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

# Sundry Print Report

08/14/2024

**Well Name:** CORRAL 17-8 FED COM

**Well Location:** T25S / R29E / SEC 17 / SESW / 32.123719 / -104.008119

**County or Parish/State:** EDDY / NM

**Well Number:** 103H

**Type of Well:** CONVENTIONAL GAS WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM99147

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3001555129

**Operator:** XTO ENERGY INCORPORATED

## Notice of Intent

**Sundry ID:** 2797574

**Type of Submission:** Notice of Intent

**Type of Action:** APD Change

**Date Sundry Submitted:** 06/27/2024

**Time Sundry Submitted:** 11:06

**Date proposed operation will begin:** 07/11/2024

**Procedure Description:** XTO Energy Incorporated respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, LTP, Casing sizes, Cement, Proposed total Depth, and formation (Pool). FROM: TO: SHL: 314' FSL & 2175' FWL OF SECTION 17-T25S-R29E 344' FSL & 2175' FWL OF SECTION 17-T25S-R29E LTP: 2448' FSL& 2430' FWL OF SECTION 8-T25S-R29E 2548' FSL & 2430' FWL OF SECTION 8-T25S-R29E The proposed total depth is changing from 17876’ MD; 9951’ TVD (Purple Sage/Wolfcamp) to 18007’ MD; 9950’ TVD (Wolfcamp X/Y). The API number for this well is 30-015-55129. See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

## NOI Attachments

**Procedure Description**

Corral_17_8_Fed_Com_103H___BLM_APD_Change_Sundry_Attachments_20240701145426.pdf



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**Well Name:** CORRAL 17-8 FED COM

**Well Location:** T25S / R29E / SEC 17 / SESW / 32.123719 / -104.008119

**County or Parish/State:** EDDY / NM

**Well Number:** 103H

**Type of Well:** CONVENTIONAL GAS WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM99147

**Unit or CA Name:**

**Unit or CA Number:**

**US Well Number:** 3001555129

**Operator:** XTO ENERGY INCORPORATED

## 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:** JENA AUSTIN

**Signed on:** JUL 01, 2024 02:54 PM

**Name:** XTO ENERGY INCORPORATED

**Title:** Regulatory Analyst

**Street Address:** 22777 SPRINGWOODS VILLAGE PARKWAY

**City:** SPRING **State:** TX

**Phone:** (346) 335-5295

**Email address:** JENA.N.AUSTIN@EXXONMOBIL.COM

## Field

**Representative Name:**

**Street Address:**

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

**Phone:**

**Email address:**

## BLM Point of Contact

**BLM POC Name:** BOBBY BALLARD

**BLM POC Title:** Natural Resource Specialist

**BLM POC Phone:** 5752342235

**BLM POC Email Address:** bballard@blm.gov

**Disposition:** Approved

**Disposition Date:** 08/14/2024

**Signature:** Chris Walls



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Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

**SUNDRY NOTICES AND REPORTS ON WELLS**

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

***SUBMIT IN TRIPLICATE*** *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*

11. Country or Parish, State

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

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

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

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

Title

Signature

Date

**THE SPACE FOR FEDERAL OR STATE OFICE USE**

Approved by

Title

Date

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

Office

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.
PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.
ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.
EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.
Response to this request is mandatory.
The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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



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## Additional Information

### Additional Remarks

See attached Drilling Plan for updated cement and casing program.

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

### Location of Well

0. SHL: SESW / 314 FSL / 2175 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123719 / LONG: -104.008119 ( TVD: 0 feet, MD: 0 feet )

PPP: SESW / 330 FSL / 2430 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123754 / LONG: -104.007295 ( TVD: 9951 feet, MD: 10400 feet )

PPP: SENW / 2650 FSL / 2433 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.130131 / LONG: -104.007323 ( TVD: 9951 feet, MD: 13100 feet )

BHL: NESW / 2598 FSL / 2430 FWL / TWSP: 25S / RANGE: 29E / SECTION: 8 / LAT: 32.144569 / LONG: -104.007385 ( TVD: 9951 feet, MD: 17876 feet )

CONFIDENTIAL

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☑ AMENDED REPORT

# WELL LOCATION AND ACREAGE DEDICATION PLAT

| [1] API Number | [2] Pool Code | [3] Pool Name |
|---|---|---|
| 30-015-55129 | 98220 | PURPLE SAGE, WOLFCAMP (GAS) |

| [4] Property Code | [5] Property Name | [6] Well Number |
|---|---|---|
| | CORRAL 17-8 FED COM | 103H |

| [7] OGRID No. | [8] Operator Name | [9] Elevation |
|---|---|---|
| 005380 | XTO ENERGY, INC | 2,969' |

## [10] Surface Location

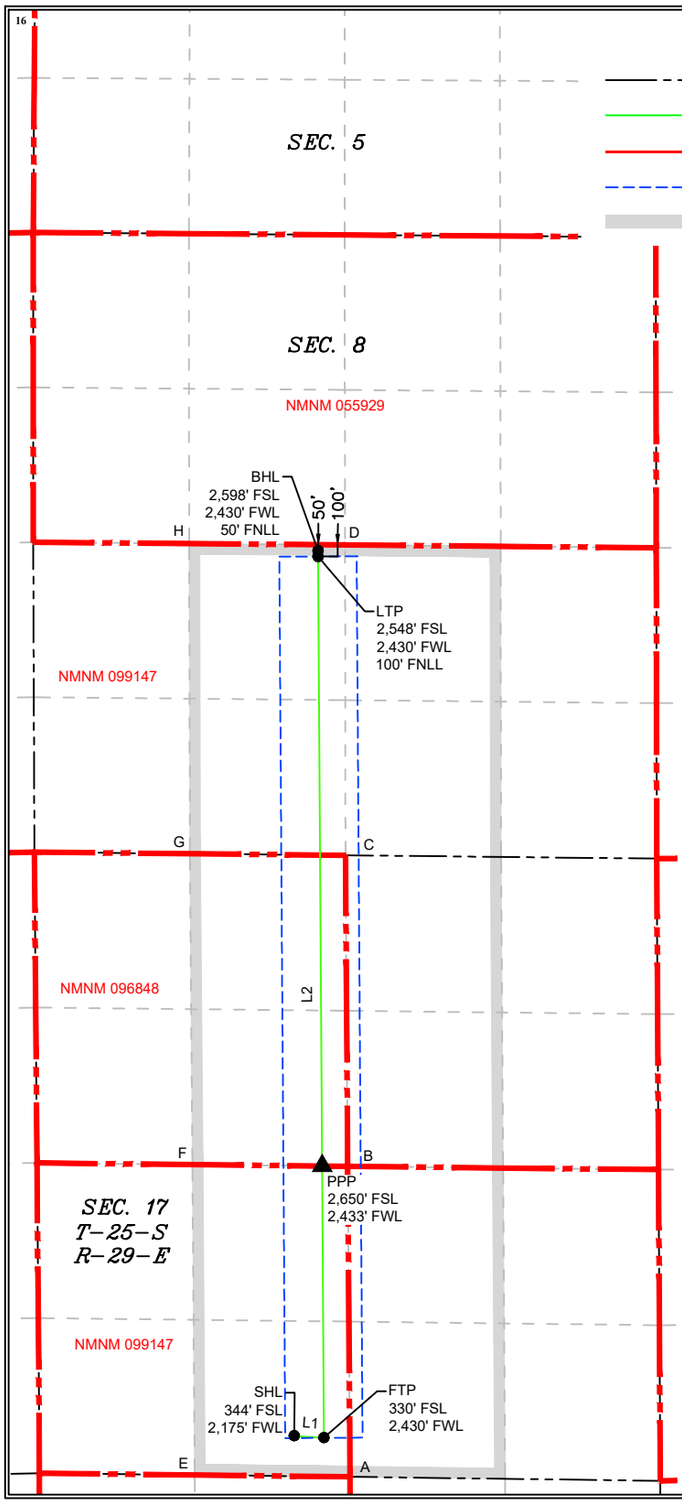
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| N | 17 | 25 S | 29 E | | 344 | SOUTH | 2,175 | WEST | EDDY |

## [11] Bottom Hole Location If Different From Surface

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---|---|---|---|---|---|---|---|---|---|
| K | 8 | 25 S | 29 E | | 2,598 | SOUTH | 2,430 | WEST | EDDY |

| [12] Dedicated Acres | [13] Joint or Infill | [14] Consolidation Code | [15] Order No. |
|---|---|---|---|
| 480 | | | |

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




## LEGEND

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

| LINE TABLE | | |
|---|---|---|
| LINE | AZUMITH | LENGTH |
| L1 | 093°43'45" | 255.39' |
| L2 | 359°37'00" | 7,572.34' |

### COORDINATE TABLE

| | SHL (NAD 83 NME) | SHL (NAD 27 NME) |
|---|---|---|
| Y = | 408,926.9 N | 408,868.4 N |
| X = | 642,014.9 E | 600,830.9 E |
| LAT. = | 32.123801 °N | 32.123677 °N |
| LONG. = | 104.008118 °W | 104.007630 °W |

| | FTP (NAD 83 NME) | FTP (NAD 27 NME) |
|---|---|---|
| Y = | 408,910.3 N | 408,851.8 N |
| X = | 642,269.7 E | 601,085.7 E |
| LAT. = | 32.123754 °N | 32.123629 °N |
| LONG. = | 104.007295 °W | 104.006807 °W |

| | PPP (NAD 83 NME) | PPP (NAD 27 NME) |
|---|---|---|
| Y = | 411,230.1 N | 411,171.6 N |
| X = | 642,254.2 E | 601,070.1 E |
| LAT. = | 32.130131 °N | 32.130006 °N |
| LONG. = | 104.007323 °W | 104.006834 °W |

| | LTP (NAD 83 NME) | LTP (NAD 27 NME) |
|---|---|---|
| Y = | 416,432.4 N | 416,373.8 N |
| X = | 642,219.3 E | 601,035.4 E |
| LAT. = | 32.144432 °N | 32.144307 °N |
| LONG. = | 104.007384 °W | 104.006896 °W |

| | BHL (NAD 83 NME) | BHL (NAD 27 NME) |
|---|---|---|
| Y = | 416,482.4 N | 416,423.8 N |
| X = | 642,219.1 E | 601,035.2 E |
| LAT. = | 32.144569 °N | 32.144445 °N |
| LONG. = | 104.007385 °W | 104.006896 °W |

### CORNER COORDINATES (NAD 83 NME)

| | | | |
|---|---|---|---|
| A - Y = | 408,577.6 N | A - X = | 642,492.6 E |
| B - Y = | 411,227.8 N | B - X = | 642,473.3 E |
| C - Y = | 413,882.3 N | C - X = | 642,454.0 E |
| D - Y = | 416,530.4 N | D - X = | 642,450.5 E |
| E - Y = | 408,593.2 N | E - X = | 641,167.4 E |
| F - Y = | 411,242.2 N | F - X = | 641,147.0 E |
| G - Y = | 413,895.5 N | G - X = | 641,126.3 E |
| H - Y = | 416,542.3 N | H - X = | 641,119.7 E |

### CORNER COORDINATES (NAD 27 NME)

| | | | |
|---|---|---|---|
| A - Y = | 408,519.2 N | A - X = | 601,308.6 E |
| B - Y = | 411,169.3 N | B - X = | 601,289.3 E |
| C - Y = | 413,823.7 N | C - X = | 601,270.0 E |
| D - Y = | 416,471.7 N | D - X = | 601,266.6 E |
| E - Y = | 408,534.8 N | E - X = | 599,983.4 E |
| F - Y = | 411,183.7 N | F - X = | 599,962.9 E |
| G - Y = | 413,836.9 N | G - X = | 599,942.4 E |
| H - Y = | 416,483.6 N | H - X = | 599,935.8 E |

## [17] OPERATOR CERTIFICATION

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

Manish Saini 05/16/2024
Signature Date

Manish Saini
Printed Name

manish.saini@exxonmobil.com
E-mail Address

## [18] SURVEYOR CERTIFICATION

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

01/31/2024
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

CC/AI/AR 618.013013.03-03

J:\618.013 XTO Energy - NM\013 Corral Canyon Unit - Eddy\03 - Corral Canyon 17 - Eddy\Wells\03 - 17-8 FEDERAL 103H\DWG\103H C-102.dwg

Intent ☐ As Drilled ☐

| API # |
|---|

| Operator Name: | Property Name: | Well Number |
|---|---|---|
| | | |

Kick Off Point (KOP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Latitude | Longitude | NAD |
|---|---|---|
| | | |

First Take Point (FTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Latitude | Longitude | NAD |
|---|---|---|
| | | |

Last Take Point (LTP)

| UL | Section | Township | Range | Lot | Feet | From N/S | Feet | From E/W | County |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

| Latitude | Longitude | NAD |
|---|---|---|
| | | |

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

| API # |
|---|

| Operator Name: | Property Name: | Well Number |
|---|---|---|
| | | |

KZ 06/29/2018

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

XTO Energy Inc.
CORRAL 17 - 8 FED COM 103H
Projected TD: 18007.41' MD / 9950' TVD
SHL: 344' FSL & 2175' FWL , Section 17, T25S, R29E
BHL: 2598' FSL & 2430' FWL , Section 8, T25S, R29E
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 |
|---|---|---|
| Top of Salt | 602' | Water |
| Base of Salt | 2702' | Water |
| Delaware | 2902' | Water |
| Brushy Canyon | 5396' | Water/Oil/Gas |
| Bone Spring | 6624' | Water |
| 1st Bone Spring | 7398' | Water/Oil/Gas |
| 2nd Bone Spring | 7845' | Water/Oil/Gas |
| 3rd Bone Spring | 8668' | Water/Oil/Gas |
| Wolfcamp | 9824' | Water/Oil/Gas |
| Wolfcamp X | 9847' | Water/Oil/Gas |
| Wolfcamp Y | 9925' | Water/Oil/Gas |
| **Target/Land Curve** | 9950' | 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 9.625 inch casing @ 567' (35' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 9110.23' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 18007.41 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8810.23 feet).

**3. Casing Design**

| Hole Size | Depth | OD Csg | Weight | Grade | Collar | New/Used | SF Burst | SF Collapse | SF Tension |
|---|---|---|---|---|---|---|---|---|---|
| 12.25 | 0’ – 567' | 9.625 | 40 | J-55 | BTC | New | 1.75 | 11.10 | 27.78 |
| 8.75 | 0’ – 4000' | 7.625 | 29.7 | RY P-110 | Flush Joint | New | 2.70 | 2.86 | 2.06 |
| 8.75 | 4000' – 9110.23' | 7.625 | 29.7 | HC L-80 | Flush Joint | New | 1.96 | 2.52 | 2.68 |
| 6.75 | 0’ – 9010.23' | 5.5 | 20 | RY P-110 | Semi-Premium | New | 1.26 | 2.15 | 2.45 |
| 6.75 | 9010.23' - 18007.41' | 5.5 | 20 | RY P-110 | Semi-Flush | New | 1.26 | 1.95 | 2.45 |

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
· XTO requests to not utilize centralizers in the curve and lateral
· 7.625 Collapse analyzed using 50% evacuation based on regional experience.
· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
· XTO requests the option to use 5" BTC Float equipment for the the production casing

**Wellhead:**

*Permanent Wellhead – Multibowl System*

A. Starting Head: 11” 10M top flange x 9-5/8” bottom

B. Tubing Head: 11” 10M bottom flange x 7-1/16” 15M top flange

- Wellhead will be installed by manufacturer’s representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

**4. Cement Program**

***Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 567'***

Lead: 80 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Top of Cement: Surface
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

***2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9110.23'***
*1st Stage*
Optional Lead: 290 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 340 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 5396
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

*2nd Stage*
Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
Tail: 610 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 0
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5396') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

***Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 18007.41'***

Lead: 20 sxs NeoCem (mixed at 12.8 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8810.23 feet
Tail: 620 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9310.23 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

**5. Pressure Control Equipment**

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 3502 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the rated working pressure. When nippling up on the 9.625, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week.

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

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

hole on each of the wells.

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

**6. Proposed Mud Circulation System**

| INTERVAL | Hole Size | Mud Type | MW (ppg) | Viscosity (sec/qt) | Fluid Loss (cc) |
|---|---|---|---|---|---|
| 0' - 567' | 12.25 | FW/Native | 8.4-8.9 | 35-40 | NC |
| 567' - 9110.23' | 8.75 | FW / Cut Brine / Direct Emulsion | 9-9.5 | 30-32 | NC |
| 9110.23' - 18007.41' | 6.75 | OBM | 11-11.5 | 50-60 | NC - 20 |

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

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

**7. Auxiliary Well Control and Monitoring Equipment**

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 9.625 casing.

**8. Logging, Coring and Testing Program**

Open hole logging will not be done on this well.

**9. Abnormal Pressures and Temperatures / Potential Hazards**

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5691 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 - Corral 17-8 Fed Com 103H_Updated

| | |
|---|---|
| **Measured Depth:** | 18007.41 ft |
| **TVD RKB:** | 9950.00 ft |
| **Location** | |
| **Cartographic Reference System:** | New Mexico East - NAD 27 |
| **Northing:** | 408868.40 ft |
| **Easting:** | 600830.90 ft |
| **RKB:** | 3002.00 ft |
| **Ground Level:** | 2969.00 ft |
| **North Reference:** | Grid |
| **Convergence Angle:** | 0.17 Deg |

**Plan Sections** Corral 17-8 Fed Com 103H_Updated

| Measured Depth (ft) | Inclination (Deg) | Azimuth (Deg) | TVD RKB (ft) | Y Offset (ft) | X Offset (ft) | Build Rate (Deg/100ft) | Turn Rate (Deg/100ft) | Dogleg Rate (Deg/100ft) | Target |
|---|---|---|---|---|---|---|---|---|---|
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1100.00 | 0.00 | 0.00 | 1100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 1692.44 | 11.85 | 160.49 | 1688.23 | -57.54 | 20.38 | 2.00 | 0.00 | 2.00 | |
| 4883.99 | 11.85 | 160.49 | 4811.77 | -675.24 | 239.21 | 0.00 | 0.00 | 0.00 | |
| 5476.43 | 0.00 | 0.00 | 5400.00 | -732.78 | 259.59 | -2.00 | 0.00 | 2.00 | |
| 9310.23 | 0.00 | 0.00 | 9233.80 | -732.78 | 259.59 | 0.00 | 0.00 | 0.00 | |
| 10435.23 | 90.00 | 359.62 | 9950.00 | -16.60 | 254.80 | 8.00 | 0.00 | 8.00 | 103H FTP |
| 17957.40 | 90.00 | 359.62 | 9950.00 | 7505.40 | 204.50 | 0.00 | 0.00 | 0.00 | 103H LTP |
| 18007.41 | 90.00 | 359.62 | 9950.00 | 7555.40 | 204.17 | 0.00 | 0.00 | 0.00 | 103H BHL |

**Position Uncertainty** Corral 17-8 Fed Com 103H_Updated

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

| Depth (ft) | Inclination (°) | Azimuth (°) | RKB (ft) | Error (ft) | Bias (ft) | Error (ft) | Bias (ft) | Error (ft) | Bias (ft) | of Bias (ft) | Error (ft) | Error (ft) | Azimuth (°) | Used |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | XOM_R2OWSG 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 | XOM_R2OWSG MWD+IFR1+MS |
| 200.000 | 0.000 | 0.000 | 200.000 | 0.717 | 0.000 | 0.538 | 0.000 | 2.309 | 0.000 | 0.000 | 0.717 | 0.538 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 300.000 | 0.000 | 0.000 | 300.000 | 1.075 | 0.000 | 0.896 | 0.000 | 2.324 | 0.000 | 0.000 | 1.075 | 0.896 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 400.000 | 0.000 | 0.000 | 400.000 | 1.434 | 0.000 | 1.255 | 0.000 | 2.345 | 0.000 | 0.000 | 1.434 | 1.255 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 500.000 | 0.000 | 0.000 | 500.000 | 1.792 | 0.000 | 1.613 | 0.000 | 2.372 | 0.000 | 0.000 | 1.792 | 1.613 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 600.000 | 0.000 | 0.000 | 600.000 | 2.151 | 0.000 | 1.972 | 0.000 | 2.403 | 0.000 | 0.000 | 2.151 | 1.972 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 700.000 | 0.000 | 0.000 | 700.000 | 2.509 | 0.000 | 2.330 | 0.000 | 2.439 | 0.000 | 0.000 | 2.509 | 2.330 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 800.000 | 0.000 | 0.000 | 800.000 | 2.868 | 0.000 | 2.689 | 0.000 | 2.480 | 0.000 | 0.000 | 2.868 | 2.689 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 900.000 | 0.000 | 0.000 | 900.000 | 3.226 | 0.000 | 3.047 | 0.000 | 2.525 | 0.000 | 0.000 | 3.226 | 3.047 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 1000.000 | 0.000 | 0.000 | 1000.000 | 3.585 | 0.000 | 3.405 | 0.000 | 2.573 | 0.000 | 0.000 | 3.585 | 3.405 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 1100.000 | 0.000 | 0.000 | 1100.000 | 3.943 | 0.000 | 3.764 | 0.000 | 2.626 | 0.000 | 0.000 | 3.943 | 3.764 | 90.000 | XOM_R2OWSG MWD+IFR1+MS |
| 1200.000 | 2.000 | 160.493 | 1199.980 | 4.263 | 0.000 | 4.125 | -0.000 | 2.681 | 0.000 | 0.000 | 4.285 | 4.105 | 90.005 | XOM_R2OWSG MWD+IFR1+MS |
| 1300.000 | 4.000 | 160.493 | 1299.838 | 4.584 | 0.000 | 4.452 | -0.000 | 2.737 | 0.000 | 0.000 | 4.614 | 4.432 | 89.927 | XOM_R2OWSG MWD+IFR1+MS |
| 1400.000 | 6.000 | 160.493 | 1399.452 | 4.904 | 0.000 | 4.784 | -0.000 | 2.795 | 0.000 | 0.000 | 4.947 | 4.763 | 89.857 | XOM_R2OWSG MWD+IFR1+MS |
| 1500.000 | 8.000 | 160.493 | 1498.702 | 5.224 | 0.000 | 5.119 | -0.000 | 2.853 | 0.000 | 0.000 | 5.285 | 5.099 | 89.854 | XOM_R2OWSG MWD+IFR1+MS |
| 1600.000 | 10.000 | 160.493 | 1597.465 | 5.541 | 0.000 | 5.459 | -0.000 | 2.913 | 0.000 | 0.000 | 5.626 | 5.438 | 89.969 | XOM_R2OWSG MWD+IFR1+MS |
| 1692.441 | 11.849 | 160.493 | 1688.228 | 5.833 | 0.000 | 5.778 | -0.000 | 2.971 | 0.000 | 0.000 | 5.943 | 5.756 | 90.194 | XOM_R2OWSG MWD+IFR1+MS |
| 1700.000 | 11.849 | 160.493 | 1695.625 | 5.859 | 0.000 | 5.804 | -0.000 | 2.971 | 0.000 | 0.000 | 5.972 | 5.783 | 89.978 | XOM_R2OWSG MWD+IFR1+MS |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1800.000 | 11.849 | 160.493 | 1793.494 | 6.208 | 0.000 | 6.154 | -0.000 | 3.049 | 0.000 | 0.000 | 6.314 | 6.131 | 90.975 | XOM_R2OWSG MWD+IFR1+MS |
| 1900.000 | 11.849 | 160.493 | 1891.364 | 6.561 | 0.000 | 6.508 | -0.000 | 3.130 | 0.000 | 0.000 | 6.660 | 6.485 | 92.014 | XOM_R2OWSG MWD+IFR1+MS |
| 2000.000 | 11.849 | 160.493 | 1989.233 | 6.918 | 0.000 | 6.867 | -0.000 | 3.214 | 0.000 | 0.000 | 7.009 | 6.841 | 93.110 | XOM_R2OWSG MWD+IFR1+MS |
| 2100.000 | 11.849 | 160.493 | 2087.102 | 7.278 | 0.000 | 7.228 | -0.000 | 3.302 | 0.000 | 0.000 | 7.362 | 7.201 | 94.276 | XOM_R2OWSG MWD+IFR1+MS |
| 2200.000 | 11.849 | 160.493 | 2184.972 | 7.640 | 0.000 | 7.592 | -0.000 | 3.393 | 0.000 | 0.000 | 7.718 | 7.564 | 95.527 | XOM_R2OWSG MWD+IFR1+MS |
| 2300.000 | 11.849 | 160.493 | 2282.841 | 8.005 | 0.000 | 7.958 | -0.000 | 3.486 | 0.000 | 0.000 | 8.076 | 7.929 | 96.878 | XOM_R2OWSG MWD+IFR1+MS |
| 2400.000 | 11.849 | 160.493 | 2380.710 | 8.372 | 0.000 | 8.327 | -0.000 | 3.583 | 0.000 | 0.000 | 8.436 | 8.296 | 98.344 | XOM_R2OWSG MWD+IFR1+MS |
| 2500.000 | 11.849 | 160.493 | 2478.579 | 8.740 | 0.000 | 8.697 | -0.000 | 3.681 | 0.000 | 0.000 | 8.798 | 8.664 | 99.942 | XOM_R2OWSG MWD+IFR1+MS |
| 2600.000 | 11.849 | 160.493 | 2576.449 | 9.110 | 0.000 | 9.069 | -0.000 | 3.782 | 0.000 | 0.000 | 9.161 | 9.034 | 101.688 | XOM_R2OWSG MWD+IFR1+MS |
| 2700.000 | 11.849 | 160.493 | 2674.318 | 9.482 | 0.000 | 9.442 | -0.000 | 3.885 | 0.000 | 0.000 | 9.527 | 9.406 | 103.596 | XOM_R2OWSG MWD+IFR1+MS |
| 2800.000 | 11.849 | 160.493 | 2772.187 | 9.854 | 0.000 | 9.816 | -0.000 | 3.991 | 0.000 | 0.000 | 9.893 | 9.778 | 105.678 | XOM_R2OWSG MWD+IFR1+MS |
| 2900.000 | 11.849 | 160.493 | 2870.056 | 10.228 | 0.000 | 10.192 | -0.000 | 4.098 | 0.000 | 0.000 | 10.261 | 10.151 | 107.942 | XOM_R2OWSG MWD+IFR1+MS |
| 3000.000 | 11.849 | 160.493 | 2967.926 | 10.602 | 0.000 | 10.568 | -0.000 | 4.207 | 0.000 | 0.000 | 10.631 | 10.524 | 110.387 | XOM_R2OWSG MWD+IFR1+MS |
| 3100.000 | 11.849 | 160.493 | 3065.795 | 10.978 | 0.000 | 10.946 | -0.000 | 4.318 | 0.000 | 0.000 | 11.002 | 10.898 | 113.002 | XOM_R2OWSG MWD+IFR1+MS |
| 3200.000 | 11.849 | 160.493 | 3163.664 | 11.354 | 0.000 | 11.324 | -0.000 | 4.431 | 0.000 | 0.000 | 11.373 | 11.273 | 115.764 | XOM_R2OWSG MWD+IFR1+MS |
| 3300.000 | 11.849 | 160.493 | 3261.534 | 11.731 | 0.000 | 11.703 | -0.000 | 4.546 | 0.000 | 0.000 | 11.747 | 11.647 | 118.636 | XOM_R2OWSG MWD+IFR1+MS |
| 3400.000 | 11.849 | 160.493 | 3359.403 | 12.109 | 0.000 | 12.082 | -0.000 | 4.663 | 0.000 | 0.000 | 12.121 | 12.022 | 121.569 | XOM_R2OWSG MWD+IFR1+MS |
| 3500.000 | 11.849 | 160.493 | 3457.272 | 12.487 | 0.000 | 12.462 | -0.000 | 4.781 | 0.000 | 0.000 | 12.496 | 12.397 | 124.507 | XOM_R2OWSG MWD+IFR1+MS |
| 3600.000 | 11.849 | 160.493 | 3555.141 | 12.866 | 0.000 | 12.843 | -0.000 | 4.901 | 0.000 | 0.000 | 12.872 | 12.772 | 127.393 | XOM_R2OWSG MWD+IFR1+MS |
| 3700.000 | 11.849 | 160.493 | 3653.011 | 13.245 | 0.000 | 13.224 | -0.000 | 5.023 | 0.000 | 0.000 | 13.250 | 13.147 | 130.174 | XOM_R2OWSG MWD+IFR1+MS |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3800.000 | 11.849 | 160.493 | 3750.880 | 13.624 | 0.000 | 13.605 | -0.000 | 5.146 | 0.000 | 0.000 | 13.628 | 13.522 | 132.812 | XOM_R2OWSG MWD+IFR1+MS |
| 3900.000 | 11.849 | 160.493 | 3848.749 | 14.004 | 0.000 | 13.987 | -0.000 | 5.271 | 0.000 | 0.000 | 14.007 | 13.898 | -44.724 | XOM_R2OWSG MWD+IFR1+MS |
| 4000.000 | 11.849 | 160.493 | 3946.619 | 14.385 | 0.000 | 14.370 | -0.000 | 5.398 | 0.000 | 0.000 | 14.387 | 14.273 | -42.446 | XOM_R2OWSG MWD+IFR1+MS |
| 4100.000 | 11.849 | 160.493 | 4044.488 | 14.765 | 0.000 | 14.752 | -0.000 | 5.526 | 0.000 | 0.000 | 14.767 | 14.648 | -40.358 | XOM_R2OWSG MWD+IFR1+MS |
| 4200.000 | 11.849 | 160.493 | 4142.357 | 15.146 | 0.000 | 15.135 | -0.000 | 5.656 | 0.000 | 0.000 | 15.148 | 15.023 | -38.456 | XOM_R2OWSG MWD+IFR1+MS |
| 4300.000 | 11.849 | 160.493 | 4240.226 | 15.528 | 0.000 | 15.519 | -0.000 | 5.788 | 0.000 | 0.000 | 15.530 | 15.398 | -36.730 | XOM_R2OWSG MWD+IFR1+MS |
| 4400.000 | 11.849 | 160.493 | 4338.096 | 15.909 | 0.000 | 15.902 | -0.000 | 5.921 | 0.000 | 0.000 | 15.912 | 15.774 | -35.166 | XOM_R2OWSG MWD+IFR1+MS |
| 4500.000 | 11.849 | 160.493 | 4435.965 | 16.291 | 0.000 | 16.286 | -0.000 | 6.056 | 0.000 | 0.000 | 16.295 | 16.149 | -33.750 | XOM_R2OWSG MWD+IFR1+MS |
| 4600.000 | 11.849 | 160.493 | 4533.834 | 16.673 | 0.000 | 16.670 | -0.000 | 6.193 | 0.000 | 0.000 | 16.678 | 16.525 | -32.467 | XOM_R2OWSG MWD+IFR1+MS |
| 4700.000 | 11.849 | 160.493 | 4631.703 | 17.056 | 0.000 | 17.054 | -0.000 | 6.331 | 0.000 | 0.000 | 17.061 | 16.901 | -31.304 | XOM_R2OWSG MWD+IFR1+MS |
| 4800.000 | 11.849 | 160.493 | 4729.573 | 17.438 | 0.000 | 17.439 | -0.000 | 6.472 | 0.000 | 0.000 | 17.445 | 17.277 | -30.246 | XOM_R2OWSG MWD+IFR1+MS |
| 4883.989 | 11.849 | 160.493 | 4811.772 | 17.760 | 0.000 | 17.762 | -0.000 | 6.591 | 0.000 | 0.000 | 17.767 | 17.592 | -29.435 | XOM_R2OWSG MWD+IFR1+MS |
| 4900.000 | 11.529 | 160.493 | 4827.451 | 17.825 | 0.000 | 17.823 | -0.000 | 6.614 | 0.000 | 0.000 | 17.828 | 17.652 | -29.282 | XOM_R2OWSG MWD+IFR1+MS |
| 5000.000 | 9.529 | 160.493 | 4925.762 | 18.220 | 0.000 | 18.204 | -0.000 | 6.757 | 0.000 | 0.000 | 18.208 | 18.025 | -28.457 | XOM_R2OWSG MWD+IFR1+MS |
| 5100.000 | 7.529 | 160.493 | 5024.652 | 18.588 | 0.000 | 18.578 | -0.000 | 6.898 | 0.000 | 0.000 | 18.582 | 18.392 | -27.810 | XOM_R2OWSG MWD+IFR1+MS |
| 5200.000 | 5.529 | 160.493 | 5123.998 | 18.929 | 0.000 | 18.945 | -0.000 | 7.034 | 0.000 | 0.000 | 18.948 | 18.753 | -27.318 | XOM_R2OWSG MWD+IFR1+MS |
| 5300.000 | 3.529 | 160.493 | 5223.681 | 19.241 | 0.000 | 19.304 | -0.000 | 7.166 | 0.000 | 0.000 | 19.307 | 19.109 | -26.938 | XOM_R2OWSG MWD+IFR1+MS |
| 5400.000 | 1.529 | 160.493 | 5323.578 | 19.525 | 0.000 | 19.656 | -0.000 | 7.294 | 0.000 | 0.000 | 19.659 | 19.458 | -26.638 | XOM_R2OWSG MWD+IFR1+MS |
| 5476.431 | 0.000 | 0.000 | 5400.000 | 19.753 | 0.000 | 19.872 | 0.000 | 7.390 | 0.000 | 0.000 | 19.913 | 19.711 | -26.831 | XOM_R2OWSG MWD+IFR1+MS |
| 5500.000 | 0.000 | 0.000 | 5423.569 | 19.828 | 0.000 | 19.946 | 0.000 | 7.419 | 0.000 | 0.000 | 19.987 | 19.787 | -27.013 | XOM_R2OWSG MWD+IFR1+MS |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5600.000 | 0.000 | 0.000 | 5523.569 | 20.150 | 0.000 | 20.261 | 0.000 | 7.545 | 0.000 | 0.000 | 20.304 | 20.106 | -27.782 | XOM_R2OWSG MWD+IFR1+MS |
| 5700.000 | 0.000 | 0.000 | 5623.569 | 20.472 | 0.000 | 20.578 | 0.000 | 7.672 | 0.000 | 0.000 | 20.623 | 20.428 | -28.549 | XOM_R2OWSG MWD+IFR1+MS |
| 5800.000 | 0.000 | 0.000 | 5723.569 | 20.796 | 0.000 | 20.896 | 0.000 | 7.802 | 0.000 | 0.000 | 20.942 | 20.750 | -29.314 | XOM_R2OWSG MWD+IFR1+MS |
| 5900.000 | 0.000 | 0.000 | 5823.569 | 21.121 | 0.000 | 21.216 | 0.000 | 7.935 | 0.000 | 0.000 | 21.263 | 21.073 | -30.074 | XOM_R2OWSG MWD+IFR1+MS |
| 6000.000 | 0.000 | 0.000 | 5923.569 | 21.447 | 0.000 | 21.536 | 0.000 | 8.070 | 0.000 | 0.000 | 21.585 | 21.398 | -30.829 | XOM_R2OWSG MWD+IFR1+MS |
| 6100.000 | 0.000 | 0.000 | 6023.569 | 21.774 | 0.000 | 21.858 | 0.000 | 8.208 | 0.000 | 0.000 | 21.909 | 21.723 | -31.578 | XOM_R2OWSG MWD+IFR1+MS |
| 6200.000 | 0.000 | 0.000 | 6123.569 | 22.102 | 0.000 | 22.181 | 0.000 | 8.348 | 0.000 | 0.000 | 22.233 | 22.049 | -32.320 | XOM_R2OWSG MWD+IFR1+MS |
| 6300.000 | 0.000 | 0.000 | 6223.569 | 22.431 | 0.000 | 22.505 | 0.000 | 8.491 | 0.000 | 0.000 | 22.559 | 22.377 | -33.054 | XOM_R2OWSG MWD+IFR1+MS |
| 6400.000 | 0.000 | 0.000 | 6323.569 | 22.761 | 0.000 | 22.830 | 0.000 | 8.636 | 0.000 | 0.000 | 22.886 | 22.705 | -33.779 | XOM_R2OWSG MWD+IFR1+MS |
| 6500.000 | 0.000 | 0.000 | 6423.569 | 23.092 | 0.000 | 23.156 | 0.000 | 8.784 | 0.000 | 0.000 | 23.214 | 23.034 | -34.495 | XOM_R2OWSG MWD+IFR1+MS |
| 6600.000 | 0.000 | 0.000 | 6523.569 | 23.423 | 0.000 | 23.483 | 0.000 | 8.935 | 0.000 | 0.000 | 23.542 | 23.364 | -35.201 | XOM_R2OWSG MWD+IFR1+MS |
| 6700.000 | 0.000 | 0.000 | 6623.569 | 23.755 | 0.000 | 23.811 | 0.000 | 9.088 | 0.000 | 0.000 | 23.872 | 23.694 | -35.895 | XOM_R2OWSG MWD+IFR1+MS |
| 6800.000 | 0.000 | 0.000 | 6723.569 | 24.088 | 0.000 | 24.140 | 0.000 | 9.244 | 0.000 | 0.000 | 24.202 | 24.026 | -36.579 | XOM_R2OWSG MWD+IFR1+MS |
| 6900.000 | 0.000 | 0.000 | 6823.569 | 24.422 | 0.000 | 24.469 | 0.000 | 9.403 | 0.000 | 0.000 | 24.533 | 24.358 | -37.250 | XOM_R2OWSG MWD+IFR1+MS |
| 7000.000 | 0.000 | 0.000 | 6923.569 | 24.757 | 0.000 | 24.800 | 0.000 | 9.565 | 0.000 | 0.000 | 24.865 | 24.690 | -37.910 | XOM_R2OWSG MWD+IFR1+MS |
| 7100.000 | 0.000 | 0.000 | 7023.569 | 25.092 | 0.000 | 25.131 | 0.000 | 9.729 | 0.000 | 0.000 | 25.198 | 25.024 | -38.556 | XOM_R2OWSG MWD+IFR1+MS |
| 7200.000 | 0.000 | 0.000 | 7123.569 | 25.428 | 0.000 | 25.463 | 0.000 | 9.896 | 0.000 | 0.000 | 25.532 | 25.358 | -39.190 | XOM_R2OWSG MWD+IFR1+MS |
| 7300.000 | 0.000 | 0.000 | 7223.569 | 25.764 | 0.000 | 25.795 | 0.000 | 10.066 | 0.000 | 0.000 | 25.866 | 25.693 | -39.811 | XOM_R2OWSG MWD+IFR1+MS |
| 7400.000 | 0.000 | 0.000 | 7323.569 | 26.101 | 0.000 | 26.128 | 0.000 | 10.239 | 0.000 | 0.000 | 26.201 | 26.028 | -40.419 | XOM_R2OWSG MWD+IFR1+MS |
| 7500.000 | 0.000 | 0.000 | 7423.569 | 26.438 | 0.000 | 26.462 | 0.000 | 10.414 | 0.000 | 0.000 | 26.537 | 26.364 | -41.013 | XOM_R2OWSG MWD+IFR1+MS |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7600.000 | 0.000 | 0.000 | 7523.569 | 26.776 | 0.000 | 26.797 | 0.000 | 10.592 | 0.000 | 0.000 | 26.873 | 26.700 | -41.593 | XOM_R2OWSG MWD+IFR1+MS |
| 7700.000 | 0.000 | 0.000 | 7623.569 | 27.115 | 0.000 | 27.132 | 0.000 | 10.773 | 0.000 | 0.000 | 27.210 | 27.037 | -42.161 | XOM_R2OWSG MWD+IFR1+MS |
| 7800.000 | 0.000 | 0.000 | 7723.569 | 27.454 | 0.000 | 27.468 | 0.000 | 10.958 | 0.000 | 0.000 | 27.547 | 27.375 | -42.715 | XOM_R2OWSG MWD+IFR1+MS |
| 7900.000 | 0.000 | 0.000 | 7823.569 | 27.794 | 0.000 | 27.804 | 0.000 | 11.144 | 0.000 | 0.000 | 27.885 | 27.713 | -43.255 | XOM_R2OWSG MWD+IFR1+MS |
| 8000.000 | 0.000 | 0.000 | 7923.569 | 28.134 | 0.000 | 28.141 | 0.000 | 11.334 | 0.000 | 0.000 | 28.224 | 28.051 | -43.782 | XOM_R2OWSG MWD+IFR1+MS |
| 8100.000 | 0.000 | 0.000 | 8023.569 | 28.474 | 0.000 | 28.479 | 0.000 | 11.527 | 0.000 | 0.000 | 28.563 | 28.390 | -44.297 | XOM_R2OWSG MWD+IFR1+MS |
| 8200.000 | 0.000 | 0.000 | 8123.569 | 28.815 | 0.000 | 28.816 | 0.000 | 11.723 | 0.000 | 0.000 | 28.902 | 28.729 | -44.798 | XOM_R2OWSG MWD+IFR1+MS |
| 8300.000 | 0.000 | 0.000 | 8223.569 | 29.157 | 0.000 | 29.155 | 0.000 | 11.921 | 0.000 | 0.000 | 29.242 | 29.069 | 134.714 | XOM_R2OWSG MWD+IFR1+MS |
| 8400.000 | 0.000 | 0.000 | 8323.569 | 29.498 | 0.000 | 29.494 | 0.000 | 12.123 | 0.000 | 0.000 | 29.583 | 29.409 | 134.238 | XOM_R2OWSG MWD+IFR1+MS |
| 8500.000 | 0.000 | 0.000 | 8423.569 | 29.841 | 0.000 | 29.833 | 0.000 | 12.327 | 0.000 | 0.000 | 29.923 | 29.750 | 133.774 | XOM_R2OWSG MWD+IFR1+MS |
| 8600.000 | 0.000 | 0.000 | 8523.569 | 30.183 | 0.000 | 30.173 | 0.000 | 12.534 | 0.000 | 0.000 | 30.265 | 30.091 | 133.323 | XOM_R2OWSG MWD+IFR1+MS |
| 8700.000 | 0.000 | 0.000 | 8623.569 | 30.526 | 0.000 | 30.513 | 0.000 | 12.745 | 0.000 | 0.000 | 30.607 | 30.432 | 132.883 | XOM_R2OWSG MWD+IFR1+MS |
| 8800.000 | 0.000 | 0.000 | 8723.569 | 30.869 | 0.000 | 30.854 | 0.000 | 12.958 | 0.000 | 0.000 | 30.949 | 30.774 | 132.455 | XOM_R2OWSG MWD+IFR1+MS |
| 8900.000 | 0.000 | 0.000 | 8823.569 | 31.213 | 0.000 | 31.195 | 0.000 | 13.174 | 0.000 | 0.000 | 31.291 | 31.116 | 132.038 | XOM_R2OWSG MWD+IFR1+MS |
| 9000.000 | 0.000 | 0.000 | 8923.569 | 31.557 | 0.000 | 31.536 | 0.000 | 13.394 | 0.000 | 0.000 | 31.634 | 31.459 | 131.632 | XOM_R2OWSG MWD+IFR1+MS |
| 9100.000 | 0.000 | 0.000 | 9023.569 | 31.901 | 0.000 | 31.878 | 0.000 | 13.616 | 0.000 | 0.000 | 31.977 | 31.801 | 131.237 | XOM_R2OWSG MWD+IFR1+MS |
| 9200.000 | 0.000 | 0.000 | 9123.569 | 32.246 | 0.000 | 32.220 | 0.000 | 13.841 | 0.000 | 0.000 | 32.321 | 32.145 | 130.852 | XOM_R2OWSG MWD+IFR1+MS |
| 9300.000 | 0.000 | 0.000 | 9223.569 | 32.590 | 0.000 | 32.563 | 0.000 | 14.069 | 0.000 | 0.000 | 32.665 | 32.488 | 130.478 | XOM_R2OWSG MWD+IFR1+MS |
| 9310.233 | 0.000 | 0.000 | 9233.803 | 32.626 | 0.000 | 32.598 | 0.000 | 14.093 | 0.000 | 0.000 | 32.700 | 32.523 | 130.440 | XOM_R2OWSG MWD+IFR1+MS |
| 9400.000 | 7.181 | 359.617 | 9323.334 | 32.429 | 0.000 | 32.901 | 0.000 | 14.296 | 0.000 | 0.000 | 33.002 | 32.823 | 130.792 | XOM_R2OWSG MWD+IFR1+MS |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 9500.000 | 15.181 | 359.617 | 9421.357 | 31.707 | 0.000 | 33.222 | 0.000 | 14.509 | 0.000 | 0.000 | 33.319 | 33.136 | 132.808 | XOM_R2OWSG MWD+IFR1+MS |
| 9600.000 | 23.181 | 359.617 | 9515.728 | 30.478 | 0.000 | 33.522 | 0.000 | 14.707 | 0.000 | 0.000 | 33.610 | 33.419 | -43.050 | XOM_R2OWSG MWD+IFR1+MS |
| 9700.000 | 31.181 | 359.617 | 9604.613 | 28.791 | 0.000 | 33.799 | 0.000 | 14.891 | 0.000 | 0.000 | 33.874 | 33.664 | -37.073 | XOM_R2OWSG MWD+IFR1+MS |
| 9800.000 | 39.181 | 359.617 | 9686.279 | 26.719 | 0.000 | 34.049 | 0.000 | 15.062 | 0.000 | 0.000 | 34.110 | 33.866 | -30.415 | XOM_R2OWSG MWD+IFR1+MS |
| 9900.000 | 47.181 | 359.617 | 9759.139 | 24.369 | 0.000 | 34.272 | 0.000 | 15.227 | 0.000 | 0.000 | 34.321 | 34.023 | -24.367 | XOM_R2OWSG MWD+IFR1+MS |
| 10000.000 | 55.181 | 359.617 | 9821.774 | 21.893 | 0.000 | 34.465 | 0.000 | 15.394 | 0.000 | 0.000 | 34.505 | 34.136 | -19.532 | XOM_R2OWSG MWD+IFR1+MS |
| 10100.000 | 63.181 | 359.617 | 9872.965 | 19.507 | 0.000 | 34.629 | 0.000 | 15.570 | 0.000 | 0.000 | 34.661 | 34.210 | -15.873 | XOM_R2OWSG MWD+IFR1+MS |
| 10200.000 | 71.181 | 359.617 | 9911.715 | 17.508 | 0.000 | 34.764 | 0.000 | 15.766 | 0.000 | 0.000 | 34.790 | 34.253 | -13.128 | XOM_R2OWSG MWD+IFR1+MS |
| 10300.000 | 79.181 | 359.617 | 9937.270 | 16.266 | 0.000 | 34.868 | 0.000 | 15.987 | 0.000 | 0.000 | 34.889 | 34.274 | -11.053 | XOM_R2OWSG MWD+IFR1+MS |
| 10400.000 | 87.181 | 359.617 | 9949.134 | 16.102 | 0.000 | 34.942 | 0.000 | 16.234 | 0.000 | 0.000 | 34.959 | 34.283 | -9.473 | XOM_R2OWSG MWD+IFR1+MS |
| 10435.233 | 90.000 | 359.617 | 9950.000 | 16.327 | 0.000 | 34.960 | 0.000 | 16.327 | 0.000 | 0.000 | 34.975 | 34.286 | -9.027 | XOM_R2OWSG MWD+IFR1+MS |
| 10500.000 | 90.000 | 359.617 | 9950.000 | 16.508 | 0.000 | 34.993 | 0.000 | 16.508 | 0.000 | 0.000 | 35.006 | 34.291 | -8.199 | XOM_R2OWSG MWD+IFR1+MS |
| 10600.000 | 90.000 | 359.617 | 9950.000 | 16.815 | 0.000 | 35.060 | 0.000 | 16.815 | 0.000 | 0.000 | 35.069 | 34.297 | -6.910 | XOM_R2OWSG MWD+IFR1+MS |
| 10700.000 | 90.000 | 359.617 | 9950.000 | 17.152 | 0.000 | 35.143 | 0.000 | 17.152 | 0.000 | 0.000 | 35.150 | 34.304 | -5.698 | XOM_R2OWSG MWD+IFR1+MS |
| 10800.000 | 90.000 | 359.617 | 9950.000 | 17.517 | 0.000 | 35.242 | 0.000 | 17.517 | 0.000 | 0.000 | 35.247 | 34.311 | -4.610 | XOM_R2OWSG MWD+IFR1+MS |
| 10900.000 | 90.000 | 359.617 | 9950.000 | 17.910 | 0.000 | 35.358 | 0.000 | 17.910 | 0.000 | 0.000 | 35.362 | 34.319 | -3.666 | XOM_R2OWSG MWD+IFR1+MS |
| 11000.000 | 90.000 | 359.617 | 9950.000 | 18.327 | 0.000 | 35.490 | 0.000 | 18.327 | 0.000 | 0.000 | 35.493 | 34.326 | -2.866 | XOM_R2OWSG MWD+IFR1+MS |
| 11100.000 | 90.000 | 359.617 | 9950.000 | 18.769 | 0.000 | 35.638 | 0.000 | 18.769 | 0.000 | 0.000 | 35.640 | 34.334 | -2.199 | XOM_R2OWSG MWD+IFR1+MS |
| 11200.000 | 90.000 | 359.617 | 9950.000 | 19.232 | 0.000 | 35.802 | 0.000 | 19.232 | 0.000 | 0.000 | 35.803 | 34.342 | -1.649 | XOM_R2OWSG MWD+IFR1+MS |
| 11300.000 | 90.000 | 359.617 | 9950.000 | 19.715 | 0.000 | 35.982 | 0.000 | 19.715 | 0.000 | 0.000 | 35.982 | 34.351 | -1.199 | XOM_R2OWSG MWD+IFR1+MS |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11400.000 | 90.000 | 359.617 | 9950.000 | 20.218 | 0.000 | 36.176 | 0.000 | 20.218 | 0.000 | 0.000 | 36.176 | 34.360 | -0.831 | XOM_R2OWSG MWD+IFR1+MS |
| 11500.000 | 90.000 | 359.617 | 9950.000 | 20.738 | 0.000 | 36.386 | 0.000 | 20.738 | 0.000 | 0.000 | 36.386 | 34.370 | -0.532 | XOM_R2OWSG MWD+IFR1+MS |
| 11600.000 | 90.000 | 359.617 | 9950.000 | 21.274 | 0.000 | 36.610 | 0.000 | 21.274 | 0.000 | 0.000 | 36.610 | 34.380 | -0.289 | XOM_R2OWSG MWD+IFR1+MS |
| 11700.000 | 90.000 | 359.617 | 9950.000 | 21.825 | 0.000 | 36.849 | 0.000 | 21.825 | 0.000 | 0.000 | 36.849 | 34.391 | -0.092 | XOM_R2OWSG MWD+IFR1+MS |
| 11800.000 | 90.000 | 359.617 | 9950.000 | 22.390 | 0.000 | 37.103 | 0.000 | 22.390 | 0.000 | 0.000 | 37.103 | 34.403 | 0.069 | XOM_R2OWSG MWD+IFR1+MS |
| 11900.000 | 90.000 | 359.617 | 9950.000 | 22.968 | 0.000 | 37.370 | 0.000 | 22.968 | 0.000 | 0.000 | 37.370 | 34.415 | 0.198 | XOM_R2OWSG MWD+IFR1+MS |
| 12000.000 | 90.000 | 359.617 | 9950.000 | 23.559 | 0.000 | 37.651 | 0.000 | 23.559 | 0.000 | 0.000 | 37.651 | 34.428 | 0.304 | XOM_R2OWSG MWD+IFR1+MS |
| 12100.000 | 90.000 | 359.617 | 9950.000 | 24.160 | 0.000 | 37.945 | 0.000 | 24.160 | 0.000 | 0.000 | 37.946 | 34.442 | 0.388 | XOM_R2OWSG MWD+IFR1+MS |
| 12200.000 | 90.000 | 359.617 | 9950.000 | 24.771 | 0.000 | 38.252 | 0.000 | 24.771 | 0.000 | 0.000 | 38.253 | 34.456 | 0.457 | XOM_R2OWSG MWD+IFR1+MS |
| 12300.000 | 90.000 | 359.617 | 9950.000 | 25.392 | 0.000 | 38.572 | 0.000 | 25.392 | 0.000 | 0.000 | 38.573 | 34.471 | 0.511 | XOM_R2OWSG MWD+IFR1+MS |
| 12400.000 | 90.000 | 359.617 | 9950.000 | 26.022 | 0.000 | 38.905 | 0.000 | 26.022 | 0.000 | 0.000 | 38.906 | 34.487 | 0.555 | XOM_R2OWSG MWD+IFR1+MS |
| 12500.000 | 90.000 | 359.617 | 9950.000 | 26.660 | 0.000 | 39.249 | 0.000 | 26.660 | 0.000 | 0.000 | 39.251 | 34.503 | 0.589 | XOM_R2OWSG MWD+IFR1+MS |
| 12600.000 | 90.000 | 359.617 | 9950.000 | 27.306 | 0.000 | 39.606 | 0.000 | 27.306 | 0.000 | 0.000 | 39.607 | 34.520 | 0.615 | XOM_R2OWSG MWD+IFR1+MS |
| 12700.000 | 90.000 | 359.617 | 9950.000 | 27.958 | 0.000 | 39.974 | 0.000 | 27.958 | 0.000 | 0.000 | 39.975 | 34.538 | 0.635 | XOM_R2OWSG MWD+IFR1+MS |
| 12800.000 | 90.000 | 359.617 | 9950.000 | 28.618 | 0.000 | 40.353 | 0.000 | 28.618 | 0.000 | 0.000 | 40.354 | 34.556 | 0.650 | XOM_R2OWSG MWD+IFR1+MS |
| 12900.000 | 90.000 | 359.617 | 9950.000 | 29.283 | 0.000 | 40.743 | 0.000 | 29.283 | 0.000 | 0.000 | 40.744 | 34.575 | 0.661 | XOM_R2OWSG MWD+IFR1+MS |
| 13000.000 | 90.000 | 359.617 | 9950.000 | 29.955 | 0.000 | 41.143 | 0.000 | 29.955 | 0.000 | 0.000 | 41.145 | 34.595 | 0.667 | XOM_R2OWSG MWD+IFR1+MS |
| 13100.000 | 90.000 | 359.617 | 9950.000 | 30.632 | 0.000 | 41.554 | 0.000 | 30.632 | 0.000 | 0.000 | 41.556 | 34.615 | 0.671 | XOM_R2OWSG MWD+IFR1+MS |
| 13200.000 | 90.000 | 359.617 | 9950.000 | 31.313 | 0.000 | 41.974 | 0.000 | 31.313 | 0.000 | 0.000 | 41.977 | 34.636 | 0.672 | XOM_R2OWSG MWD+IFR1+MS |
| 13300.000 | 90.000 | 359.617 | 9950.000 | 32.000 | 0.000 | 42.405 | 0.000 | 32.000 | 0.000 | 0.000 | 42.407 | 34.658 | 0.671 | XOM_R2OWSG MWD+IFR1+MS |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 13400.000 | 90.000 | 359.617 | 9950.000 | 32.691 | 0.000 | 42.844 | 0.000 | 32.691 | 0.000 | 0.000 | 42.847 | 34.681 | 0.668 | XOM_R2OWSG MWD+IFR1+MS |
| 13500.000 | 90.000 | 359.617 | 9950.000 | 33.386 | 0.000 | 43.293 | 0.000 | 33.386 | 0.000 | 0.000 | 43.295 | 34.704 | 0.664 | XOM_R2OWSG MWD+IFR1+MS |
| 13600.000 | 90.000 | 359.617 | 9950.000 | 34.085 | 0.000 | 43.750 | 0.000 | 34.085 | 0.000 | 0.000 | 43.753 | 34.728 | 0.659 | XOM_R2OWSG MWD+IFR1+MS |
| 13700.000 | 90.000 | 359.617 | 9950.000 | 34.788 | 0.000 | 44.216 | 0.000 | 34.788 | 0.000 | 0.000 | 44.219 | 34.752 | 0.652 | XOM_R2OWSG MWD+IFR1+MS |
| 13800.000 | 90.000 | 359.617 | 9950.000 | 35.494 | 0.000 | 44.691 | 0.000 | 35.494 | 0.000 | 0.000 | 44.693 | 34.777 | 0.645 | XOM_R2OWSG MWD+IFR1+MS |
| 13900.000 | 90.000 | 359.617 | 9950.000 | 36.203 | 0.000 | 45.173 | 0.000 | 36.203 | 0.000 | 0.000 | 45.176 | 34.803 | 0.637 | XOM_R2OWSG MWD+IFR1+MS |
| 14000.000 | 90.000 | 359.617 | 9950.000 | 36.916 | 0.000 | 45.663 | 0.000 | 36.916 | 0.000 | 0.000 | 45.666 | 34.830 | 0.629 | XOM_R2OWSG MWD+IFR1+MS |
| 14100.000 | 90.000 | 359.617 | 9950.000 | 37.631 | 0.000 | 46.160 | 0.000 | 37.631 | 0.000 | 0.000 | 46.163 | 34.857 | 0.620 | XOM_R2OWSG MWD+IFR1+MS |
| 14200.000 | 90.000 | 359.617 | 9950.000 | 38.349 | 0.000 | 46.665 | 0.000 | 38.349 | 0.000 | 0.000 | 46.668 | 34.885 | 0.611 | XOM_R2OWSG MWD+IFR1+MS |
| 14300.000 | 90.000 | 359.617 | 9950.000 | 39.069 | 0.000 | 47.177 | 0.000 | 39.069 | 0.000 | 0.000 | 47.180 | 34.913 | 0.601 | XOM_R2OWSG MWD+IFR1+MS |
| 14400.000 | 90.000 | 359.617 | 9950.000 | 39.792 | 0.000 | 47.695 | 0.000 | 39.792 | 0.000 | 0.000 | 47.698 | 34.942 | 0.591 | XOM_R2OWSG MWD+IFR1+MS |
| 14500.000 | 90.000 | 359.617 | 9950.000 | 40.518 | 0.000 | 48.220 | 0.000 | 40.518 | 0.000 | 0.000 | 48.223 | 34.972 | 0.581 | XOM_R2OWSG MWD+IFR1+MS |
| 14600.000 | 90.000 | 359.617 | 9950.000 | 41.245 | 0.000 | 48.752 | 0.000 | 41.245 | 0.000 | 0.000 | 48.755 | 35.002 | 0.571 | XOM_R2OWSG MWD+IFR1+MS |
| 14700.000 | 90.000 | 359.617 | 9950.000 | 41.975 | 0.000 | 49.289 | 0.000 | 41.975 | 0.000 | 0.000 | 49.293 | 35.034 | 0.561 | XOM_R2OWSG MWD+IFR1+MS |
| 14800.000 | 90.000 | 359.617 | 9950.000 | 42.706 | 0.000 | 49.833 | 0.000 | 42.706 | 0.000 | 0.000 | 49.836 | 35.065 | 0.551 | XOM_R2OWSG MWD+IFR1+MS |
| 14900.000 | 90.000 | 359.617 | 9950.000 | 43.440 | 0.000 | 50.382 | 0.000 | 43.440 | 0.000 | 0.000 | 50.385 | 35.098 | 0.541 | XOM_R2OWSG MWD+IFR1+MS |
| 15000.000 | 90.000 | 359.617 | 9950.000 | 44.175 | 0.000 | 50.937 | 0.000 | 44.175 | 0.000 | 0.000 | 50.940 | 35.131 | 0.531 | XOM_R2OWSG MWD+IFR1+MS |
| 15100.000 | 90.000 | 359.617 | 9950.000 | 44.912 | 0.000 | 51.497 | 0.000 | 44.912 | 0.000 | 0.000 | 51.501 | 35.165 | 0.521 | XOM_R2OWSG MWD+IFR1+MS |
| 15200.000 | 90.000 | 359.617 | 9950.000 | 45.650 | 0.000 | 52.063 | 0.000 | 45.650 | 0.000 | 0.000 | 52.066 | 35.199 | 0.511 | XOM_R2OWSG MWD+IFR1+MS |
| 15300.000 | 90.000 | 359.617 | 9950.000 | 46.390 | 0.000 | 52.633 | 0.000 | 46.390 | 0.000 | 0.000 | 52.637 | 35.234 | 0.501 | XOM_R2OWSG MWD+IFR1+MS |

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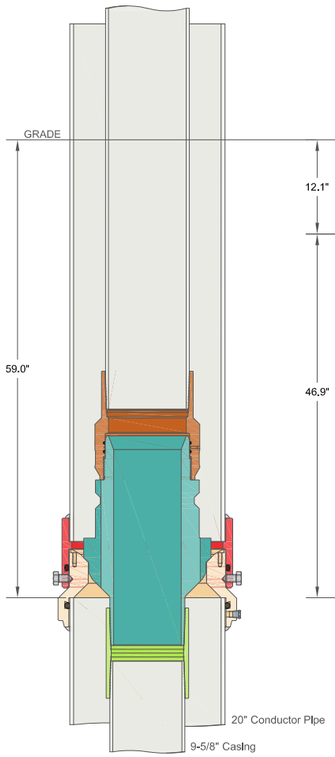
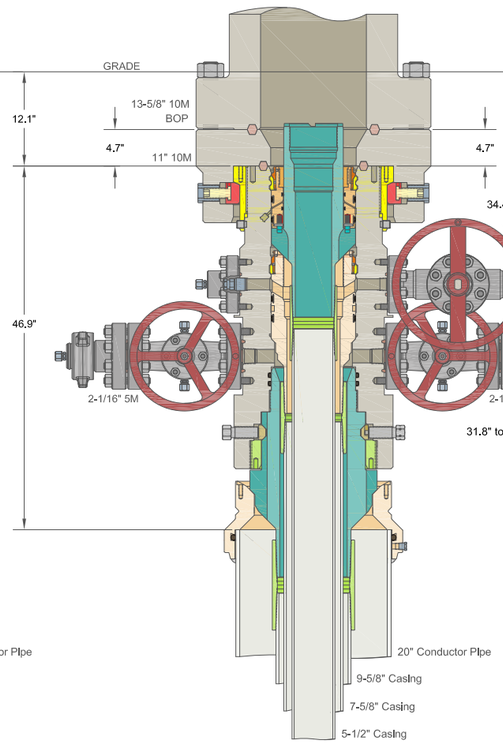
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 15400.000 | 90.000 | 359.617 | 9950.000 | 47.131 | 0.000 | 53.209 | 0.000 | 47.131 | 0.000 | 0.000 | 53.212 | 35.270 | 0.492 | XOM_R2OWSG MWD+IFR1+MS |
| 15500.000 | 90.000 | 359.617 | 9950.000 | 47.874 | 0.000 | 53.789 | 0.000 | 47.874 | 0.000 | 0.000 | 53.793 | 35.306 | 0.482 | XOM_R2OWSG MWD+IFR1+MS |
| 15600.000 | 90.000 | 359.617 | 9950.000 | 48.618 | 0.000 | 54.374 | 0.000 | 48.618 | 0.000 | 0.000 | 54.377 | 35.343 | 0.472 | XOM_R2OWSG MWD+IFR1+MS |
| 15700.000 | 90.000 | 359.617 | 9950.000 | 49.364 | 0.000 | 54.963 | 0.000 | 49.364 | 0.000 | 0.000 | 54.967 | 35.380 | 0.463 | XOM_R2OWSG MWD+IFR1+MS |
| 15800.000 | 90.000 | 359.617 | 9950.000 | 50.110 | 0.000 | 55.557 | 0.000 | 50.110 | 0.000 | 0.000 | 55.560 | 35.418 | 0.454 | XOM_R2OWSG MWD+IFR1+MS |
| 15900.000 | 90.000 | 359.617 | 9950.000 | 50.858 | 0.000 | 56.154 | 0.000 | 50.858 | 0.000 | 0.000 | 56.158 | 35.457 | 0.444 | XOM_R2OWSG MWD+IFR1+MS |
| 16000.000 | 90.000 | 359.617 | 9950.000 | 51.607 | 0.000 | 56.756 | 0.000 | 51.607 | 0.000 | 0.000 | 56.759 | 35.497 | 0.435 | XOM_R2OWSG MWD+IFR1+MS |
| 16100.000 | 90.000 | 359.617 | 9950.000 | 52.356 | 0.000 | 57.362 | 0.000 | 52.356 | 0.000 | 0.000 | 57.365 | 35.537 | 0.426 | XOM_R2OWSG MWD+IFR1+MS |
| 16200.000 | 90.000 | 359.617 | 9950.000 | 53.107 | 0.000 | 57.971 | 0.000 | 53.107 | 0.000 | 0.000 | 57.974 | 35.578 | 0.418 | XOM_R2OWSG MWD+IFR1+MS |
| 16300.000 | 90.000 | 359.617 | 9950.000 | 53.859 | 0.000 | 58.584 | 0.000 | 53.859 | 0.000 | 0.000 | 58.588 | 35.619 | 0.409 | XOM_R2OWSG MWD+IFR1+MS |
| 16400.000 | 90.000 | 359.617 | 9950.000 | 54.612 | 0.000 | 59.201 | 0.000 | 54.612 | 0.000 | 0.000 | 59.204 | 35.661 | 0.401 | XOM_R2OWSG MWD+IFR1+MS |
| 16500.000 | 90.000 | 359.617 | 9950.000 | 55.366 | 0.000 | 59.821 | 0.000 | 55.366 | 0.000 | 0.000 | 59.824 | 35.703 | 0.392 | XOM_R2OWSG MWD+IFR1+MS |
| 16600.000 | 90.000 | 359.617 | 9950.000 | 56.120 | 0.000 | 60.444 | 0.000 | 56.120 | 0.000 | 0.000 | 60.447 | 35.747 | 0.384 | XOM_R2OWSG MWD+IFR1+MS |
| 16700.000 | 90.000 | 359.617 | 9950.000 | 56.875 | 0.000 | 61.071 | 0.000 | 56.875 | 0.000 | 0.000 | 61.074 | 35.790 | 0.376 | XOM_R2OWSG MWD+IFR1+MS |
| 16800.000 | 90.000 | 359.617 | 9950.000 | 57.631 | 0.000 | 61.700 | 0.000 | 57.631 | 0.000 | 0.000 | 61.704 | 35.835 | 0.368 | XOM_R2OWSG MWD+IFR1+MS |
| 16900.000 | 90.000 | 359.617 | 9950.000 | 58.388 | 0.000 | 62.333 | 0.000 | 58.388 | 0.000 | 0.000 | 62.337 | 35.880 | 0.360 | XOM_R2OWSG MWD+IFR1+MS |
| 17000.000 | 90.000 | 359.617 | 9950.000 | 59.146 | 0.000 | 62.969 | 0.000 | 59.146 | 0.000 | 0.000 | 62.972 | 35.925 | 0.352 | XOM_R2OWSG MWD+IFR1+MS |
| 17100.000 | 90.000 | 359.617 | 9950.000 | 59.904 | 0.000 | 63.607 | 0.000 | 59.904 | 0.000 | 0.000 | 63.611 | 35.972 | 0.345 | XOM_R2OWSG MWD+IFR1+MS |
| 17200.000 | 90.000 | 359.617 | 9950.000 | 60.663 | 0.000 | 64.249 | 0.000 | 60.663 | 0.000 | 0.000 | 64.252 | 36.018 | 0.337 | XOM_R2OWSG MWD+IFR1+MS |
| 17300.000 | 90.000 | 359.617 | 9950.000 | 61.423 | 0.000 | 64.893 | 0.000 | 61.423 | 0.000 | 0.000 | 64.896 | 36.066 | 0.330 | XOM_R2OWSG MWD+IFR1+MS |

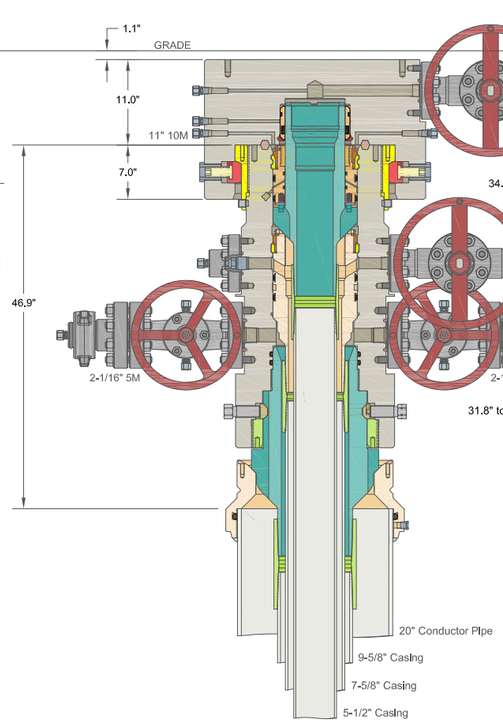
| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17400.000 | 90.000 | 359.617 | 9950.000 | 62.183 | 0.000 | 65.539 | 0.000 | 62.183 | 0.000 | 0.000 | 65.543 | 36.114 | 0.323 | XOM_R2OWSG MWD+IFR1+MS |
| 17500.000 | 90.000 | 359.617 | 9950.000 | 62.944 | 0.000 | 66.188 | 0.000 | 62.944 | 0.000 | 0.000 | 66.192 | 36.162 | 0.316 | XOM_R2OWSG MWD+IFR1+MS |
| 17600.000 | 90.000 | 359.617 | 9950.000 | 63.705 | 0.000 | 66.840 | 0.000 | 63.705 | 0.000 | 0.000 | 66.844 | 36.212 | 0.309 | XOM_R2OWSG MWD+IFR1+MS |
| 17700.000 | 90.000 | 359.617 | 9950.000 | 64.467 | 0.000 | 67.494 | 0.000 | 64.467 | 0.000 | 0.000 | 67.498 | 36.261 | 0.302 | XOM_R2OWSG MWD+IFR1+MS |
| 17800.000 | 90.000 | 359.617 | 9950.000 | 65.230 | 0.000 | 68.150 | 0.000 | 65.230 | 0.000 | 0.000 | 68.154 | 36.312 | 0.295 | XOM_R2OWSG MWD+IFR1+MS |
| 17900.000 | 90.000 | 359.617 | 9950.000 | 65.993 | 0.000 | 68.809 | 0.000 | 65.993 | 0.000 | 0.000 | 68.812 | 36.363 | 0.289 | XOM_R2OWSG MWD+IFR1+MS |
| 17957.402 | 90.000 | 359.617 | 9950.000 | 66.431 | 0.000 | 69.187 | 0.000 | 66.431 | 0.000 | 0.000 | 69.191 | 36.392 | 0.285 | XOM_R2OWSG MWD+IFR1+MS |
| 18007.406 | 90.000 | 359.617 | 9950.000 | 66.622 | 0.000 | 69.441 | 0.000 | 66.622 | 0.000 | 0.000 | 69.446 | 42.407 | 0.497 | MWD+IFR1+MS |

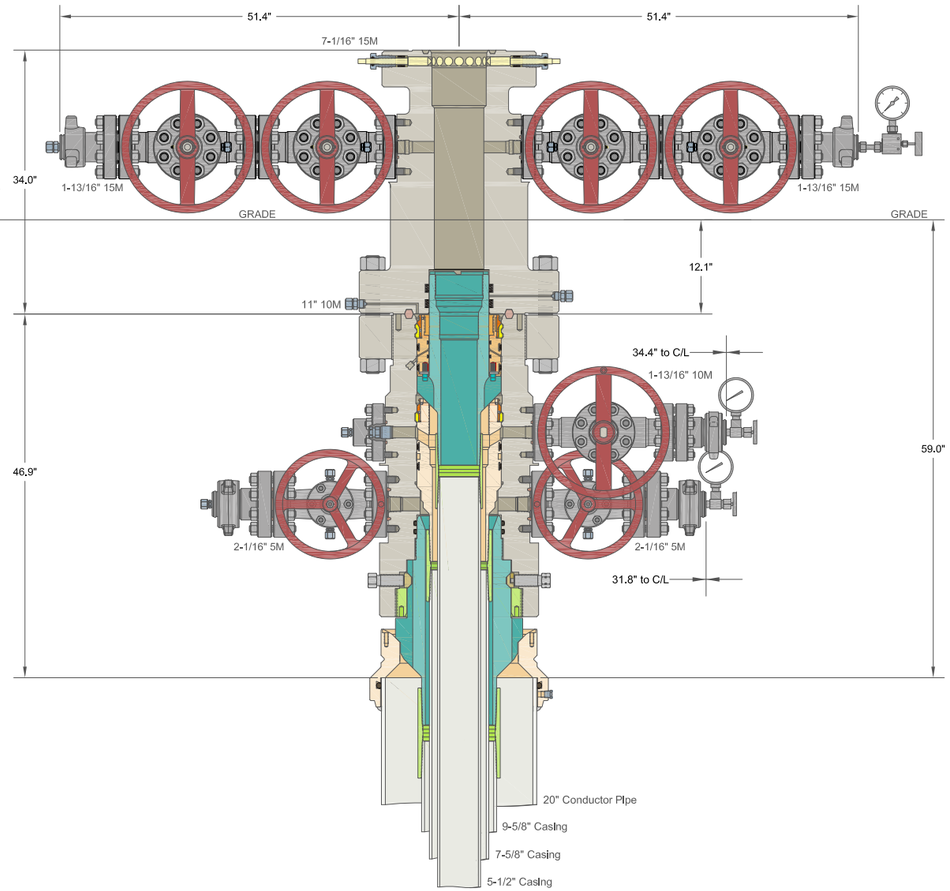
**Plan Targets** Corral 17-8 Fed Com 103H_Updated

| Target Name | Measured Depth (ft) | Grid Northing (ft) | Grid Easting (ft) | TVD MSL (ft) | Target Shape |
|---|---|---|---|---|---|
| 103H FTP | 10435.23 | 408851.80 | 601085.70 | 6948.00 | CIRCLE |
| 103H LTP | 17957.40 | 416373.80 | 601035.40 | 6948.00 | CIRCLE |
| 103H BHL | 18007.40 | 416423.80 | 601035.20 | 6948.00 | CIRCLE |




ALL DIMENSIONS APPROXIMATE

# CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead
With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head
And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers

| | | |
|---|---|---|
| DRAWN | VJK | 31MAR22 |
| APPRV | | |
| DRAWING NO. | HBE0000479 | |

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

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

**Background**

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

**Supporting Documentation**

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

Figure 1: Winch System attached to BOP Stack

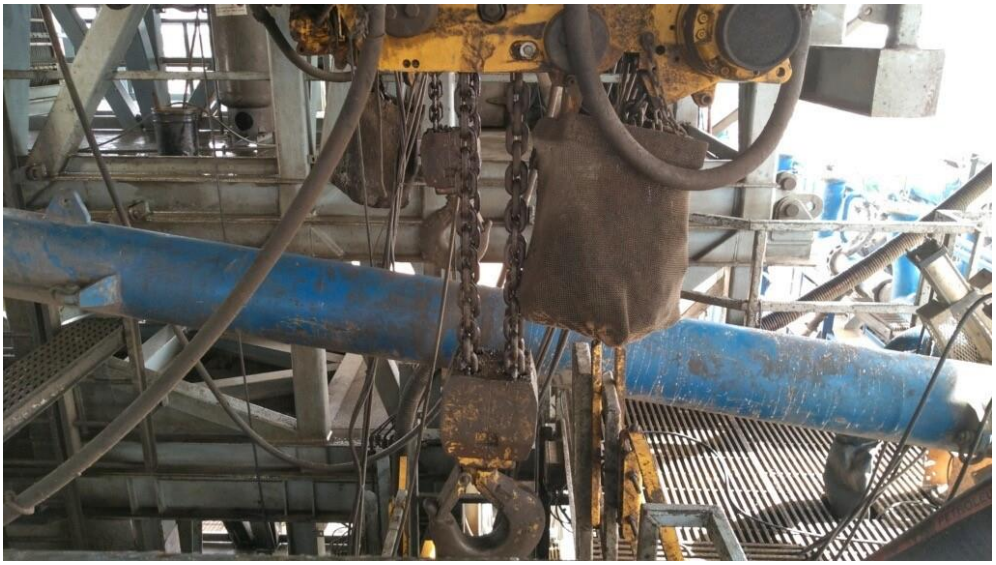


Figure 2: BOP Winch System

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

62 API STANDARD 53

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

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

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

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

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

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

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

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

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

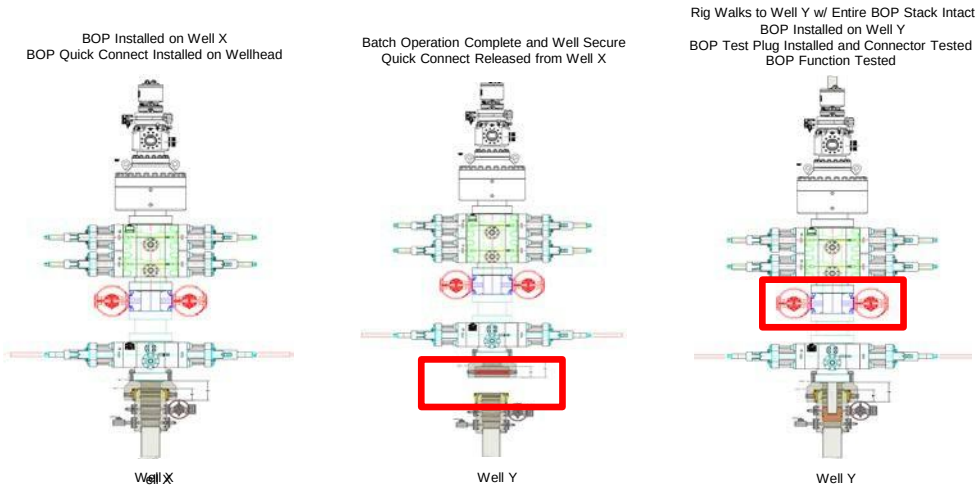
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often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

**Procedures**

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

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

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




**Summary**

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

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

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

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

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

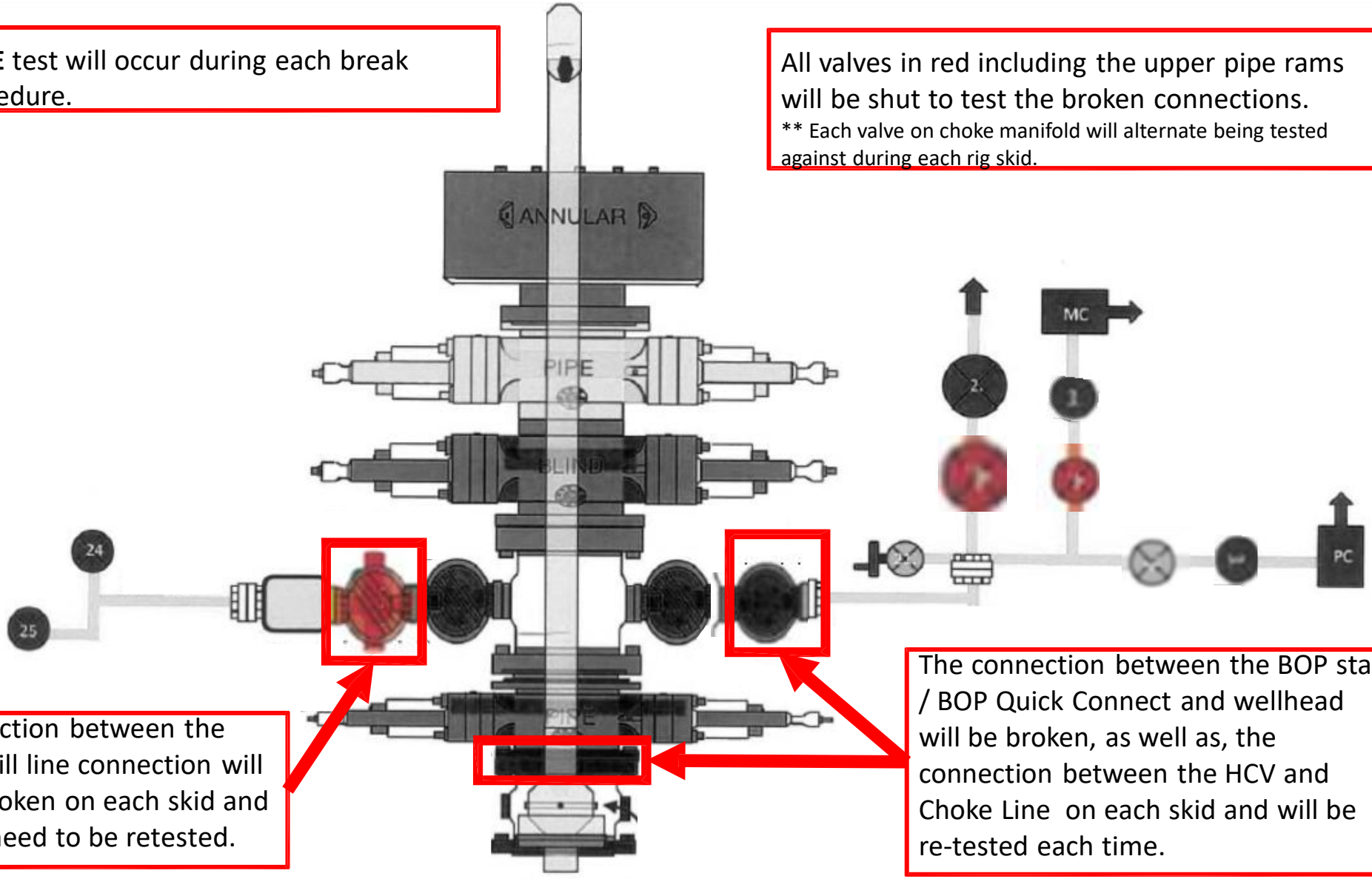
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

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

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

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

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




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

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

# 10,000 PSI Annular BOP Variance Request

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

## 1. Component and Preventer Compatibility Tables

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

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

**2. Well Control Procedures**

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

ii. Pit gain
iii. Time

h. Regroup and identify forward plan

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

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

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

CONDITIONS

Action 373854

## CONDITIONS

| | |
|---|---|
| Operator:<br>XTO ENERGY, INC<br>6401 Holiday Hill Road<br>Midland, TX 79707 | OGRID:<br>5380 |
| | Action Number:<br>373854 |
| | Action Type:<br>[C-103] NOI Change of Plans (C-103A) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| ward.rikala | All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required. | 8/21/2024 |