

Well Name: CORRAL CANYON 17-8 FEDERAL	Well Location: T25S / R29E / SEC 17 / SWSW / 32.124098 / -104.011949	County or Parish/State: EDDY / NM
Well Number: 162H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM99147	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: XTO ENERGY INCORPORATED	

Notice of Intent

Sundry ID: 2791073

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 05/17/2024	Time Sundry Submitted: 08:56
Date proposed operation will begin: 05/31/2024	

**Procedure Description:** XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include FTP, LTP, BHL, & Proposed total Depth. FROM: TO: FTP: 330' FSL & 1270' FWL OF SECTION 17-T25S-R29E 330' FSL & 1380' FWL OF SECTION 17-T25S-R29E LTP: 2317' FSL & 1270' FWL OF SECTION 8-T25S-R29E 2547' FSL & 1380' FWL OF SECTION 8-T25S-R29E BHL: 2447' FSL & 1270' FWL OF SECTION 8-T25S-R29E 2597' FSL & 1380' FWL OF SECTION 8-T25S-R29E The proposed total depth is changing from 18452' MD; 10672' TVD (Wolfcamp) to 18792' MD; 10754' TVD (Wolfcamp D/E). 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\_162H\_Sundry\_Documents\_20240517085638.pdf

Received by OCD: 7/10/2024 2:40:42 PM

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US Well Number:	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: TERRA SEBASTIAN	Signed on: MAY 17, 2024 08:56 AM
Name: XTO ENERGY INCORPORATED	
Title: Regulatory Advisor	
Street Address: 6401 HOLIDAY HILL ROAD SUITE 200	
City: MIDLAND	State: TX
Phone: (432) 999-3107	
Email address: TERRA.B.SEBASTIAN@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: 07/09/2024
Signature: Chris Walls	

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

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

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>	
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator	
3a. Address	3b. Phone No. (include area code)
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)	

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

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

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

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

## Additional Information

## Additional Remarks

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

## Location of Well

0. SHL: SWSW / 434 FSL / 990 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.124098 / LONG: -104.011949 ( TVD: 0 feet, MD: 0 feet )

PPP: SWSW / 330 FSL / 1270 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123801 / LONG: -104.011042 ( TVD: 10672 feet, MD: 11100 feet )

PPP: SENW / 2310 FNL / 1270 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.13562 / LONG: -104.011072 ( TVD: 10672 feet, MD: 13800 feet )

BHL: NWSW / 2447 FSL / 1270 FWL / TWSP: 25S / RANGE: 29E / SECTION: 8 / LAT: 32.144195 / LONG: -104.011132 ( TVD: 10672 feet, MD: 18452 feet )

CONFIDENTIAL

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

☒ AMENDED REPORT

**KC/AI 618.013013.03-13**

Intent ☒ As Drilled ☐

API # <b>30015</b>		
Operator Name: <b>XTO ENERGY, INC</b>	Property Name: <b>Coral 17-8 Fed Com</b>	Well Number <b>162H</b>

## 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 <b>N</b>	Section <b>17</b>	Township <b>25S</b>	Range <b>29E</b>	Lot	Feet <b>330</b>	From N/S <b>South</b>	Feet <b>1,380</b>	From E/W <b>West</b>	County <b>Eddy</b>
Latitude <b>32.123796</b>					Longitude <b>104.010687</b>				NAD <b>83</b>

## Last Take Point (LTP)

UL <b>K</b>	Section <b>8</b>	Township <b>25S</b>	Range <b>29E</b>	Lot	Feet <b>2,547</b>	From N/S <b>South</b>	Feet <b>1,380</b>	From E/W <b>West</b>	County <b>Eddy</b>
Latitude <b>32.144466</b>					Longitude <b>104.010777</b>				NAD <b>83</b>

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 162H

Projected TD: 18792' MD / 10754' TVD

SHL: 434' FSL & 990' FWL , Section 17, T25S, R29E

BHL: 2597' FSL & 1380' 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
Rustler	0'	Water
Top of Salt	590'	Water
Base of Salt	2678'	Water
Delaware	2878'	Water
Brushy Canyon	5370'	Water/Oil/Gas
Bone Spring	6586'	Water
1st Bone Spring	7363'	Water/Oil/Gas
2nd Bone Spring	7813'	Water/Oil/Gas
3rd Bone Spring	8641'	Water/Oil/Gas
Wolfcamp	9796'	Water/Oil/Gas
Wolfcamp X	9819'	Water/Oil/Gas
Wolfcamp Y	9896'	Water/Oil/Gas
Wolfcamp A	9936'	Water/Oil/Gas
Wolfcamp B	10269'	Water/Oil/Gas
Wolfcamp D	10654'	Water/Oil/Gas
<b>Target/Land Curve</b>	<b>10754'</b>	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 @ 555' (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 9948' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 18792 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9648 feet).

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 555'	9.625	40	J-55	BTC	New	1.60	11.21	28.38
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	1.93	2.86	1.89
8.75	4000' – 9948'	7.625	29.7	HC L-80	Flush Joint	New	1.40	2.30	2.30
6.75	0' – 9848'	5.5	20	RY P-110	Semi-Premium	New	1.26	1.67	2.30
6.75	9848' - 18792'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.53	2.30

- 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 +/- 555'**

Lead: 80 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft<sup>3</sup>/sx, 10.13 gal/sx water)

Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/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 +/- 9948'**

###### 1st Stage

Optional Lead: 290 sxs Class C (mixed at 10.5 ppg, 2.77 ft<sup>3</sup>/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 420 sxs Class C (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 5370

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

###### 2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft<sup>3</sup>/sx, 9.61 gal/sx water)

Tail: 600 sxs Class C (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/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 (5370') 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 +/- 18792'**

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 9648 feet

Tail: 620 sxs VersaCem (mixed at 14.8 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 10148 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 4904 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 nipping up on the 9.625, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping 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' - 555'	12.25	FW/Native	8.5-9	35-40	NC
555' - 9948'	8.75	FW / Cut Brine / Direct Emulsion	9-9.5	30-32	NC
9948' - 18792'	6.75	OBM	13-13.5	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 170 to 190 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 7270 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 162H

Measured Depth:	18792.70 ft
TVD RKB:	10754.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	408972.70 ft
Easting:	599644.60 ft
RKB:	2990.00 ft
Ground Level:	2957.00 ft
North Reference:	Grid
Convergence Angle:	0.17 Deg

Plan Sections		Corral 17-8 Fed Com 162H							
Measured			TVD			Build		Turn	Dogleg
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1841.62	14.83	154.36	1833.37	-86.06	41.30	2.00	0.00	2.00	
4669.10	14.83	154.36	4566.63	-738.62	354.48	0.00	0.00	0.00	
5410.73	0.00	0.00	5300.00	-824.68	395.78	-2.00	0.00	2.00	
10148.53	0.00	0.00	10037.80	-824.68	395.78	0.00	0.00	0.00	
11273.53	90.00	359.62	10754.00	-108.50	391.00	8.00	0.00	8.00	162H FTP
18792.70	90.00	359.62	10754.00	7410.50	340.80	0.00	0.00	0.00	162H LTP

Position Uncertainty			Corral 17-8 Fed Com 162H											
Measured			TVD	Highside		Lateral		Vertical		Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used

(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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
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
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
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
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.371	0.000	0.000	1.792	1.613	90.000
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
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
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
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.524	0.000	0.000	3.226	3.047	90.000
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
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.625	0.000	0.000	3.943	3.764	90.000
1200.000	2.000	154.363	1199.980	4.250	0.000	4.139	-0.000	2.680	0.000	0.000	4.285	4.105	89.996
1300.000	4.000	154.363	1299.838	4.572	0.000	4.467	-0.000	2.737	0.000	0.000	4.615	4.432	89.895
1400.000	6.000	154.363	1399.452	4.893	0.000	4.799	-0.000	2.794	0.000	0.000	4.949	4.764	89.854
1500.000	8.000	154.363	1498.702	5.212	0.000	5.136	-0.000	2.853	0.000	0.000	5.288	5.100	89.987
1600.000	10.000	154.363	1597.465	5.530	0.000	5.478	-0.000	2.913	0.000	0.000	5.630	5.441	90.402
1700.000	12.000	154.363	1695.623	5.847	0.000	5.827	-0.000	2.976	0.000	0.000	5.975	5.788	91.219
1800.000	14.000	154.363	1793.055	6.161	0.000	6.183	-0.000	3.041	0.000	0.000	6.324	6.141	92.599
1841.624	14.832	154.363	1833.369	6.292	0.000	6.333	-0.000	3.066	0.000	0.000	6.472	6.290	93.040

XOM\_R2OWSG  
MWD+IFR1+MS



															MWD+IFR1+MS
1900.000	14.832	154.363	1889.799	6.500	0.000	6.545	-0.000	3.113	0.000	0.000	6.677	6.500	94.602	XOM_R2OWSG	MWD+IFR1+MS
2000.000	14.832	154.363	1986.467	6.860	0.000	6.916	-0.000	3.201	0.000	0.000	7.030	6.864	98.186	XOM_R2OWSG	MWD+IFR1+MS
2100.000	14.832	154.363	2083.135	7.224	0.000	7.291	-0.000	3.294	0.000	0.000	7.390	7.231	102.336	XOM_R2OWSG	MWD+IFR1+MS
2200.000	14.832	154.363	2179.803	7.592	0.000	7.672	-0.000	3.390	0.000	0.000	7.755	7.601	107.001	XOM_R2OWSG	MWD+IFR1+MS
2300.000	14.832	154.363	2276.470	7.963	0.000	8.057	-0.000	3.490	0.000	0.000	8.125	7.973	112.013	XOM_R2OWSG	MWD+IFR1+MS
2400.000	14.832	154.363	2373.138	8.337	0.000	8.445	-0.000	3.594	0.000	0.000	8.501	8.346	117.099	XOM_R2OWSG	MWD+IFR1+MS
2500.000	14.832	154.363	2469.806	8.714	0.000	8.836	-0.000	3.701	0.000	0.000	8.882	8.720	121.962	XOM_R2OWSG	MWD+IFR1+MS
2600.000	14.832	154.363	2566.474	9.093	0.000	9.230	-0.000	3.810	0.000	0.000	9.268	9.093	126.371	XOM_R2OWSG	MWD+IFR1+MS
2700.000	14.832	154.363	2663.142	9.474	0.000	9.626	-0.000	3.922	0.000	0.000	9.657	9.467	130.216	XOM_R2OWSG	MWD+IFR1+MS
2800.000	14.832	154.363	2759.810	9.856	0.000	10.024	-0.000	4.037	0.000	0.000	10.050	9.842	133.489	XOM_R2OWSG	MWD+IFR1+MS
2900.000	14.832	154.363	2856.477	10.240	0.000	10.424	-0.000	4.155	0.000	0.000	10.446	10.217	-43.757	XOM_R2OWSG	MWD+IFR1+MS
3000.000	14.832	154.363	2953.145	10.625	0.000	10.826	-0.000	4.274	0.000	0.000	10.844	10.592	-41.446	XOM_R2OWSG	MWD+IFR1+MS
3100.000	14.832	154.363	3049.813	11.011	0.000	11.229	-0.000	4.396	0.000	0.000	11.244	10.968	-39.503	XOM_R2OWSG	MWD+IFR1+MS
3200.000	14.832	154.363	3146.481	11.399	0.000	11.633	-0.000	4.520	0.000	0.000	11.646	11.345	-37.859	XOM_R2OWSG	MWD+IFR1+MS
3300.000	14.832	154.363	3243.149	11.787	0.000	12.039	-0.000	4.646	0.000	0.000	12.050	11.722	-36.459	XOM_R2OWSG	MWD+IFR1+MS
3400.000	14.832	154.363	3339.817	12.177	0.000	12.445	-0.000	4.774	0.000	0.000	12.455	12.100	-35.257	XOM_R2OWSG	MWD+IFR1+MS
3500.000	14.832	154.363	3436.484	12.567	0.000	12.853	-0.000	4.904	0.000	0.000	12.861	12.479	-34.217	XOM_R2OWSG	MWD+IFR1+MS
3600.000	14.832	154.363	3533.152	12.958	0.000	13.261	-0.000	5.036	0.000	0.000	13.268	12.858	-33.311	XOM_R2OWSG	MWD+IFR1+MS
3700.000	14.832	154.363	3629.820	13.349	0.000	13.670	-0.000	5.169	0.000	0.000	13.676	13.237	-32.515	XOM_R2OWSG	MWD+IFR1+MS
3800.000	14.832	154.363	3726.488	13.741	0.000	14.080	-0.000	5.304	0.000	0.000	14.085	13.617	-31.812	XOM_R2OWSG	MWD+IFR1+MS

3900.000	14.832	154.363	3823.156	14.134	0.000	14.490	-0.000	5.441	0.000	0.000	14.495	13.998	-31.186	XOM_R2OWSG MWD+IFR1+MS
4000.000	14.832	154.363	3919.824	14.527	0.000	14.901	-0.000	5.580	0.000	0.000	14.905	14.379	-30.627	XOM_R2OWSG MWD+IFR1+MS
4100.000	14.832	154.363	4016.491	14.921	0.000	15.313	-0.000	5.720	0.000	0.000	15.316	14.760	-30.124	XOM_R2OWSG MWD+IFR1+MS
4200.000	14.832	154.363	4113.159	15.315	0.000	15.725	-0.000	5.862	0.000	0.000	15.728	15.142	-29.669	XOM_R2OWSG MWD+IFR1+MS
4300.000	14.832	154.363	4209.827	15.709	0.000	16.138	-0.000	6.006	0.000	0.000	16.140	15.525	-29.256	XOM_R2OWSG MWD+IFR1+MS
4400.000	14.832	154.363	4306.495	16.104	0.000	16.551	-0.000	6.151	0.000	0.000	16.553	15.907	-28.880	XOM_R2OWSG MWD+IFR1+MS
4500.000	14.832	154.363	4403.163	16.499	0.000	16.964	-0.000	6.298	0.000	0.000	16.966	16.290	-28.536	XOM_R2OWSG MWD+IFR1+MS
4600.000	14.832	154.363	4499.831	16.894	0.000	17.378	-0.000	6.447	0.000	0.000	17.380	16.673	-28.220	XOM_R2OWSG MWD+IFR1+MS
4669.104	14.832	154.363	4566.631	17.168	0.000	17.664	-0.000	6.550	0.000	0.000	17.665	16.938	-28.016	XOM_R2OWSG MWD+IFR1+MS
4700.000	14.215	154.363	4596.541	17.301	0.000	17.792	-0.000	6.598	0.000	0.000	17.793	17.056	-27.930	XOM_R2OWSG MWD+IFR1+MS
4800.000	12.215	154.363	4693.888	17.713	0.000	18.198	-0.000	6.748	0.000	0.000	18.198	17.435	-27.683	XOM_R2OWSG MWD+IFR1+MS
4900.000	10.215	154.363	4791.973	18.098	0.000	18.593	-0.000	6.894	0.000	0.000	18.594	17.809	-27.480	XOM_R2OWSG MWD+IFR1+MS
5000.000	8.215	154.363	4890.678	18.455	0.000	18.977	-0.000	7.034	0.000	0.000	18.978	18.177	-27.315	XOM_R2OWSG MWD+IFR1+MS
5100.000	6.215	154.363	4989.881	18.783	0.000	19.350	-0.000	7.168	0.000	0.000	19.350	18.539	-27.180	XOM_R2OWSG MWD+IFR1+MS
5200.000	4.215	154.363	5089.462	19.082	0.000	19.711	-0.000	7.297	0.000	0.000	19.712	18.893	-27.072	XOM_R2OWSG MWD+IFR1+MS
5300.000	2.215	154.363	5189.300	19.350	0.000	20.061	-0.000	7.421	0.000	0.000	20.061	19.239	-26.986	XOM_R2OWSG MWD+IFR1+MS
5400.000	0.215	154.363	5289.272	19.589	0.000	20.399	-0.000	7.541	0.000	0.000	20.399	19.576	-26.920	XOM_R2OWSG MWD+IFR1+MS
5410.728	0.000	0.000	5300.000	19.783	0.000	20.267	0.000	7.554	0.000	0.000	20.433	19.611	-26.934	XOM_R2OWSG MWD+IFR1+MS
5500.000	0.000	0.000	5389.272	20.064	0.000	20.535	0.000	7.659	0.000	0.000	20.702	19.891	-27.213	XOM_R2OWSG MWD+IFR1+MS
5600.000	0.000	0.000	5489.272	20.380	0.000	20.837	0.000	7.779	0.000	0.000	21.004	20.207	-27.527	XOM_R2OWSG MWD+IFR1+MS

5700.000	0.000	0.000	5589.272	20.697	0.000	21.140	0.000	7.902	0.000	0.000	21.309	20.524	-27.841	XOM_R2OWSG MWD+IFR1+MS
5800.000	0.000	0.000	5689.272	21.016	0.000	21.445	0.000	8.027	0.000	0.000	21.615	20.842	-28.155	XOM_R2OWSG MWD+IFR1+MS
5900.000	0.000	0.000	5789.272	21.336	0.000	21.752	0.000	8.155	0.000	0.000	21.922	21.161	-28.470	XOM_R2OWSG MWD+IFR1+MS
6000.000	0.000	0.000	5889.272	21.658	0.000	22.060	0.000	8.285	0.000	0.000	22.232	21.481	-28.785	XOM_R2OWSG MWD+IFR1+MS
6100.000	0.000	0.000	5989.272	21.980	0.000	22.370	0.000	8.418	0.000	0.000	22.542	21.803	-29.101	XOM_R2OWSG MWD+IFR1+MS
6200.000	0.000	0.000	6089.272	22.304	0.000	22.681	0.000	8.554	0.000	0.000	22.855	22.126	-29.416	XOM_R2OWSG MWD+IFR1+MS
6300.000	0.000	0.000	6189.272	22.628	0.000	22.993	0.000	8.692	0.000	0.000	23.168	22.450	-29.732	XOM_R2OWSG MWD+IFR1+MS
6400.000	0.000	0.000	6289.272	22.954	0.000	23.307	0.000	8.833	0.000	0.000	23.483	22.774	-30.047	XOM_R2OWSG MWD+IFR1+MS
6500.000	0.000	0.000	6389.272	23.281	0.000	23.622	0.000	8.976	0.000	0.000	23.799	23.100	-30.362	XOM_R2OWSG MWD+IFR1+MS
6600.000	0.000	0.000	6489.272	23.608	0.000	23.939	0.000	9.122	0.000	0.000	24.116	23.427	-30.678	XOM_R2OWSG MWD+IFR1+MS
6700.000	0.000	0.000	6589.272	23.937	0.000	24.256	0.000	9.272	0.000	0.000	24.435	23.754	-30.993	XOM_R2OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6689.272	24.266	0.000	24.575	0.000	9.423	0.000	0.000	24.755	24.082	-31.307	XOM_R2OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6789.272	24.596	0.000	24.895	0.000	9.578	0.000	0.000	25.076	24.412	-31.621	XOM_R2OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6889.272	24.927	0.000	25.216	0.000	9.735	0.000	0.000	25.397	24.741	-31.935	XOM_R2OWSG MWD+IFR1+MS
7100.000	0.000	0.000	6989.272	25.258	0.000	25.537	0.000	9.895	0.000	0.000	25.720	25.072	-32.248	XOM_R2OWSG MWD+IFR1+MS
7200.000	0.000	0.000	7089.272	25.591	0.000	25.860	0.000	10.058	0.000	0.000	26.044	25.403	-32.561	XOM_R2OWSG MWD+IFR1+MS
7300.000	0.000	0.000	7189.272	25.924	0.000	26.184	0.000	10.224	0.000	0.000	26.369	25.736	-32.873	XOM_R2OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7289.272	26.257	0.000	26.508	0.000	10.393	0.000	0.000	26.694	26.068	-33.184	XOM_R2OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7389.272	26.592	0.000	26.834	0.000	10.565	0.000	0.000	27.021	26.402	-33.494	XOM_R2OWSG MWD+IFR1+MS
7600.000	0.000	0.000	7489.272	26.927	0.000	27.160	0.000	10.739	0.000	0.000	27.348	26.736	-33.803	XOM_R2OWSG MWD+IFR1+MS

7700.000	0.000	0.000	7589.272	27.262	0.000	27.487	0.000	10.917	0.000	0.000	27.676	27.070	-34.112	XOM_R2OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7689.272	27.598	0.000	27.815	0.000	11.097	0.000	0.000	28.005	27.405	-34.419	XOM_R2OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7789.272	27.935	0.000	28.144	0.000	11.280	0.000	0.000	28.335	27.741	-34.725	XOM_R2OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7889.272	28.272	0.000	28.473	0.000	11.467	0.000	0.000	28.665	28.077	-35.030	XOM_R2OWSG MWD+IFR1+MS
8100.000	0.000	0.000	7989.272	28.610	0.000	28.803	0.000	11.656	0.000	0.000	28.996	28.414	-35.334	XOM_R2OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8089.272	28.948	0.000	29.134	0.000	11.848	0.000	0.000	29.328	28.751	-35.637	XOM_R2OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8189.272	29.287	0.000	29.465	0.000	12.043	0.000	0.000	29.661	29.089	-35.938	XOM_R2OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8289.272	29.626	0.000	29.797	0.000	12.241	0.000	0.000	29.994	29.427	-36.237	XOM_R2OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8389.272	29.966	0.000	30.129	0.000	12.442	0.000	0.000	30.327	29.766	-36.536	XOM_R2OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8489.272	30.306	0.000	30.463	0.000	12.647	0.000	0.000	30.662	30.105	-36.832	XOM_R2OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8589.272	30.647	0.000	30.796	0.000	12.854	0.000	0.000	30.996	30.444	-37.128	XOM_R2OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8689.272	30.987	0.000	31.131	0.000	13.064	0.000	0.000	31.332	30.784	-37.421	XOM_R2OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8789.272	31.329	0.000	31.465	0.000	13.277	0.000	0.000	31.668	31.124	-37.713	XOM_R2OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8889.272	31.670	0.000	31.801	0.000	13.494	0.000	0.000	32.004	31.465	-38.003	XOM_R2OWSG MWD+IFR1+MS
9100.000	0.000	0.000	8989.272	32.012	0.000	32.137	0.000	13.713	0.000	0.000	32.341	31.806	-38.292	XOM_R2OWSG MWD+IFR1+MS
9200.000	0.000	0.000	9089.272	32.355	0.000	32.473	0.000	13.935	0.000	0.000	32.679	32.147	-38.578	XOM_R2OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9189.272	32.698	0.000	32.810	0.000	14.161	0.000	0.000	33.016	32.489	-38.863	XOM_R2OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9289.272	33.041	0.000	33.147	0.000	14.390	0.000	0.000	33.355	32.831	-39.146	XOM_R2OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9389.272	33.384	0.000	33.485	0.000	14.621	0.000	0.000	33.694	33.173	-39.427	XOM_R2OWSG MWD+IFR1+MS
9600.000	0.000	0.000	9489.272	33.728	0.000	33.823	0.000	14.856	0.000	0.000	34.033	33.516	-39.706	XOM_R2OWSG MWD+IFR1+MS

9700.000	0.000	0.000	9589.272	34.072	0.000	34.161	0.000	15.094	0.000	0.000	34.372	33.859	-39.983	XOM_R2OWSG MWD+IFR1+MS
9800.000	0.000	0.000	9689.272	34.416	0.000	34.500	0.000	15.334	0.000	0.000	34.712	34.202	-40.258	XOM_R2OWSG MWD+IFR1+MS
9900.000	0.000	0.000	9789.272	34.761	0.000	34.839	0.000	15.578	0.000	0.000	35.053	34.546	-40.531	XOM_R2OWSG MWD+IFR1+MS
10000.000	0.000	0.000	9889.272	35.106	0.000	35.179	0.000	15.825	0.000	0.000	35.394	34.889	-40.802	XOM_R2OWSG MWD+IFR1+MS
10100.000	0.000	0.000	9989.272	35.451	0.000	35.519	0.000	16.076	0.000	0.000	35.735	35.233	-41.071	XOM_R2OWSG MWD+IFR1+MS
10148.531	0.000	0.000	10037.803	35.618	0.000	35.684	0.000	16.198	0.000	0.000	35.900	35.401	-41.200	XOM_R2OWSG MWD+IFR1+MS
10200.000	4.118	359.617	10089.228	35.532	0.000	35.861	0.000	16.327	0.000	0.000	36.074	35.575	-41.273	XOM_R2OWSG MWD+IFR1+MS
10300.000	12.118	359.617	10188.146	34.940	0.000	36.187	0.000	16.570	0.000	0.000	36.400	35.895	-40.958	XOM_R2OWSG MWD+IFR1+MS
10400.000	20.118	359.617	10284.137	33.801	0.000	36.494	0.000	16.799	0.000	0.000	36.703	36.185	-39.927	XOM_R2OWSG MWD+IFR1+MS
10500.000	28.118	359.617	10375.334	32.161	0.000	36.779	0.000	17.013	0.000	0.000	36.981	36.439	-38.056	XOM_R2OWSG MWD+IFR1+MS
10600.000	36.118	359.617	10459.961	30.093	0.000	37.041	0.000	17.212	0.000	0.000	37.230	36.654	-35.446	XOM_R2OWSG MWD+IFR1+MS
10700.000	44.118	359.617	10536.371	27.701	0.000	37.277	0.000	17.402	0.000	0.000	37.450	36.827	-32.346	XOM_R2OWSG MWD+IFR1+MS
10800.000	52.118	359.617	10603.077	25.132	0.000	37.487	0.000	17.586	0.000	0.000	37.643	36.959	-29.063	XOM_R2OWSG MWD+IFR1+MS
10900.000	60.118	359.617	10658.781	22.592	0.000	37.672	0.000	17.774	0.000	0.000	37.811	37.053	-25.877	XOM_R2OWSG MWD+IFR1+MS
11000.000	68.118	359.617	10702.398	20.365	0.000	37.831	0.000	17.971	0.000	0.000	37.954	37.113	-22.982	XOM_R2OWSG MWD+IFR1+MS
11100.000	76.118	359.617	10733.080	18.802	0.000	37.965	0.000	18.185	0.000	0.000	38.073	37.148	-20.486	XOM_R2OWSG MWD+IFR1+MS
11200.000	84.118	359.617	10750.229	18.252	0.000	38.074	0.000	18.419	0.000	0.000	38.169	37.167	-18.434	XOM_R2OWSG MWD+IFR1+MS
11273.531	90.000	359.617	10754.000	18.604	0.000	38.137	0.000	18.604	0.000	0.000	38.223	37.178	-17.239	XOM_R2OWSG MWD+IFR1+MS
11300.000	90.000	359.617	10754.000	18.673	0.000	38.157	0.000	18.673	0.000	0.000	38.241	37.182	-16.856	XOM_R2OWSG MWD+IFR1+MS
11400.000	90.000	359.617	10754.000	18.954	0.000	38.249	0.000	18.954	0.000	0.000	38.322	37.196	-15.256	XOM_R2OWSG MWD+IFR1+MS

11500.000	90.000	359.617	10754.000	19.262	0.000	38.362	0.000	19.262	0.000	0.000	38.424	37.211	-13.633	XOM_R2OWSG MWD+IFR1+MS
11600.000	90.000	359.617	10754.000	19.597	0.000	38.494	0.000	19.597	0.000	0.000	38.547	37.225	-12.063	XOM_R2OWSG MWD+IFR1+MS
11700.000	90.000	359.617	10754.000	19.958	0.000	38.646	0.000	19.958	0.000	0.000	38.691	37.239	-10.602	XOM_R2OWSG MWD+IFR1+MS
11800.000	90.000	359.617	10754.000	20.342	0.000	38.817	0.000	20.342	0.000	0.000	38.855	37.253	-9.278	XOM_R2OWSG MWD+IFR1+MS
11900.000	90.000	359.617	10754.000	20.749	0.000	39.008	0.000	20.749	0.000	0.000	39.039	37.266	-8.103	XOM_R2OWSG MWD+IFR1+MS
12000.000	90.000	359.617	10754.000	21.177	0.000	39.217	0.000	21.177	0.000	0.000	39.243	37.279	-7.074	XOM_R2OWSG MWD+IFR1+MS
12100.000	90.000	359.617	10754.000	21.625	0.000	39.445	0.000	21.625	0.000	0.000	39.466	37.292	-6.180	XOM_R2OWSG MWD+IFR1+MS
12200.000	90.000	359.617	10754.000	22.092	0.000	39.691	0.000	22.092	0.000	0.000	39.709	37.304	-5.408	XOM_R2OWSG MWD+IFR1+MS
12300.000	90.000	359.617	10754.000	22.577	0.000	39.955	0.000	22.577	0.000	0.000	39.970	37.317	-4.743	XOM_R2OWSG MWD+IFR1+MS
12400.000	90.000	359.617	10754.000	23.078	0.000	40.236	0.000	23.078	0.000	0.000	40.249	37.330	-4.170	XOM_R2OWSG MWD+IFR1+MS
12500.000	90.000	359.617	10754.000	23.594	0.000	40.535	0.000	23.594	0.000	0.000	40.545	37.344	-3.677	XOM_R2OWSG MWD+IFR1+MS
12600.000	90.000	359.617	10754.000	24.125	0.000	40.851	0.000	24.125	0.000	0.000	40.859	37.357	-3.251	XOM_R2OWSG MWD+IFR1+MS
12700.000	90.000	359.617	10754.000	24.670	0.000	41.183	0.000	24.670	0.000	0.000	41.190	37.371	-2.883	XOM_R2OWSG MWD+IFR1+MS
12800.000	90.000	359.617	10754.000	25.227	0.000	41.531	0.000	25.227	0.000	0.000	41.536	37.386	-2.563	XOM_R2OWSG MWD+IFR1+MS
12900.000	90.000	359.617	10754.000	25.796	0.000	41.894	0.000	25.796	0.000	0.000	41.899	37.401	-2.286	XOM_R2OWSG MWD+IFR1+MS
13000.000	90.000	359.617	10754.000	26.376	0.000	42.273	0.000	26.376	0.000	0.000	42.277	37.417	-2.043	XOM_R2OWSG MWD+IFR1+MS
13100.000	90.000	359.617	10754.000	26.967	0.000	42.667	0.000	26.967	0.000	0.000	42.670	37.433	-1.831	XOM_R2OWSG MWD+IFR1+MS
13200.000	90.000	359.617	10754.000	27.567	0.000	43.075	0.000	27.567	0.000	0.000	43.077	37.449	-1.645	XOM_R2OWSG MWD+IFR1+MS
13300.000	90.000	359.617	10754.000	28.176	0.000	43.497	0.000	28.176	0.000	0.000	43.499	37.467	-1.482	XOM_R2OWSG MWD+IFR1+MS
13400.000	90.000	359.617	10754.000	28.794	0.000	43.932	0.000	28.794	0.000	0.000	43.934	37.485	-1.338	XOM_R2OWSG MWD+IFR1+MS



13500.000	90.000	359.617	10754.000	29.420	0.000	44.381	0.000	29.420	0.000	0.000	44.382	37.503	-1.210	XOM_R2OWSG MWD+IFR1+MS
13600.000	90.000	359.617	10754.000	30.053	0.000	44.843	0.000	30.053	0.000	0.000	44.844	37.522	-1.097	XOM_R2OWSG MWD+IFR1+MS
13700.000	90.000	359.617	10754.000	30.693	0.000	45.317	0.000	30.693	0.000	0.000	45.317	37.542	-0.996	XOM_R2OWSG MWD+IFR1+MS
13800.000	90.000	359.617	10754.000	31.340	0.000	45.803	0.000	31.340	0.000	0.000	45.803	37.563	-0.907	XOM_R2OWSG MWD+IFR1+MS
13900.000	90.000	359.617	10754.000	31.993	0.000	46.300	0.000	31.993	0.000	0.000	46.301	37.584	-0.826	XOM_R2OWSG MWD+IFR1+MS
14000.000	90.000	359.617	10754.000	32.652	0.000	46.809	0.000	32.652	0.000	0.000	46.810	37.605	-0.755	XOM_R2OWSG MWD+IFR1+MS
14100.000	90.000	359.617	10754.000	33.316	0.000	47.329	0.000	33.316	0.000	0.000	47.329	37.628	-0.691	XOM_R2OWSG MWD+IFR1+MS
14200.000	90.000	359.617	10754.000	33.985	0.000	47.860	0.000	33.985	0.000	0.000	47.860	37.651	-0.633	XOM_R2OWSG MWD+IFR1+MS
14300.000	90.000	359.617	10754.000	34.659	0.000	48.400	0.000	34.659	0.000	0.000	48.400	37.675	-0.581	XOM_R2OWSG MWD+IFR1+MS
14400.000	90.000	359.617	10754.000	35.338	0.000	48.951	0.000	35.338	0.000	0.000	48.951	37.699	-0.534	XOM_R2OWSG MWD+IFR1+MS
14500.000	90.000	359.617	10754.000	36.021	0.000	49.511	0.000	36.021	0.000	0.000	49.511	37.724	-0.492	XOM_R2OWSG MWD+IFR1+MS
14600.000	90.000	359.617	10754.000	36.708	0.000	50.080	0.000	36.708	0.000	0.000	50.080	37.750	-0.454	XOM_R2OWSG MWD+IFR1+MS
14700.000	90.000	359.617	10754.000	37.399	0.000	50.658	0.000	37.399	0.000	0.000	50.658	37.777	-0.419	XOM_R2OWSG MWD+IFR1+MS
14800.000	90.000	359.617	10754.000	38.094	0.000	51.245	0.000	38.094	0.000	0.000	51.245	37.804	-0.388	XOM_R2OWSG MWD+IFR1+MS
14900.000	90.000	359.617	10754.000	38.792	0.000	51.840	0.000	38.792	0.000	0.000	51.840	37.832	-0.359	XOM_R2OWSG MWD+IFR1+MS
15000.000	90.000	359.617	10754.000	39.493	0.000	52.443	0.000	39.493	0.000	0.000	52.443	37.860	-0.334	XOM_R2OWSG MWD+IFR1+MS
15100.000	90.000	359.617	10754.000	40.198	0.000	53.054	0.000	40.198	0.000	0.000	53.054	37.889	-0.310	XOM_R2OWSG MWD+IFR1+MS
15200.000	90.000	359.617	10754.000	40.905	0.000	53.673	0.000	40.905	0.000	0.000	53.673	37.919	-0.289	XOM_R2OWSG MWD+IFR1+MS
15300.000	90.000	359.617	10754.000	41.615	0.000	54.298	0.000	41.615	0.000	0.000	54.298	37.950	-0.269	XOM_R2OWSG MWD+IFR1+MS
15400.000	90.000	359.617	10754.000	42.328	0.000	54.931	0.000	42.328	0.000	0.000	54.931	37.981	-0.252	XOM_R2OWSG MWD+IFR1+MS



15500.000	90.000	359.617	10754.000	43.043	0.000	55.570	0.000	43.043	0.000	0.000	55.570	38.013	-0.236	XOM_R2OWSG MWD+IFR1+MS
15600.000	90.000	359.617	10754.000	43.761	0.000	56.216	0.000	43.761	0.000	0.000	56.216	38.045	-0.221	XOM_R2OWSG MWD+IFR1+MS
15700.000	90.000	359.617	10754.000	44.481	0.000	56.868	0.000	44.481	0.000	0.000	56.869	38.078	-0.208	XOM_R2OWSG MWD+IFR1+MS
15800.000	90.000	359.617	10754.000	45.203	0.000	57.527	0.000	45.203	0.000	0.000	57.527	38.112	-0.195	XOM_R2OWSG MWD+IFR1+MS
15900.000	90.000	359.617	10754.000	45.927	0.000	58.191	0.000	45.927	0.000	0.000	58.191	38.147	-0.184	XOM_R2OWSG MWD+IFR1+MS
16000.000	90.000	359.617	10754.000	46.653	0.000	58.861	0.000	46.653	0.000	0.000	58.861	38.182	-0.174	XOM_R2OWSG MWD+IFR1+MS
16100.000	90.000	359.617	10754.000	47.381	0.000	59.536	0.000	47.381	0.000	0.000	59.536	38.218	-0.165	XOM_R2OWSG MWD+IFR1+MS
16200.000	90.000	359.617	10754.000	48.111	0.000	60.217	0.000	48.111	0.000	0.000	60.217	38.254	-0.156	XOM_R2OWSG MWD+IFR1+MS
16300.000	90.000	359.617	10754.000	48.842	0.000	60.902	0.000	48.842	0.000	0.000	60.903	38.291	-0.149	XOM_R2OWSG MWD+IFR1+MS
16400.000	90.000	359.617	10754.000	49.575	0.000	61.593	0.000	49.575	0.000	0.000	61.593	38.329	-0.142	XOM_R2OWSG MWD+IFR1+MS
16500.000	90.000	359.617	10754.000	50.310	0.000	62.289	0.000	50.310	0.000	0.000	62.289	38.368	-0.135	XOM_R2OWSG MWD+IFR1+MS
16600.000	90.000	359.617	10754.000	51.046	0.000	62.989	0.000	51.046	0.000	0.000	62.989	38.407	-0.130	XOM_R2OWSG MWD+IFR1+MS
16700.000	90.000	359.617	10754.000	51.784	0.000	63.693	0.000	51.784	0.000	0.000	63.694	38.447	-0.124	XOM_R2OWSG MWD+IFR1+MS
16800.000	90.000	359.617	10754.000	52.523	0.000	64.402	0.000	52.523	0.000	0.000	64.403	38.487	-0.120	XOM_R2OWSG MWD+IFR1+MS
16900.000	90.000	359.617	10754.000	53.263	0.000	65.115	0.000	53.263	0.000	0.000	65.116	38.528	-0.115	XOM_R2OWSG MWD+IFR1+MS
17000.000	90.000	359.617	10754.000	54.004	0.000	65.833	0.000	54.004	0.000	0.000	65.833	38.570	-0.111	XOM_R2OWSG MWD+IFR1+MS
17100.000	90.000	359.617	10754.000	54.747	0.000	66.554	0.000	54.747	0.000	0.000	66.554	38.612	-0.108	XOM_R2OWSG MWD+IFR1+MS
17200.000	90.000	359.617	10754.000	55.491	0.000	67.279	0.000	55.491	0.000	0.000	67.279	38.655	-0.105	XOM_R2OWSG MWD+IFR1+MS
17300.000	90.000	359.617	10754.000	56.236	0.000	68.007	0.000	56.236	0.000	0.000	68.008	38.699	-0.102	XOM_R2OWSG MWD+IFR1+MS
17400.000	90.000	359.617	10754.000	56.982	0.000	68.739	0.000	56.982	0.000	0.000	68.740	38.743	-0.099	XOM_R2OWSG MWD+IFR1+MS

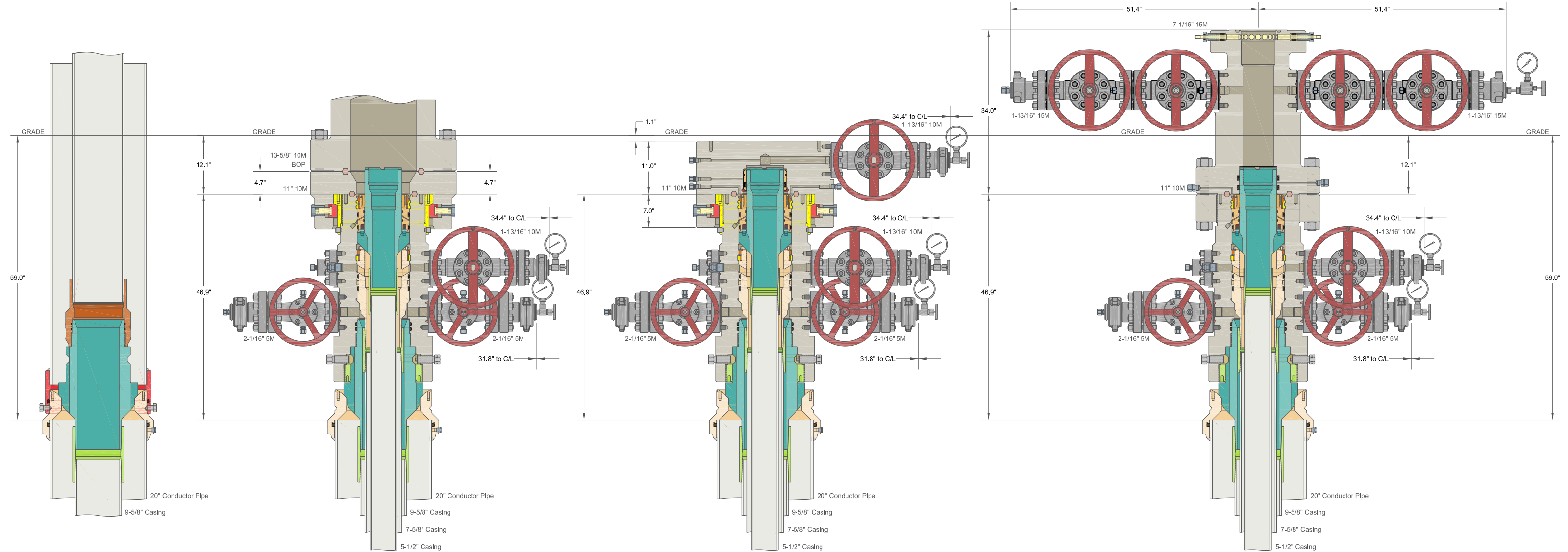
17500.000	90.000	359.617	10754.000	57.729	0.000	69.475	0.000	57.729	0.000	0.000	69.476	38.788	-0.097	XOM_R2OWSG MWD+IFR1+MS
17600.000	90.000	359.617	10754.000	58.477	0.000	70.214	0.000	58.477	0.000	0.000	70.214	38.833	-0.095	XOM_R2OWSG MWD+IFR1+MS
17700.000	90.000	359.617	10754.000	59.226	0.000	70.956	0.000	59.226	0.000	0.000	70.957	38.880	-0.093	XOM_R2OWSG MWD+IFR1+MS
17800.000	90.000	359.617	10754.000	59.976	0.000	71.701	0.000	59.976	0.000	0.000	71.702	38.926	-0.092	XOM_R2OWSG MWD+IFR1+MS
17900.000	90.000	359.617	10754.000	60.727	0.000	72.450	0.000	60.727	0.000	0.000	72.450	38.974	-0.090	XOM_R2OWSG MWD+IFR1+MS
18000.000	90.000	359.617	10754.000	61.478	0.000	73.201	0.000	61.478	0.000	0.000	73.202	39.022	-0.089	XOM_R2OWSG MWD+IFR1+MS
18100.000	90.000	359.617	10754.000	62.231	0.000	73.955	0.000	62.231	0.000	0.000	73.956	39.071	-0.088	XOM_R2OWSG MWD+IFR1+MS
18200.000	90.000	359.617	10754.000	62.984	0.000	74.712	0.000	62.984	0.000	0.000	74.713	39.120	-0.087	XOM_R2OWSG MWD+IFR1+MS
18300.000	90.000	359.617	10754.000	63.738	0.000	75.471	0.000	63.738	0.000	0.000	75.472	39.170	-0.087	XOM_R2OWSG MWD+IFR1+MS
18400.000	90.000	359.617	10754.000	64.493	0.000	76.234	0.000	64.493	0.000	0.000	76.234	39.220	-0.086	XOM_R2OWSG MWD+IFR1+MS
18500.000	90.000	359.617	10754.000	65.248	0.000	76.998	0.000	65.248	0.000	0.000	76.999	39.271	-0.086	XOM_R2OWSG MWD+IFR1+MS
18600.000	90.000	359.617	10754.000	66.005	0.000	77.765	0.000	66.005	0.000	0.000	77.766	39.323	-0.085	XOM_R2OWSG MWD+IFR1+MS
18700.000	90.000	359.617	10754.000	66.761	0.000	78.535	0.000	66.761	0.000	0.000	78.536	39.375	-0.085	XOM_R2OWSG MWD+IFR1+MS
18792.698	90.000	359.617	10754.000	67.464	0.000	79.250	0.000	67.464	0.000	0.000	79.251	39.424	-0.085	XOM_R2OWSG MWD+IFR1+MS

## Plan Targets

Corral 17-8 Fed Com 162H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
162H FTP	11273.50	408864.20	600035.60	7764.00	CIRCLE
162H BHL	18842.70	416433.20	599985.20	7764.00	CIRCLE
162H LTP	18792.70	416383.20	599985.40	7764.00	CIRCLE

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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
		APPRV	31MAR22
		DRAWING NO.	HBE0000479

**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>a</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>a</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

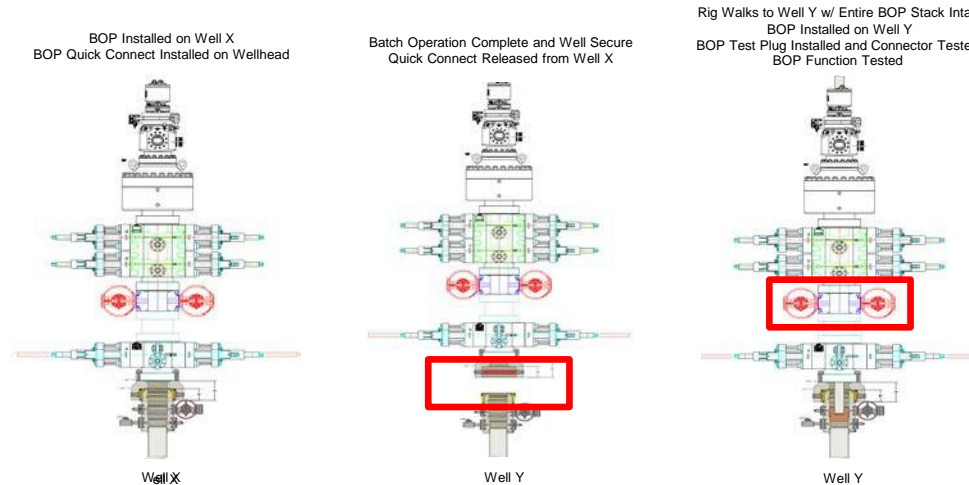
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

### **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.

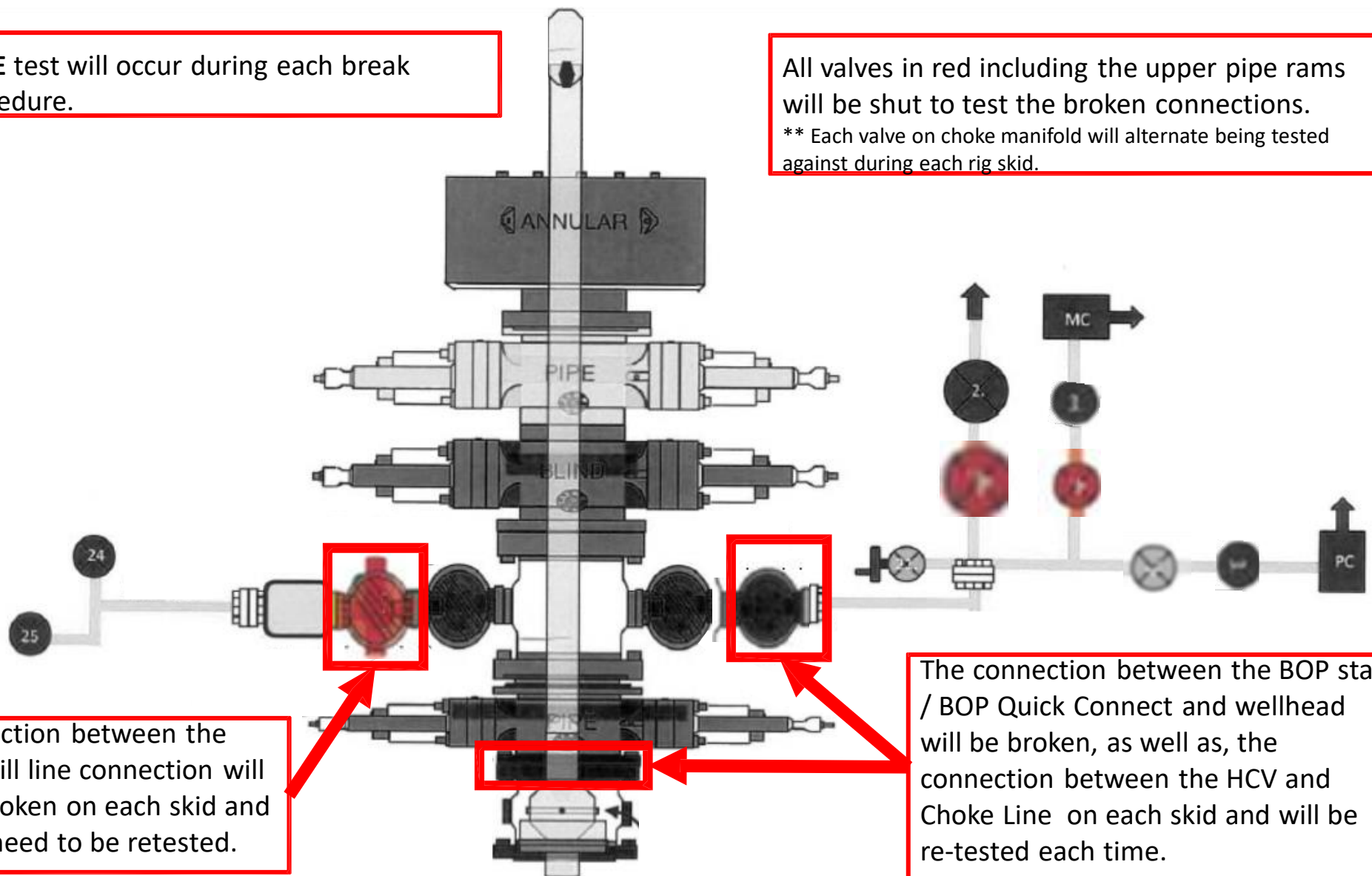
Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met:

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.

## 10,000 PSI Annular BOP Variance Request

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

### 1. Component and Preventer Compatibility Tables

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

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

## 2. Well Control Procedures

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

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**District IV**  
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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 362901

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  362901
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	7/19/2024