XOMR2_OWSG MWD+IFR1+MS
17500.000	90.000	269.825	9576.000	71.217	0.000	86.838	0.000	71.217	0.000	0.000	87.543	39.400	97.981	XOMR2_OWSG MWD+IFR1+MS
17600.000	90.000	269.825	9576.000	71.982	0.000	87.857	0.000	71.982	0.000	0.000	88.555	39.437	97.870	XOMR2_OWSG MWD+IFR1+MS
17700.000	90.000	269.825	9576.000	72.746	0.000	88.880	0.000	72.746	0.000	0.000	89.570	39.474	97.763	XOMR2_OWSG MWD+IFR1+MS
17800.000	90.000	269.825	9576.000	73.512	0.000	89.904	0.000	73.512	0.000	0.000	90.588	39.512	97.658	XOMR2_OWSG MWD+IFR1+MS
17900.000	90.000	269.825	9576.000	74.278	0.000	90.931	0.000	74.278	0.000	0.000	91.608	39.550	97.556	XOMR2_OWSG MWD+IFR1+MS
18000.000	90.000	269.825	9576.000	75.044	0.000	91.960	0.000	75.044	0.000	0.000	92.630	39.589	97.457	XOMR2_OWSG MWD+IFR1+MS
18100.000	90.000	269.825	9576.000	75.810	0.000	92.992	0.000	75.810	0.000	0.000	93.655	39.629	97.360	XOMR2_OWSG MWD+IFR1+MS
18200.000	90.000	269.825	9576.000	76.577	0.000	94.025	0.000	76.577	0.000	0.000	94.682	39.668	97.266	XOMR2_OWSG MWD+IFR1+MS
18300.000	90.000	269.825	9576.000	77.344	0.000	95.061	0.000	77.344	0.000	0.000	95.711	39.709	97.174	XOMR2_OWSG MWD+IFR1+MS
18400.000	90.000	269.825	9576.000	78.112	0.000	96.098	0.000	78.112	0.000	0.000	96.742	39.750	97.084	XOMR2_OWSG MWD+IFR1+MS
18500.000	90.000	269.825	9576.000	78.880	0.000	97.138	0.000	78.880	0.000	0.000	97.775	39.791	96.997	XOMR2_OWSG MWD+IFR1+MS
18600.000	90.000	269.825	9576.000	79.648	0.000	98.179	0.000	79.648	0.000	0.000	98.811	39.833	96.912	XOMR2_OWSG MWD+IFR1+MS
18700.000	90.000	269.825	9576.000	80.417	0.000	99.222	0.000	80.417	0.000	0.000	99.848	39.876	96.828	XOMR2_OWSG MWD+IFR1+MS
18800.000	90.000	269.825	9576.000	81.186	0.000	100.267	0.000	81.186	0.000	0.000	100.886	39.919	96.747	XOMR2_OWSG MWD+IFR1+MS
18900.000	90.000	269.825	9576.000	81.955	0.000	101.313	0.000	81.955	0.000	0.000	101.927	39.962	96.667	XOMR2_OWSG MWD+IFR1+MS
19000.000	90.000	269.825	9576.000	82.725	0.000	102.361	0.000	82.725	0.000	0.000	102.969	40.006	96.590	XOMR2_OWSG MWD+IFR1+MS
19100.000	90.000	269.825	9576.000	83.494	0.000	103.410	0.000	83.494	0.000	0.000	104.013	40.051	96.514	XOMR2_OWSG MWD+IFR1+MS
19200.000	90.000	269.825	9576.000	84.264	0.000	104.462	0.000	84.264	0.000	0.000	105.059	40.096	96.440	XOMR2_OWSG MWD+IFR1+MS
19300.000	90.000	269.825	9576.000	85.035	0.000	105.514	0.000	85.035	0.000	0.000	106.106	40.141	96.367	XOMR2_OWSG MWD+IFR1+MS

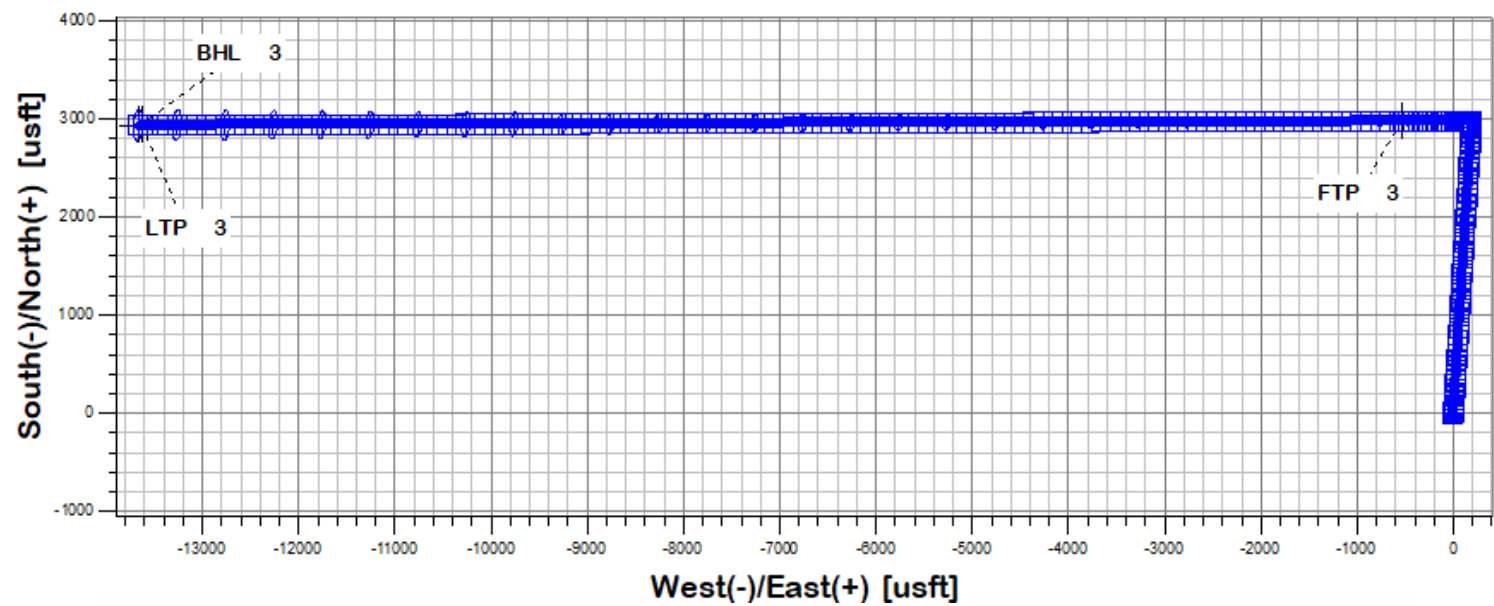
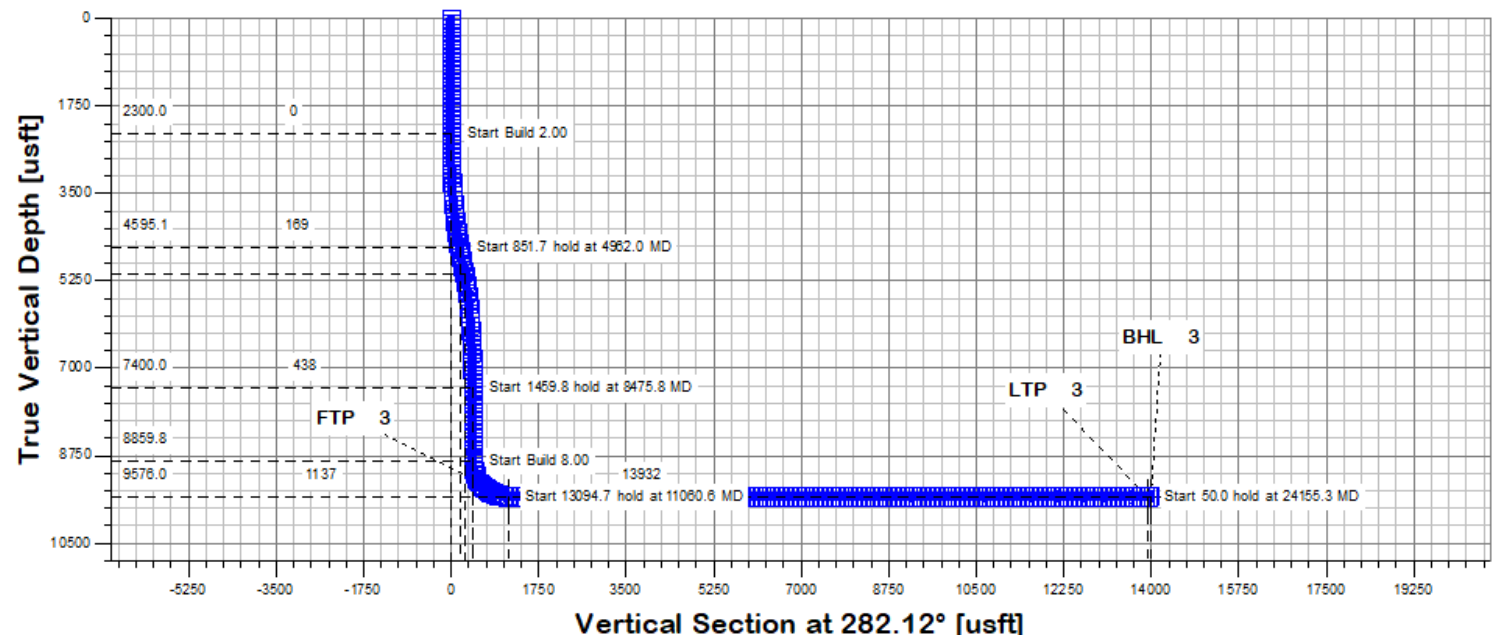
19400.000	90.000	269.825	9576.000	85.805	0.000	106.568	0.000	85.805	0.000	0.000	107.154	40.187	96.296	XOMR2_OWSG MWD+IFR1+MS
19500.000	90.000	269.825	9576.000	86.576	0.000	107.624	0.000	86.576	0.000	0.000	108.205	40.234	96.227	XOMR2_OWSG MWD+IFR1+MS
19600.000	90.000	269.825	9576.000	87.347	0.000	108.680	0.000	87.347	0.000	0.000	109.256	40.281	96.159	XOMR2_OWSG MWD+IFR1+MS
19700.000	90.000	269.825	9576.000	88.119	0.000	109.738	0.000	88.119	0.000	0.000	110.309	40.328	96.092	XOMR2_OWSG MWD+IFR1+MS
19800.000	90.000	269.825	9576.000	88.890	0.000	110.798	0.000	88.890	0.000	0.000	111.363	40.376	96.027	XOMR2_OWSG MWD+IFR1+MS
19900.000	90.000	269.825	9576.000	89.662	0.000	111.858	0.000	89.662	0.000	0.000	112.419	40.424	95.963	XOMR2_OWSG MWD+IFR1+MS
20000.000	90.000	269.825	9576.000	90.434	0.000	112.920	0.000	90.434	0.000	0.000	113.476	40.473	95.901	XOMR2_OWSG MWD+IFR1+MS
20100.000	90.000	269.825	9576.000	91.206	0.000	113.983	0.000	91.206	0.000	0.000	114.534	40.523	95.840	XOMR2_OWSG MWD+IFR1+MS
20200.000	90.000	269.825	9576.000	91.979	0.000	115.047	0.000	91.979	0.000	0.000	115.594	40.573	95.780	XOMR2_OWSG MWD+IFR1+MS
20300.000	90.000	269.825	9576.000	92.751	0.000	116.112	0.000	92.751	0.000	0.000	116.654	40.623	95.721	XOMR2_OWSG MWD+IFR1+MS
20400.000	90.000	269.825	9576.000	93.524	0.000	117.178	0.000	93.524	0.000	0.000	117.716	40.674	95.663	XOMR2_OWSG MWD+IFR1+MS
20500.000	90.000	269.825	9576.000	94.297	0.000	118.246	0.000	94.297	0.000	0.000	118.779	40.725	95.607	XOMR2_OWSG MWD+IFR1+MS
20600.000	90.000	269.825	9576.000	95.071	0.000	119.314	0.000	95.071	0.000	0.000	119.843	40.777	95.551	XOMR2_OWSG MWD+IFR1+MS
20700.000	90.000	269.825	9576.000	95.844	0.000	120.383	0.000	95.844	0.000	0.000	120.908	40.829	95.497	XOMR2_OWSG MWD+IFR1+MS
20800.000	90.000	269.825	9576.000	96.618	0.000	121.454	0.000	96.618	0.000	0.000	121.974	40.882	95.444	XOMR2_OWSG MWD+IFR1+MS
20900.000	90.000	269.825	9576.000	97.391	0.000	122.525	0.000	97.391	0.000	0.000	123.041	40.935	95.391	XOMR2_OWSG MWD+IFR1+MS
21000.000	90.000	269.825	9576.000	98.165	0.000	123.597	0.000	98.165	0.000	0.000	124.109	40.988	95.340	XOMR2_OWSG MWD+IFR1+MS
21100.000	90.000	269.825	9576.000	98.940	0.000	124.670	0.000	98.940	0.000	0.000	125.178	41.042	95.290	XOMR2_OWSG MWD+IFR1+MS
21200.000	90.000	269.825	9576.000	99.714	0.000	125.744	0.000	99.714	0.000	0.000	126.247	41.097	95.240	XOMR2_OWSG MWD+IFR1+MS
21300.000	90.000	269.825	9576.000	100.488	0.000	126.819	0.000	100.488	0.000	0.000	127.318	41.152	95.192	XOMR2_OWSG MWD+IFR1+MS

21400.000	90.000	269.825	9576.000	101.263	0.000	127.894	0.000	101.263	0.000	0.000	128.390	41.207	95.144	XOMR2_OWSG MWD+IFR1+MS
21500.000	90.000	269.825	9576.000	102.038	0.000	128.971	0.000	102.038	0.000	0.000	129.462	41.263	95.097	XOMR2_OWSG MWD+IFR1+MS
21600.000	90.000	269.825	9576.000	102.813	0.000	130.048	0.000	102.813	0.000	0.000	130.536	41.319	95.051	XOMR2_OWSG MWD+IFR1+MS
21700.000	90.000	269.825	9576.000	103.588	0.000	131.126	0.000	103.588	0.000	0.000	131.610	41.376	95.006	XOMR2_OWSG MWD+IFR1+MS
21800.000	90.000	269.825	9576.000	104.363	0.000	132.204	0.000	104.363	0.000	0.000	132.685	41.433	94.961	XOMR2_OWSG MWD+IFR1+MS
21900.000	90.000	269.825	9576.000	105.138	0.000	133.284	0.000	105.138	0.000	0.000	133.761	41.491	94.917	XOMR2_OWSG MWD+IFR1+MS
22000.000	90.000	269.825	9576.000	105.914	0.000	134.364	0.000	105.914	0.000	0.000	134.837	41.549	94.874	XOMR2_OWSG MWD+IFR1+MS
22100.000	90.000	269.825	9576.000	106.690	0.000	135.445	0.000	106.690	0.000	0.000	135.914	41.607	94.832	XOMR2_OWSG MWD+IFR1+MS
22200.000	90.000	269.825	9576.000	107.465	0.000	136.526	0.000	107.465	0.000	0.000	136.992	41.666	94.791	XOMR2_OWSG MWD+IFR1+MS
22300.000	90.000	269.825	9576.000	108.241	0.000	137.608	0.000	108.241	0.000	0.000	138.071	41.726	94.750	XOMR2_OWSG MWD+IFR1+MS
22400.000	90.000	269.825	9576.000	109.017	0.000	138.691	0.000	109.017	0.000	0.000	139.151	41.785	94.710	XOMR2_OWSG MWD+IFR1+MS
22500.000	90.000	269.825	9576.000	109.793	0.000	139.774	0.000	109.793	0.000	0.000	140.231	41.846	94.670	XOMR2_OWSG MWD+IFR1+MS
22600.000	90.000	269.825	9576.000	110.570	0.000	140.858	0.000	110.570	0.000	0.000	141.311	41.906	94.631	XOMR2_OWSG MWD+IFR1+MS
22700.000	90.000	269.825	9576.000	111.346	0.000	141.943	0.000	111.346	0.000	0.000	142.393	41.967	94.593	XOMR2_OWSG MWD+IFR1+MS
22800.000	90.000	269.825	9576.000	112.123	0.000	143.028	0.000	112.123	0.000	0.000	143.475	42.029	94.555	XOMR2_OWSG MWD+IFR1+MS
22900.000	90.000	269.825	9576.000	112.899	0.000	144.114	0.000	112.899	0.000	0.000	144.558	42.091	94.518	XOMR2_OWSG MWD+IFR1+MS
23000.000	90.000	269.825	9576.000	113.676	0.000	145.200	0.000	113.676	0.000	0.000	145.641	42.153	94.482	XOMR2_OWSG MWD+IFR1+MS
23100.000	90.000	269.825	9576.000	114.453	0.000	146.287	0.000	114.453	0.000	0.000	146.725	42.216	94.446	XOMR2_OWSG MWD+IFR1+MS
23200.000	90.000	269.825	9576.000	115.230	0.000	147.375	0.000	115.230	0.000	0.000	147.809	42.279	94.410	XOMR2_OWSG MWD+IFR1+MS
23300.000	90.000	269.825	9576.000	116.007	0.000	148.463	0.000	116.007	0.000	0.000	148.894	42.342	94.375	XOMR2_OWSG MWD+IFR1+MS

23400.000	90.000	269.825	9576.000	116.784	0.000	149.551	0.000	116.784	0.000	0.000	149.980	42.406	94.341	XOMR2_OWSG MWD+IFR1+MS
23500.000	90.000	269.825	9576.000	117.561	0.000	150.640	0.000	117.561	0.000	0.000	151.066	42.471	94.307	XOMR2_OWSG MWD+IFR1+MS
23600.000	90.000	269.825	9576.000	118.339	0.000	151.730	0.000	118.339	0.000	0.000	152.152	42.535	94.274	XOMR2_OWSG MWD+IFR1+MS
23700.000	90.000	269.825	9576.000	119.116	0.000	152.820	0.000	119.116	0.000	0.000	153.239	42.600	94.241	XOMR2_OWSG MWD+IFR1+MS
23800.000	90.000	269.825	9576.000	119.894	0.000	153.910	0.000	119.894	0.000	0.000	154.327	42.666	94.209	XOMR2_OWSG MWD+IFR1+MS
23900.000	90.000	269.825	9576.000	120.671	0.000	155.001	0.000	120.671	0.000	0.000	155.415	42.732	94.177	XOMR2_OWSG MWD+IFR1+MS
24000.000	90.000	269.825	9576.000	121.449	0.000	156.092	0.000	121.449	0.000	0.000	156.504	42.798	94.146	XOMR2_OWSG MWD+IFR1+MS
24100.000	90.000	269.825	9576.000	122.227	0.000	157.184	0.000	122.227	0.000	0.000	157.593	42.865	94.115	XOMR2_OWSG MWD+IFR1+MS
24155.241	90.000	269.825	9576.000	122.657	0.000	157.787	0.000	122.657	0.000	0.000	158.194	42.902	94.098	XOMR2_OWSG MWD+IFR1+MS
24205.231	90.000	269.825	9576.000	123.046	0.000	158.333	0.000	123.046	0.000	0.000	158.739	42.936	94.083	XOMR2_OWSG MWD+IFR1+MS

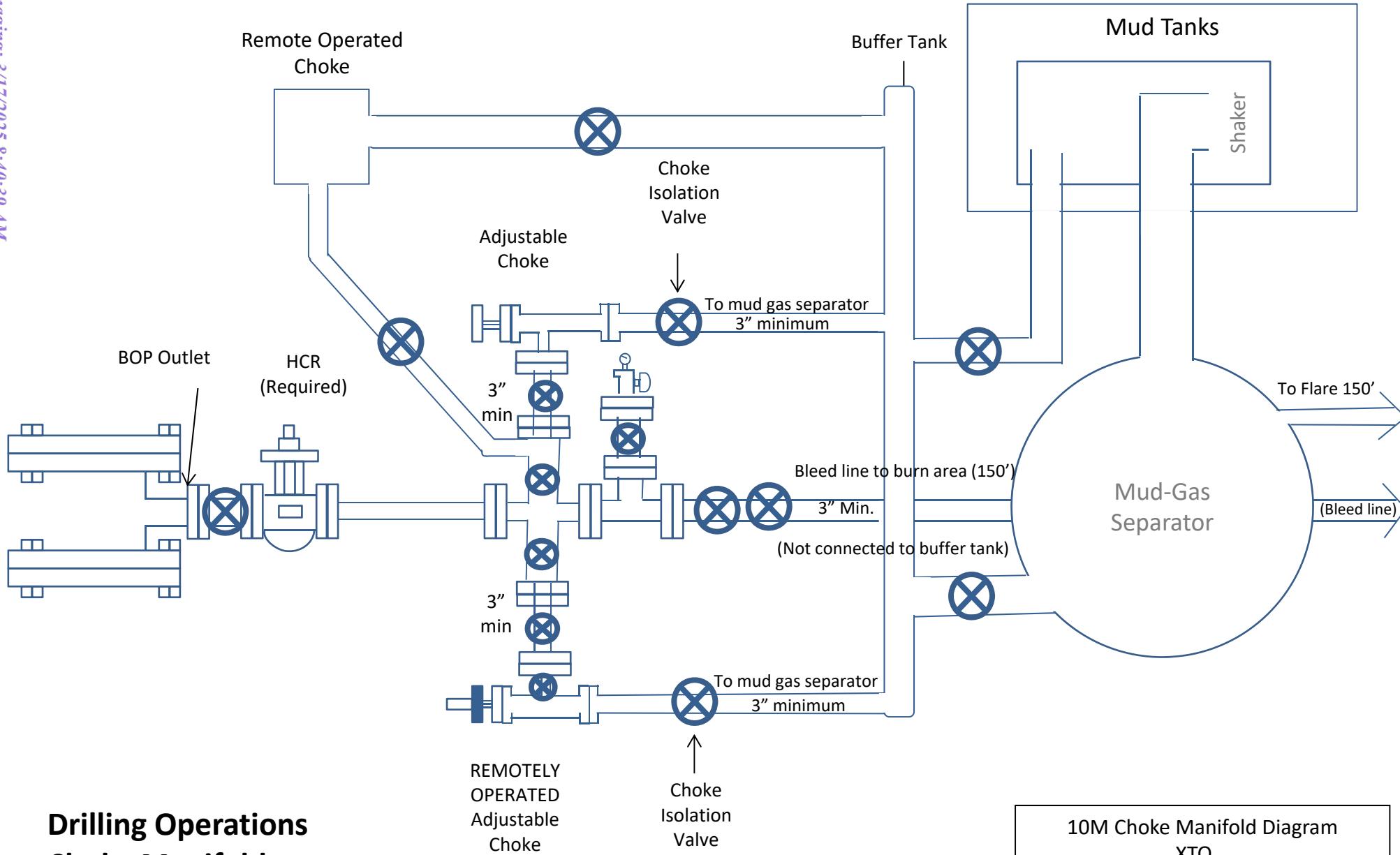
Plan Targets

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 3	11060.56	565953.00	646875.70	6020.00	CIRCLE
LTP 3	24155.24	565913.10	633781.10	6020.00	CIRCLE
BHL 3	24205.28	565912.90	633731.10	6020.00	CIRCLE



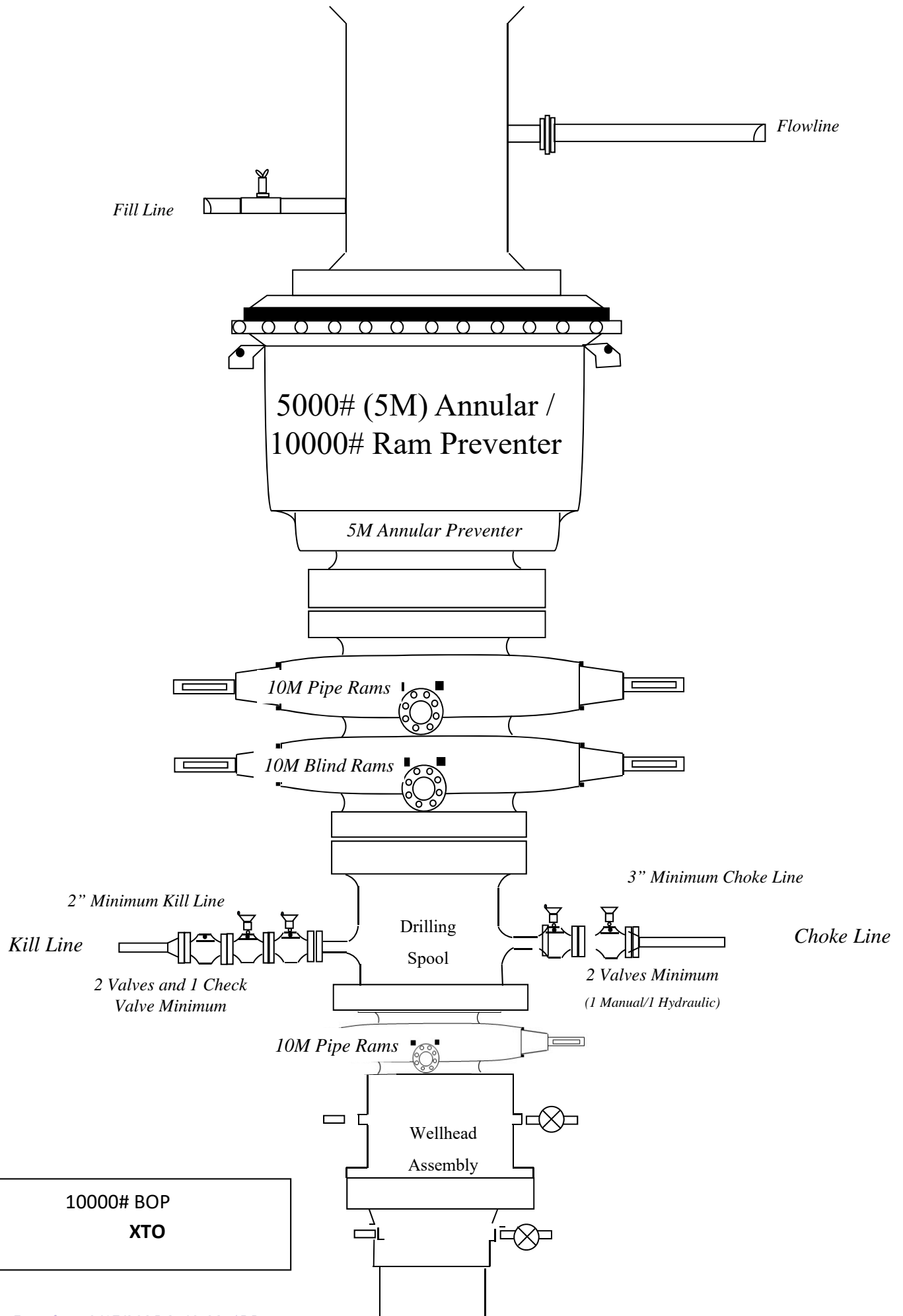
<u>Formation</u>	<u>TVDSS (feet)</u>	<u>TVD (feet)</u>
Rustler	2,882'	674'
Salado	2,606'	950'
Base Salt	1,354'	2,202'
Capitan Reef	694'	2,862'
Delaware Ss.	-381'	3,937'
Brushy Canyon Ss.	-2,338'	5,894'
Basal Brushy Canyon Ss.	-3,727'	7,283'
Bone Spring Lime	-3,914'	7,470'
Avalon Shale Upper SH	-4,109'	7,665'
Avalon Mid Carb	-4,453'	8,009'
Avalon Shale Lower SH	-4,612'	8,168'
1st Bone Spring Lime	-4,847'	8,403'
1st Bone Spring Sand	-5,188'	8,744'
2nd Bone Spring Lime	-5,549'	9,105'
2nd Bone Spring Sand	-5,649'	9,205'
2nd Bone Spring B Sand	-5,833'	9,389'
Landing Point	-6,020'	9,576'
2nd Bone Spring C Sand	-6,044'	9,600'
3rd Bone Spring Lime	-6,259'	9,815'

Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



## Drilling Operations Choke Manifold 10M Service

10M Choke Manifold Diagram  
XTO





U. S. Steel Tubular Products  
5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®

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MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ®		--
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-FREEDOM HTQ®		--
Outside Diameter	5.500	6.300	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	Pipe	USS-FREEDOM HTQ®		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	Pipe	USS-FREEDOM HTQ®		--
Minimum Collapse Pressure	11,100	11,100	psi	--
Minimum Internal Yield Pressure	12,640	12,640	psi	--
Minimum Pipe Body Yield Strength	641,000	--	lb	--
Joint Strength	--	641,000	lb	--
Compression Rating	--	641,000	lb	--
Reference Length [4]	--	21,370	ft	--
Maximum Uniaxial Bend Rating [2]	--	91.7	deg/100 ft	--
MAKE-UP DATA	Pipe	USS-FREEDOM HTQ®		--
Make-Up Loss	--	4.13	in.	--
Minimum Make-Up Torque [3]	--	15,000	ft-lb	--
Maximum Make-Up Torque [3]	--	21,000	ft-lb	--
Maximum Operating Torque[3]	--	29,500	ft-lb	--

UNCONTROLLED

Notes

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

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www.usstubular.com






## U. S. Steel Tubular Products

11/29/2021 4:16:04 PM

5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-TALON HTQ™ RD

				
MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		--
Outside Diameter	5.500	5.900	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	Pipe	USS-TALON HTQ™ RD		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		--
Minimum Collapse Pressure	11,100	11,100	psi	--
Minimum Internal Yield Pressure	12,640	12,640	psi	--
Minimum Pipe Body Yield Strength	641,000	--	lb	--
Joint Strength	--	641,000	lb	--
Compression Rating	--	641,000	lb	--
Reference Length	--	21,370	ft	[5]
Maximum Uniaxial Bend Rating	--	91.7	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		--
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	17,000	ft-lb	[4]
Maximum Make-Up Torque	--	20,000	ft-lb	[4]
Maximum Operating Torque	--	39,500	ft-lb	[4]

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## Notes

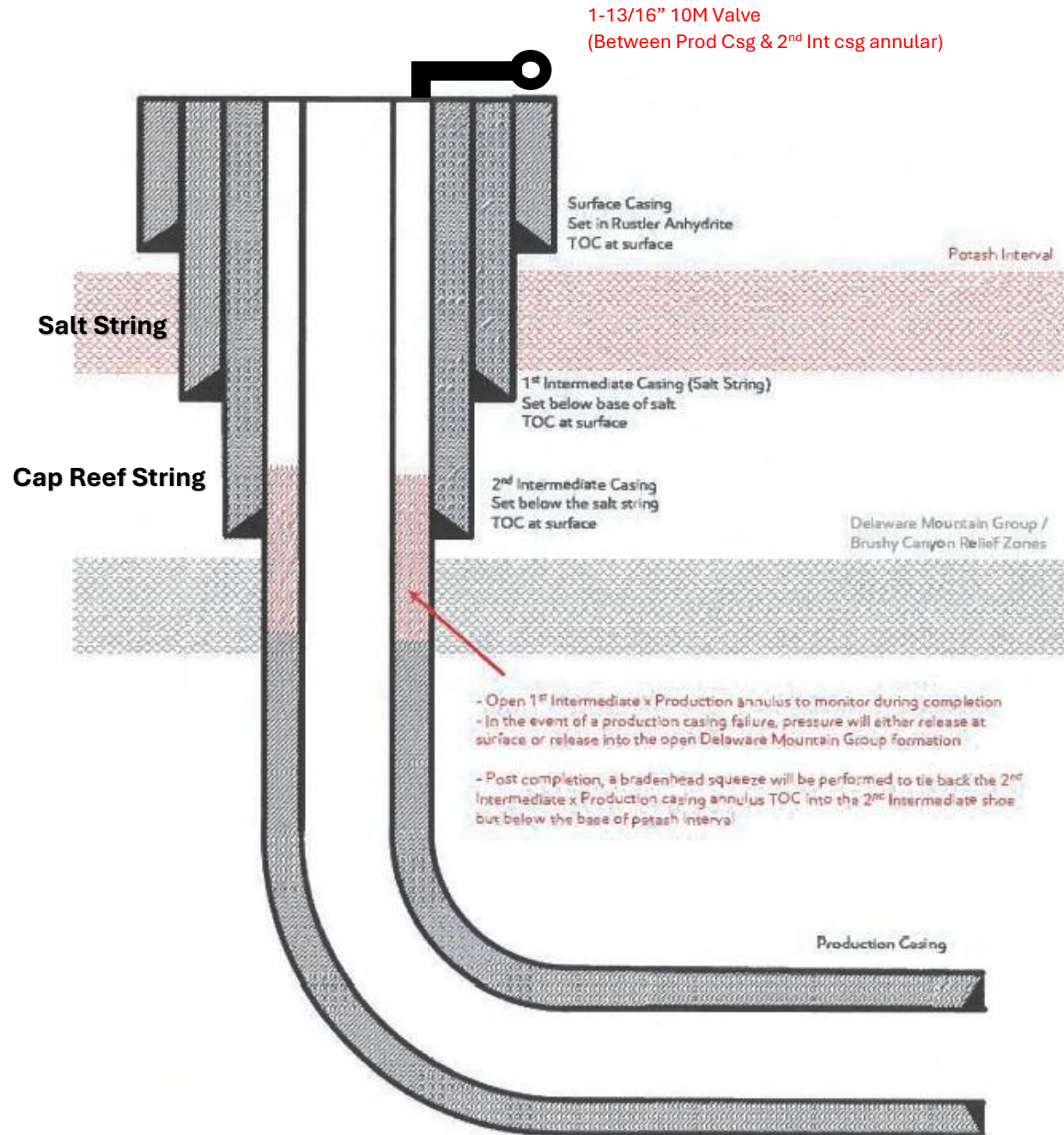
- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- Uniaxial bend rating shown is structural only.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- Coupling must meet minimum mechanical properties of the pipe.

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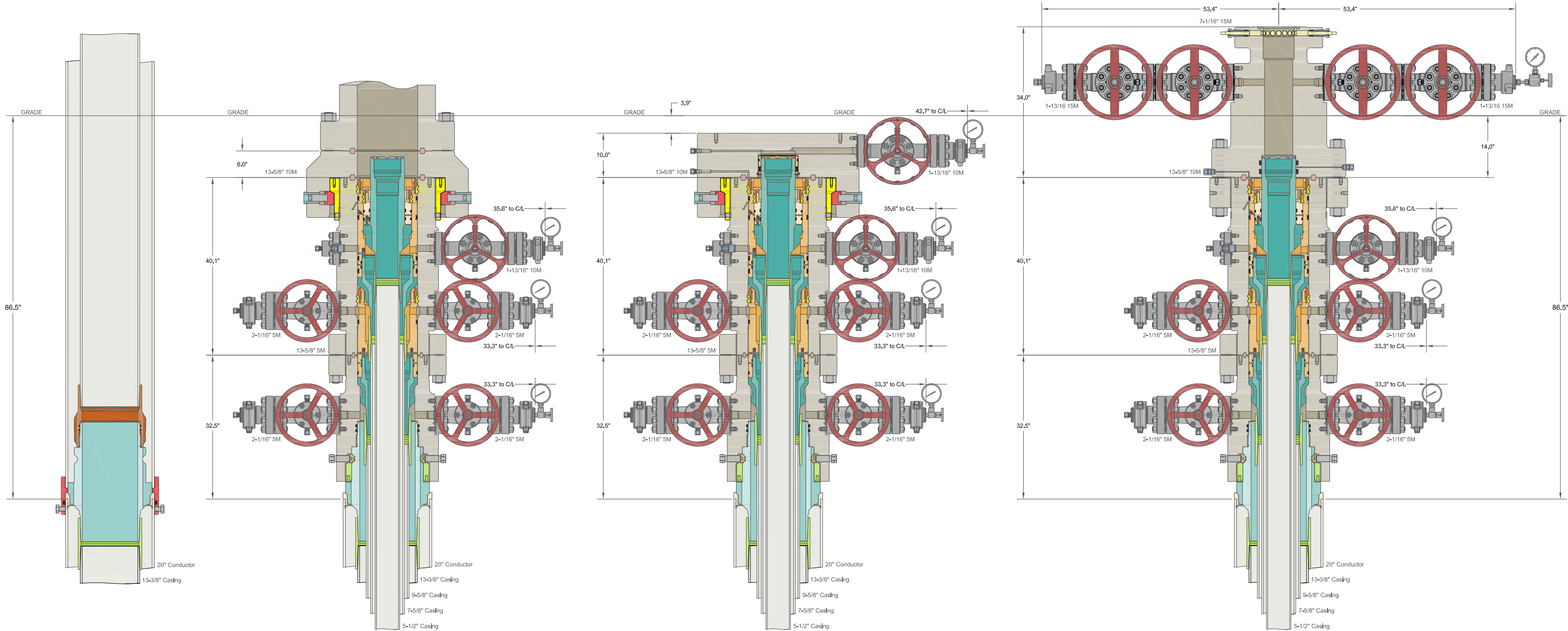
1-877-893-9461  
connections@uss.com  
www.usstubular.com

**Figure E**

Updated May 2024:

XTO is aware of the R-111-Q update and will comply with these requirements including (but not limited to):

1. Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards.
2. Contingency plans in place to divert formation fluids away from salt interval in even of production casing failure.
3. Bradenhead squeeze to be completed within 180 days to tie back TOC to salt string at least 500ft but with top below Marker Bed 126.
4. Production Cement to be tied back no less than 500ft inside previous casing shoe



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ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC			
(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And Drilling & Skid Configurations			
XTO ENERGY INC DELAWARE BASIN			
DRAWN	VJK	31MAR22	
APPRV			
DRAWING NO.		SDT-3301	



**BLACK GOLD®**

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*NEW CHOKE HOSE  
INSTALLED 02-10-2024*

## CERTIFICATE OF CONFORMANCE

This is to verify that the items detailed below meet the requirements of the Customer's Purchase Order referenced herein, and are in Conformance with applicable specifications, and that Records of Required Tests are on file and subject to examination. The following items were inspected and hydrostatically tested at **Gates Engineering & Services North America** facilities in Houston, TX, USA.

**CUSTOMER:** NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA  
**CUSTOMER P.O.#:** 15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)  
**CUSTOMER P/N:** IMR RETEST SN 74621 ASSET #66-1531

**PART DESCRIPTION:** RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES

**SALES ORDER #:** 529480  
**QUANTITY:** 1  
**SERIAL #:** 74621 H3-012524-1

**SIGNATURE:***F. Cismos***TITLE:****QUALITY ASSURANCE****DATE:****1/25/2024**



H3-15/16

1/25/2024 11:48:06 AM

# TEST REPORT

**CUSTOMER**

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

**TEST OBJECT**

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

**TEST INFORMATION**

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K

Part number:

Description:

Fitting 2: 3.0 x 4-1/16 10K

Part number:

Description:

Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/16

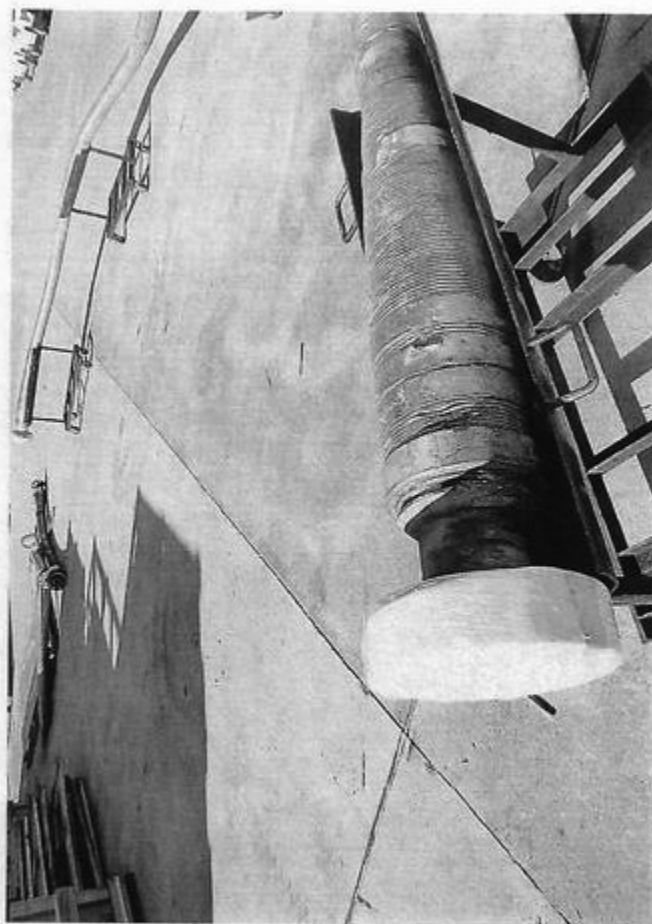
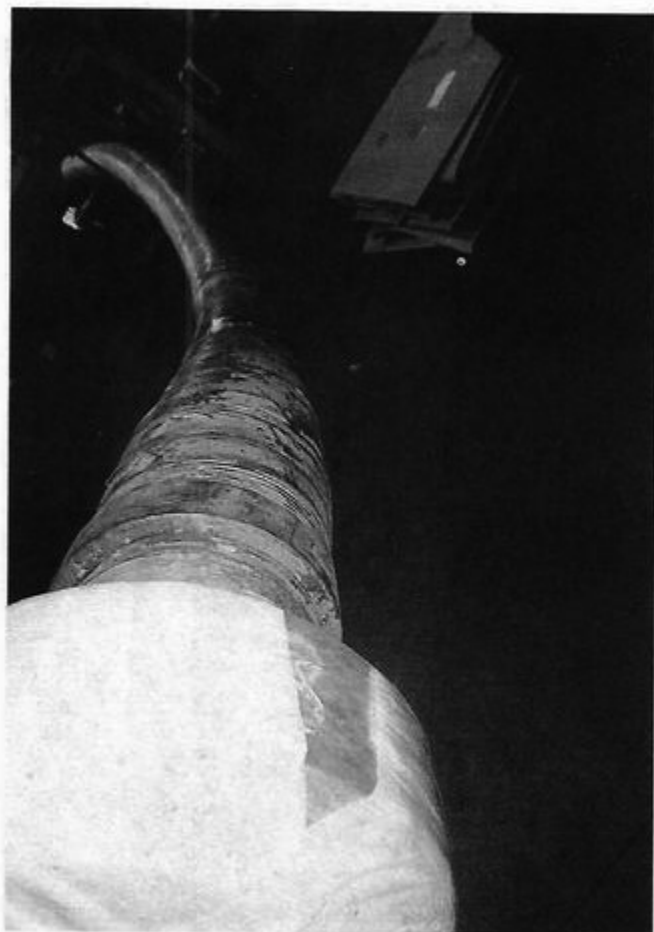
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## TEST REPORT

### GAUGE TRACEABILITY

Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

Comment







XTO respectfully requests approval to utilize a spudder rig to pre-set surface casing.

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
  - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
  - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
  - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped up and tested on the wellhead before drilling operations resume on each well.
  - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
  - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.

**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



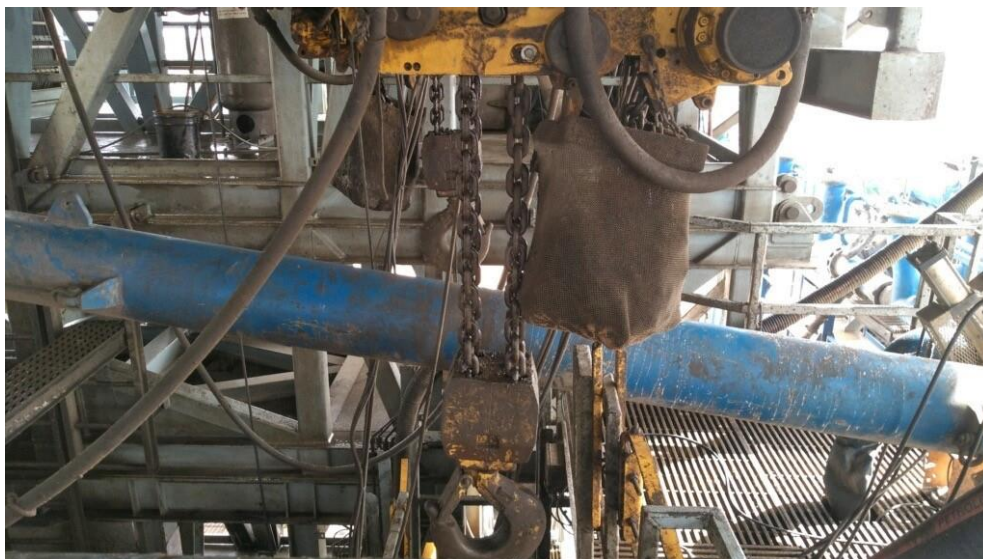


Figure 2: BOP Winch System

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 <sup>ac</sup> psig (MPa)	Pressure Test—High Pressure <sup>ac</sup>	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer <sup>a</sup>	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 <sup>bd</sup>	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 <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes <sup>e</sup>	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	

<sup>a</sup> 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.

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

<sup>c</sup> 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.

<sup>d</sup> 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.

<sup>e</sup> 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

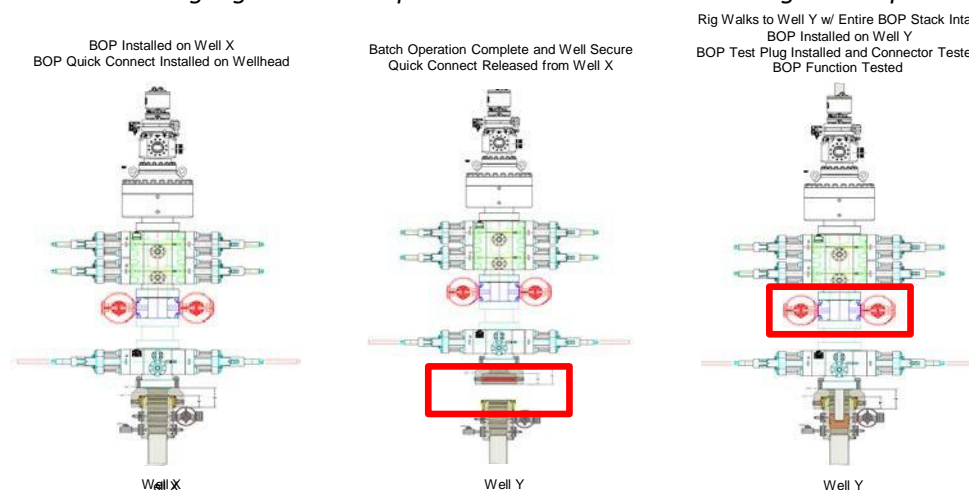
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

### **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.

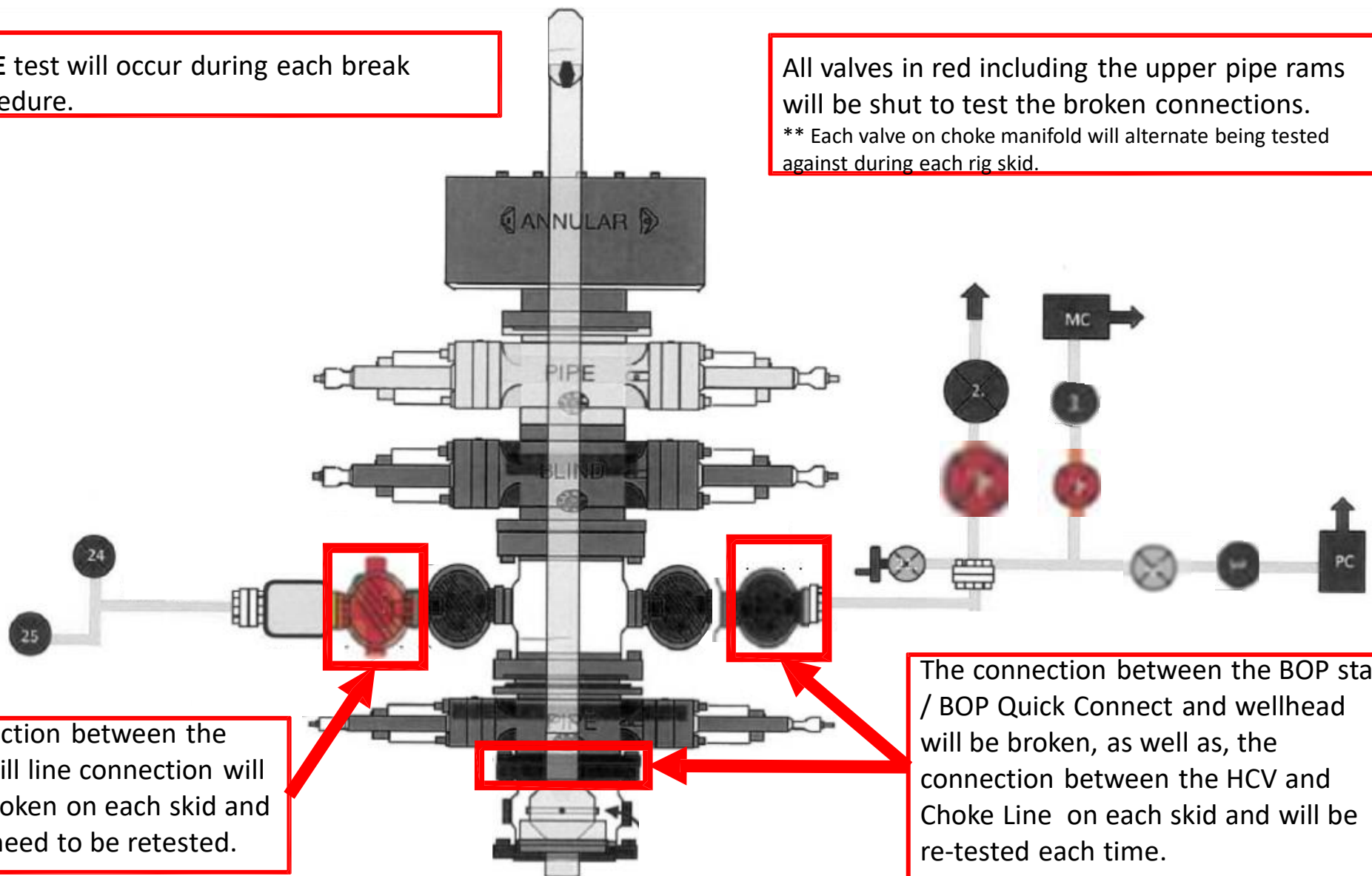
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.



**XTO Permian Operating, LLC Offline Cementing Variance Request**

XTO requests the option to cement the surface and intermediate casing strings offline as a prudent batch drilling efficiency of acreage development.

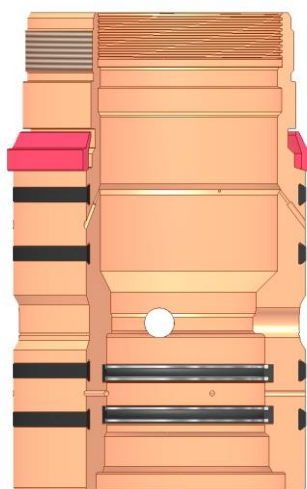
**1. Cement Program**

No changes to the cement program will take place for offline cementing.

**2. Offline Cementing Procedure**

The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
  - a. If any barrier fails to test, the BOP stack will not be nippedled down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50-psi compressive strength if kill weight fluid cannot be verified.



Annular packoff with both external and internal seals

## XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nipping up for further remediation.
  - a. Well Control Plan
    - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
    - ii. Rig pumps or a 3<sup>rd</sup> party pump will be tied into the upper casing valve to pump down the casing ID
    - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
    - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
    - v. Well will be confirmed static
    - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
8. Install offline cement tool
9. Rig up cement equipment

**XTO Permian Operating, LLC Offline Cementing Variance Request**

Wellhead diagram during offline cementing operations

10. Circulate bottoms up with cement truck
  - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
  - b. Max anticipated time before circulating with cement truck is 6 hrs
11. Perform cement job taking returns from the annulus wellhead valve
12. Confirm well is static and floats are holding after cement job
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

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

CONDITIONS

Action 437873

CONDITIONS

Operator:  XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID:  373075
	Action Number:  437873
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Administrative order required for non-standard spacing unit prior to production.	3/17/2025
ward.rikala	Administrative order required for non-standard location prior to production.	3/17/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	3/17/2025