

Well Name: CORRAL CANYON 17-8  
FEDERAL

Well Location: T25S / R29E / SEC 17 /  
SESW / 32.123789 / -104.007149

County or Parish/State: EDDY /  
NM

Well Number: 165H

Type of Well: CONVENTIONAL GAS  
WELL

Allottee or Tribe Name:

Lease Number: NMNM96848

Unit or CA Name:

Unit or CA Number:

US Well Number:

Operator: XTO ENERGY  
INCORPORATED

Notice of Intent

Sundry ID: 2791082

Type of Submission: Notice of Intent

Date Sundry Submitted: 05/17/2024

Date proposed operation will begin: 05/31/2024

Type of Action: APD Change

Time Sundry Submitted: 09:03

**Procedure Description:** XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, FTP, LTP, BHL, & Proposed total Depth. FROM: TO: SHL: 344' FSL & 2475' FWL OF SECTION 17-T25S-R29E 374' FSL & 2476' FWL OF SECTION 17-T25S-R29E FTP: 330' FSL & 1310' FEL OF SECTION 17-T25S-R29E 330' FSL & 1380' FEL OF SECTION 17-T25S-R29E LTP: 330' FNL & 1310' FEL OF SECTION 8-T25S-R29E 2550' FSL & 1380' FEL OF SECTION 8-T25S-R29E BHL: 200' FNL & 1310' FEL OF SECTION 8-T25S-R29E 2600' FSL & 1380' FEL OF SECTION 8-T25S-R29E The proposed total depth is changing from 21299' MD; 10740' TVD (Wolfcamp) to 19129' MD; 10843' 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\_165H\_Sundry\_Documents\_20240517090338.pdf

Received by OCD: 7/10/2024 2:24:13 PM

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Well Name: CORRAL CANYON 17-8 FEDERAL	Well Location: T25S / R29E / SEC 17 / SESW / 32.123789 / -104.007149	County or Parish/State: EDDY / NM
Well Number: 165H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM96848	Unit or CA Name:	Unit or CA Number:
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 09:03 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	

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

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: SESW / 344 FSL / 2475 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123789 / LONG: -104.007149 ( TVD: 0 feet, MD: 0 feet )

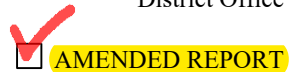
PPP: SENE / 2652 FSL / 1305 FEL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.130071 / LONG: -104.002261 ( TVD: 10740 feet, MD: 14000 feet )

PPP: SESE / 330 FSL / 1310 FEL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123687 / LONG: -104.002257 ( TVD: 10740 feet, MD: 11300 feet )

BHL: NENE / 200 FNL / 1310 FEL / TWSP: 25S / RANGE: 29E / SECTION: 8 / LAT: 32.151386 / LONG: -104.002273 ( TVD: 10740 feet, MD: 21299 feet )

CONFIDENTIAL

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



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 165H

Projected TD: 19129.44' MD / 10843' TVD

SHL: 374' FSL & 2476' FWL , Section 17, T25S, R29E

BHL: 2600' FSL & 1380' FEL , 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	612'	Water
Base of Salt	2730'	Water
Delaware	2930'	Water
Brushy Canyon	5428'	Water/Oil/Gas
Bone Spring	6686'	Water
1st Bone Spring	7462'	Water/Oil/Gas
2nd Bone Spring	7888'	Water/Oil/Gas
3rd Bone Spring	8703'	Water/Oil/Gas
Wolfcamp	9865'	Water/Oil/Gas
Wolfcamp X	9888'	Water/Oil/Gas
Wolfcamp Y	9965'	Water/Oil/Gas
Wolfcamp A	10010'	Water/Oil/Gas
Wolfcamp B	10359'	Water/Oil/Gas
Wolfcamp D	10743'	Water/Oil/Gas
<b>Target/Land Curve</b>	<b>10843'</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 @ 577' (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 10227.27' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19129.44 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9927.27 feet).

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 577'	9.625	40	J-55	BTC	New	1.56	10.91	27.30
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	1.91	2.86	1.84
8.75	4000' – 10227.27'	7.625	29.7	HC L-80	Flush Joint	New	1.39	2.24	2.20
6.75	0' – 10127.27'	5.5	20	RY P-110	Semi-Premium	New	1.26	1.62	2.26
6.75	10127.27' - 19129.44'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.51	2.26

· 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 +/- 577'**

Lead: 90 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 +/- 10227.27'**

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

TOC: Brushy Canyon @ 5428

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: 610 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 (5428') 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 +/- 19129.44'**

Lead: 20 sxs NeoCem (mixed at 13.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 9927.27 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: 10427.27 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 4944 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 day.

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' - 577'	12.25	FW/Native	8.4-8.9	35-40	NC
577' - 10227.27'	8.75	FW / Cut Brine / Direct Emulsion	9-9.5	30-32	NC
10227.27' - 19129.44'	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 175 to 195 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 7330 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 165H\_Updated

Measured Depth: 19129.00 ft

TVD RKB: 10843.00 ft

### Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 408894.90 ft

Easting: 601131.20 ft

RKB: 3007.00 ft

Ground Level: 2974.00 ft

North Reference: Grid

Convergence Angle: 0.17 Deg

### Plan Sections

Corral 17-8 Fed Com 165H\_Updated

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	
2251.66	23.03	117.32	2220.89	-104.82	202.91	2.00	0.00	2.00	
5248.82	23.03	117.32	4979.11	-643.07	1244.77	0.00	0.00	0.00	
6400.48	0.00	0.00	6100.00	-747.89	1447.67	-2.00	0.00	2.00	
10427.27	0.00	0.00	10126.80	-747.89	1447.67	0.00	0.00	0.00	
11552.27	90.00	359.75	10843.00	-31.70	1444.60	8.00	0.00	8.00	165H FTP
19079.44	90.00	359.75	10843.00	7495.40	1412.28	0.00	0.00	0.00	165H LTP
19129.44	90.00	359.75	10843.00	7545.40	1412.07	0.00	0.00	0.00	165H BHL

### Position Uncertainty

Corral 17-8 Fed Com 165H\_Updated

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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	2.371	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	2.688	0.000	2.480	0.000	0.000	2.868	2.688	90.000	XOM_R2OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.225	0.000	3.047	0.000	2.524	0.000	0.000	3.225	3.047	90.000	XOM_R2OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.404	0.000	2.573	0.000	0.000	3.585	3.404	90.000	XOM_R2OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.942	0.000	3.763	0.000	2.626	0.000	0.000	3.942	3.763	90.000	XOM_R2OWSG MWD+IFR1+MS
1200.000	1.999	117.300	1199.980	4.215	0.000	4.251	-0.000	2.681	0.000	0.000	4.288	4.109	90.000	XOM_R2OWSG MWD+IFR1+MS
1300.000	4.000	117.300	1299.838	4.625	0.000	4.589	-0.000	2.737	0.000	0.000	4.626	4.445	90.000	XOM_R2OWSG MWD+IFR1+MS
1400.000	6.000	117.300	1399.452	5.042	0.000	4.930	-0.000	2.795	0.000	0.000	4.968	4.785	90.059	XOM_R2OWSG MWD+IFR1+MS
1500.000	7.999	117.300	1498.702	5.465	0.000	5.277	-0.000	2.853	0.000	0.000	5.315	5.128	90.360	XOM_R2OWSG MWD+IFR1+MS
1600.000	10.000	117.300	1597.465	5.895	0.000	5.629	-0.000	2.913	0.000	0.000	5.666	5.475	91.021	XOM_R2OWSG MWD+IFR1+MS
1700.000	11.990	117.300	1695.623	6.329	0.000	5.986	-0.000	2.976	0.000	0.000	6.021	5.825	92.135	XOM_R2OWSG MWD+IFR1+MS
1800.000	14.000	117.300	1793.055	6.770	0.000	6.350	-0.000	3.042	0.000	0.000	6.383	6.177	93.750	XOM_R2OWSG MWD+IFR1+MS



1900.000	15.990	117.300	1889.643	7.215	0.000	6.723	-0.000	3.112	0.000	0.000	6.752	6.534	95.878	XOM_R2OWSG MWD+IFR1+MS
2000.000	18.000	117.300	1985.268	7.664	0.000	7.105	-0.000	3.186	0.000	0.000	7.130	6.892	98.412	XOM_R2OWSG MWD+IFR1+MS
2100.000	19.990	117.300	2079.816	8.118	0.000	7.498	-0.000	3.270	0.000	0.000	7.519	7.253	101.205	XOM_R2OWSG MWD+IFR1+MS
2200.000	22.000	117.300	2173.169	8.578	0.000	7.904	-0.000	3.360	0.000	0.000	7.920	7.617	104.051	XOM_R2OWSG MWD+IFR1+MS
2251.600	23.030	117.300	2220.886	8.817	0.000	8.119	-0.000	3.407	0.000	0.000	8.132	7.807	105.358	XOM_R2OWSG MWD+IFR1+MS
2300.000	23.030	117.300	2265.376	9.031	0.000	8.322	-0.000	3.461	0.000	0.000	8.334	7.983	106.623	XOM_R2OWSG MWD+IFR1+MS
2400.000	23.030	117.300	2357.404	9.481	0.000	8.751	-0.000	3.590	0.000	0.000	8.760	8.345	109.008	XOM_R2OWSG MWD+IFR1+MS
2500.000	23.030	117.300	2449.432	9.937	0.000	9.189	-0.000	3.724	0.000	0.000	9.195	8.711	110.814	XOM_R2OWSG MWD+IFR1+MS
2600.000	23.030	117.300	2541.460	10.400	0.000	9.634	-0.000	3.867	0.000	0.000	9.638	9.082	112.189	XOM_R2OWSG MWD+IFR1+MS
2700.000	23.030	117.300	2633.488	10.867	0.000	10.084	-0.000	4.012	0.000	0.000	10.087	9.457	113.359	XOM_R2OWSG MWD+IFR1+MS
2800.000	23.030	117.300	2725.515	11.341	0.000	10.540	-0.000	4.164	0.000	0.000	10.542	9.835	114.262	XOM_R2OWSG MWD+IFR1+MS
2900.000	23.030	117.300	2817.543	11.815	0.000	10.998	-0.000	4.321	0.000	0.000	10.999	10.214	115.025	XOM_R2OWSG MWD+IFR1+MS
3000.000	23.030	117.300	2909.571	12.296	0.000	11.462	-0.000	4.482	0.000	0.000	11.462	10.598	115.697	XOM_R2OWSG MWD+IFR1+MS
3100.000	23.030	117.300	3001.599	12.781	0.000	11.930	-0.000	4.647	0.000	0.000	11.930	10.985	116.237	XOM_R2OWSG MWD+IFR1+MS
3200.000	23.030	117.300	3093.627	13.269	0.000	12.403	-0.000	4.814	0.000	0.000	12.403	11.374	116.670	XOM_R2OWSG MWD+IFR1+MS
3300.000	23.030	117.300	3185.655	13.756	0.000	12.875	-0.000	4.985	0.000	0.000	12.875	11.762	117.025	XOM_R2OWSG MWD+IFR1+MS
3400.000	23.030	117.300	3277.683	14.249	0.000	13.351	-0.000	5.158	0.000	0.000	13.351	12.155	117.384	XOM_R2OWSG MWD+IFR1+MS
3500.000	23.030	117.300	3369.711	14.743	0.000	13.828	-0.000	5.335	0.000	0.000	13.828	12.549	117.754	XOM_R2OWSG MWD+IFR1+MS
3600.000	23.030	117.300	3461.739	15.238	0.000	14.308	-0.000	5.515	0.000	0.000	14.308	12.945	118.065	XOM_R2OWSG MWD+IFR1+MS
3700.000	23.030	117.300	3553.767	15.737	0.000	14.790	-0.000	5.696	0.000	0.000	14.791	13.343	118.319	XOM_R2OWSG MWD+IFR1+MS

3800.000	23.030	117.300	3645.794	16.237	0.000	15.275	-0.000	5.880	0.000	0.000	15.276	13.742	118.526	XOM_R2OWSG MWD+IFR1+MS
3900.000	23.030	117.300	3737.822	16.738	0.000	15.760	-0.000	6.065	0.000	0.000	15.761	14.142	118.753	XOM_R2OWSG MWD+IFR1+MS
4000.000	23.030	117.300	3829.850	17.238	0.000	16.246	-0.000	6.252	0.000	0.000	16.247	14.541	118.893	XOM_R2OWSG MWD+IFR1+MS
4100.000	23.030	117.300	3921.878	17.743	0.000	16.734	-0.000	6.442	0.000	0.000	16.736	14.943	119.056	XOM_R2OWSG MWD+IFR1+MS
4200.000	23.030	117.300	4013.906	18.247	0.000	17.223	-0.000	6.633	0.000	0.000	17.225	15.346	119.236	XOM_R2OWSG MWD+IFR1+MS
4300.000	23.030	117.300	4105.934	18.753	0.000	17.713	-0.000	6.826	0.000	0.000	17.715	15.750	119.381	XOM_R2OWSG MWD+IFR1+MS
4400.000	23.030	117.300	4197.962	19.260	0.000	18.204	-0.000	7.021	0.000	0.000	18.207	16.155	119.506	XOM_R2OWSG MWD+IFR1+MS
4500.000	23.030	117.300	4289.990	19.766	0.000	18.695	-0.000	7.217	0.000	0.000	18.699	16.561	119.646	XOM_R2OWSG MWD+IFR1+MS
4600.000	23.030	117.300	4382.018	20.275	0.000	19.188	-0.000	7.415	0.000	0.000	19.192	16.967	119.764	XOM_R2OWSG MWD+IFR1+MS
4700.000	23.030	117.300	4474.046	20.784	0.000	19.682	-0.000	7.614	0.000	0.000	19.686	17.374	119.862	XOM_R2OWSG MWD+IFR1+MS
4800.000	23.030	117.300	4566.073	21.291	0.000	20.175	-0.000	7.815	0.000	0.000	20.179	17.779	119.947	XOM_R2OWSG MWD+IFR1+MS
4900.000	23.030	117.300	4658.101	21.802	0.000	20.669	-0.000	8.017	0.000	0.000	20.674	18.187	120.044	XOM_R2OWSG MWD+IFR1+MS
5000.000	23.030	117.300	4750.129	22.313	0.000	21.165	-0.000	8.219	0.000	0.000	21.170	18.596	120.125	XOM_R2OWSG MWD+IFR1+MS
5100.000	23.030	117.300	4842.157	22.825	0.000	21.661	-0.000	8.425	0.000	0.000	21.668	19.006	120.195	XOM_R2OWSG MWD+IFR1+MS
5200.000	23.030	117.300	4934.185	23.337	0.000	22.157	-0.000	8.631	0.000	0.000	22.164	19.415	120.276	XOM_R2OWSG MWD+IFR1+MS
5248.800	23.030	117.300	4979.114	23.587	0.000	22.398	-0.000	8.733	0.000	0.000	22.406	19.616	120.342	XOM_R2OWSG MWD+IFR1+MS
5300.000	22.000	117.300	5026.390	23.766	0.000	22.650	-0.000	8.839	0.000	0.000	22.658	19.825	120.378	XOM_R2OWSG MWD+IFR1+MS
5400.000	20.000	117.300	5119.738	24.074	0.000	23.128	-0.000	9.040	0.000	0.000	23.136	20.229	120.451	XOM_R2OWSG MWD+IFR1+MS
5500.000	18.000	117.300	5214.279	24.322	0.000	23.586	-0.000	9.232	0.000	0.000	23.595	20.627	120.505	XOM_R2OWSG MWD+IFR1+MS
5600.000	16.000	117.300	5309.900	24.516	0.000	24.025	-0.000	9.412	0.000	0.000	24.035	21.022	120.596	XOM_R2OWSG MWD+IFR1+MS

5700.000	14.000	117.300	5406.483	24.648	0.000	24.445	-0.000	9.581	0.000	0.000	24.455	21.409	120.670	XOM_R2OWSG MWD+IFR1+MS
5800.000	12.000	117.300	5503.912	24.720	0.000	24.847	-0.000	9.740	0.000	0.000	24.857	21.788	120.729	XOM_R2OWSG MWD+IFR1+MS
5900.000	10.000	117.300	5602.066	24.730	0.000	25.229	-0.000	9.889	0.000	0.000	25.239	22.158	120.816	XOM_R2OWSG MWD+IFR1+MS
6000.000	8.009	117.300	5700.828	24.680	0.000	25.594	-0.000	10.030	0.000	0.000	25.605	22.517	120.862	XOM_R2OWSG MWD+IFR1+MS
6100.000	6.009	117.300	5800.075	24.568	0.000	25.941	-0.000	10.159	0.000	0.000	25.952	22.866	120.942	XOM_R2OWSG MWD+IFR1+MS
6200.000	4.009	117.300	5899.688	24.393	0.000	26.271	-0.000	10.286	0.000	0.000	26.283	23.203	120.993	XOM_R2OWSG MWD+IFR1+MS
6300.000	2.009	117.300	5999.545	24.156	0.000	26.585	-0.000	10.407	0.000	0.000	26.598	23.528	121.051	XOM_R2OWSG MWD+IFR1+MS
6400.400	0.000	0.000	6100.000	26.115	0.000	24.684	0.000	10.521	0.000	0.000	26.892	23.836	121.015	XOM_R2OWSG MWD+IFR1+MS
6500.000	0.000	0.000	6199.524	26.403	0.000	24.966	0.000	10.635	0.000	0.000	27.169	24.129	120.878	XOM_R2OWSG MWD+IFR1+MS
6600.000	0.000	0.000	6299.524	26.693	0.000	25.251	0.000	10.747	0.000	0.000	27.450	24.425	120.742	XOM_R2OWSG MWD+IFR1+MS
6700.000	0.000	0.000	6399.524	26.985	0.000	25.538	0.000	10.867	0.000	0.000	27.733	24.724	120.610	XOM_R2OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6499.524	27.278	0.000	25.826	0.000	10.991	0.000	0.000	28.017	25.023	120.478	XOM_R2OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6599.524	27.574	0.000	26.117	0.000	11.113	0.000	0.000	28.304	25.324	120.349	XOM_R2OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6699.524	27.871	0.000	26.408	0.000	11.243	0.000	0.000	28.592	25.626	120.204	XOM_R2OWSG MWD+IFR1+MS
7100.000	0.000	0.000	6799.524	28.169	0.000	26.702	0.000	11.371	0.000	0.000	28.881	25.930	120.077	XOM_R2OWSG MWD+IFR1+MS
7200.000	0.000	0.000	6899.524	28.468	0.000	26.998	0.000	11.507	0.000	0.000	29.172	26.236	119.968	XOM_R2OWSG MWD+IFR1+MS
7300.000	0.000	0.000	6999.524	28.768	0.000	27.295	0.000	11.645	0.000	0.000	29.464	26.542	119.844	XOM_R2OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7099.524	29.071	0.000	27.593	0.000	11.781	0.000	0.000	29.758	26.850	119.720	XOM_R2OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7199.524	29.373	0.000	27.893	0.000	11.925	0.000	0.000	30.053	27.159	119.601	XOM_R2OWSG MWD+IFR1+MS
7600.000	0.000	0.000	7299.524	29.678	0.000	28.194	0.000	12.071	0.000	0.000	30.350	27.469	119.480	XOM_R2OWSG MWD+IFR1+MS

7700.000	0.000	0.000	7399.524	29.985	0.000	28.496	0.000	12.223	0.000	0.000	30.649	27.780	119.347	XOM_R2OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7499.524	30.292	0.000	28.799	0.000	12.373	0.000	0.000	30.949	28.092	119.231	XOM_R2OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7599.524	30.599	0.000	29.105	0.000	12.530	0.000	0.000	31.249	28.406	119.128	XOM_R2OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7699.524	30.908	0.000	29.411	0.000	12.689	0.000	0.000	31.550	28.721	119.015	XOM_R2OWSG MWD+IFR1+MS
8100.000	0.000	0.000	7799.524	31.219	0.000	29.719	0.000	12.849	0.000	0.000	31.854	29.037	118.903	XOM_R2OWSG MWD+IFR1+MS
8200.000	0.000	0.000	7899.524	31.529	0.000	30.027	0.000	13.015	0.000	0.000	32.158	29.353	118.791	XOM_R2OWSG MWD+IFR1+MS
8300.000	0.000	0.000	7999.524	31.828	0.000	30.336	0.000	13.183	0.000	0.000	32.453	29.667	118.808	XOM_R2OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8099.524	32.140	0.000	30.646	0.000	13.357	0.000	0.000	32.759	29.985	118.695	XOM_R2OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8199.524	32.465	0.000	30.958	0.000	13.531	0.000	0.000	33.075	30.306	118.492	XOM_R2OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8299.524	32.772	0.000	31.270	0.000	13.711	0.000	0.000	33.377	30.624	118.454	XOM_R2OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8399.524	33.091	0.000	31.585	0.000	13.892	0.000	0.000	33.689	30.946	118.334	XOM_R2OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8499.524	33.407	0.000	31.890	0.000	14.078	0.000	0.000	33.997	31.261	118.162	XOM_R2OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8599.524	33.734	0.000	32.202	0.000	14.265	0.000	0.000	34.315	31.583	117.941	XOM_R2OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8699.524	34.044	0.000	32.527	0.000	14.457	0.000	0.000	34.623	31.910	117.984	XOM_R2OWSG MWD+IFR1+MS
9100.000	0.000	0.000	8799.524	34.366	0.000	32.848	0.000	14.653	0.000	0.000	34.939	32.238	117.896	XOM_R2OWSG MWD+IFR1+MS
9200.000	0.000	0.000	8899.524	34.684	0.000	33.166	0.000	14.853	0.000	0.000	35.252	32.562	117.810	XOM_R2OWSG MWD+IFR1+MS
9300.000	0.000	0.000	8999.524	35.000	0.000	33.481	0.000	15.053	0.000	0.000	35.562	32.883	117.723	XOM_R2OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9099.524	35.327	0.000	33.793	0.000	15.258	0.000	0.000	35.881	33.205	117.510	XOM_R2OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9199.524	35.651	0.000	34.117	0.000	15.466	0.000	0.000	36.200	33.534	117.428	XOM_R2OWSG MWD+IFR1+MS
9600.000	0.000	0.000	9299.524	35.972	0.000	34.438	0.000	15.678	0.000	0.000	36.516	33.861	117.343	XOM_R2OWSG MWD+IFR1+MS

9700.000	0.000	0.000	9399.524	36.290	0.000	34.756	0.000	15.893	0.000	0.000	36.829	34.185	117.263	XOM_R2OWSG MWD+IFR1+MS
9800.000	0.000	0.000	9499.524	36.620	0.000	35.086	0.000	16.112	0.000	0.000	37.154	34.519	117.184	XOM_R2OWSG MWD+IFR1+MS
9900.000	0.000	0.000	9599.524	36.946	0.000	35.412	0.000	16.337	0.000	0.000	37.475	34.851	117.103	XOM_R2OWSG MWD+IFR1+MS
10000.000	0.000	0.000	9699.524	37.269	0.000	35.735	0.000	16.562	0.000	0.000	37.794	35.180	117.025	XOM_R2OWSG MWD+IFR1+MS
10100.000	0.000	0.000	9799.524	37.603	0.000	36.056	0.000	16.790	0.000	0.000	38.120	35.508	116.824	XOM_R2OWSG MWD+IFR1+MS
10200.000	0.000	0.000	9899.524	37.921	0.000	36.387	0.000	17.024	0.000	0.000	38.437	35.842	116.868	XOM_R2OWSG MWD+IFR1+MS
10300.000	0.000	0.000	9999.524	38.249	0.000	36.701	0.000	17.257	0.000	0.000	38.758	36.164	116.674	XOM_R2OWSG MWD+IFR1+MS
10400.000	0.000	0.000	10099.524	38.575	0.000	37.027	0.000	17.499	0.000	0.000	39.079	36.494	116.598	XOM_R2OWSG MWD+IFR1+MS
10427.000	0.000	0.000	10126.803	38.665	0.000	37.121	0.000	17.564	0.000	0.000	39.169	36.590	116.611	XOM_R2OWSG MWD+IFR1+MS
10500.000	5.818	359.700	10199.408	34.562	0.000	37.374	0.000	17.737	0.000	0.000	39.401	36.831	116.667	XOM_R2OWSG MWD+IFR1+MS
10600.000	13.810	359.700	10297.863	27.460	0.000	37.681	0.000	17.975	0.000	0.000	39.711	37.135	116.706	XOM_R2OWSG MWD+IFR1+MS
10700.000	21.810	359.700	10392.989	17.676	0.000	37.959	0.000	18.204	0.000	0.000	39.988	37.402	116.937	XOM_R2OWSG MWD+IFR1+MS
10800.000	29.810	359.700	10482.934	9.525	0.000	38.221	0.000	18.434	0.000	0.000	40.244	37.649	117.315	XOM_R2OWSG MWD+IFR1+MS
10900.000	37.810	359.700	10565.947	20.479	0.000	38.456	0.000	18.665	0.000	0.000	40.463	37.865	117.801	XOM_R2OWSG MWD+IFR1+MS
11000.000	45.810	359.700	10640.413	25.344	0.000	38.664	0.000	18.902	0.000	0.000	40.636	38.049	118.477	XOM_R2OWSG MWD+IFR1+MS
11100.000	53.810	359.700	10704.882	27.167	0.000	38.845	0.000	19.149	0.000	0.000	40.769	38.208	119.196	XOM_R2OWSG MWD+IFR1+MS
11200.000	61.810	359.700	10758.099	26.379	0.000	38.999	0.000	19.414	0.000	0.000	40.861	38.346	119.933	XOM_R2OWSG MWD+IFR1+MS
11300.000	69.810	359.700	10799.029	22.742	0.000	39.127	0.000	19.698	0.000	0.000	40.909	38.464	120.683	XOM_R2OWSG MWD+IFR1+MS
11400.000	77.810	359.700	10826.874	14.714	0.000	39.228	0.000	20.005	0.000	0.000	40.930	38.571	121.182	XOM_R2OWSG MWD+IFR1+MS
11500.000	85.810	359.700	10841.094	13.517	0.000	39.304	0.000	20.332	0.000	0.000	40.923	38.669	121.403	XOM_R2OWSG MWD+IFR1+MS

11552.000	90.000	359.700	10843.000	20.509	0.000	39.342	0.000	20.509	0.000	0.000	40.909	38.722	121.513	XOM_R2OWSG MWD+IFR1+MS
11600.000	90.000	359.700	10843.000	20.674	0.000	39.367	0.000	20.674	0.000	0.000	40.893	38.766	121.486	XOM_R2OWSG MWD+IFR1+MS
11700.000	90.000	359.700	10843.000	21.040	0.000	39.430	0.000	21.040	0.000	0.000	40.861	38.864	121.553	XOM_R2OWSG MWD+IFR1+MS
11800.000	90.000	359.700	10843.000	21.429	0.000	39.518	0.000	21.429	0.000	0.000	40.844	38.984	121.807	XOM_R2OWSG MWD+IFR1+MS
11900.000	90.000	359.700	10843.000	21.838	0.000	39.631	0.000	21.838	0.000	0.000	40.826	39.118	122.665	XOM_R2OWSG MWD+IFR1+MS
12000.000	90.000	359.700	10843.000	22.269	0.000	39.757	0.000	22.269	0.000	0.000	40.813	39.259	123.901	XOM_R2OWSG MWD+IFR1+MS
12100.000	90.000	359.700	10843.000	22.718	0.000	39.907	0.000	22.718	0.000	0.000	40.818	39.419	125.644	XOM_R2OWSG MWD+IFR1+MS
12200.000	90.000	359.700	10843.000	23.184	0.000	40.081	0.000	23.184	0.000	0.000	40.828	39.586	128.635	XOM_R2OWSG MWD+IFR1+MS
12300.000	90.000	359.700	10843.000	23.669	0.000	40.267	0.000	23.669	0.000	0.000	40.859	39.756	132.417	XOM_R2OWSG MWD+IFR1+MS
12400.000	90.000	359.700	10843.000	24.168	0.000	40.465	0.000	24.168	0.000	0.000	40.902	39.912	-42.131	XOM_R2OWSG MWD+IFR1+MS
12500.000	90.000	359.700	10843.000	24.682	0.000	40.686	0.000	24.682	0.000	0.000	40.988	40.062	-35.271	XOM_R2OWSG MWD+IFR1+MS
12600.000	90.000	359.700	10843.000	25.211	0.000	40.931	0.000	25.211	0.000	0.000	41.122	40.187	-27.301	XOM_R2OWSG MWD+IFR1+MS
12700.000	90.000	359.700	10843.000	25.751	0.000	41.186	0.000	25.751	0.000	0.000	41.299	40.279	-19.841	XOM_R2OWSG MWD+IFR1+MS
12800.000	90.000	359.700	10843.000	26.306	0.000	41.464	0.000	26.306	0.000	0.000	41.525	40.332	-13.487	XOM_R2OWSG MWD+IFR1+MS
12900.000	90.000	359.700	10843.000	26.870	0.000	41.751	0.000	26.870	0.000	0.000	41.783	40.376	-8.934	XOM_R2OWSG MWD+IFR1+MS
13000.000	90.000	359.700	10843.000	27.446	0.000	42.061	0.000	27.446	0.000	0.000	42.075	40.407	-5.590	XOM_R2OWSG MWD+IFR1+MS
13100.000	90.000	359.700	10843.000	28.032	0.000	42.380	0.000	28.032	0.000	0.000	42.385	40.429	-3.173	XOM_R2OWSG MWD+IFR1+MS
13200.000	90.000	359.700	10843.000	28.629	0.000	42.721	0.000	28.629	0.000	0.000	42.721	40.446	-1.384	XOM_R2OWSG MWD+IFR1+MS
13300.000	90.000	359.700	10843.000	29.232	0.000	43.070	0.000	29.232	0.000	0.000	43.070	40.460	-0.051	XOM_R2OWSG MWD+IFR1+MS
13400.000	90.000	359.700	10843.000	29.845	0.000	43.439	0.000	29.845	0.000	0.000	43.440	40.471	0.961	XOM_R2OWSG MWD+IFR1+MS



13500.000	90.000	359.700	10843.000	30.466	0.000	43.828	0.000	30.466	0.000	0.000	43.832	40.494	1.739	XOM_R2OWSG MWD+IFR1+MS
13600.000	90.000	359.700	10843.000	31.095	0.000	44.225	0.000	31.095	0.000	0.000	44.233	40.503	2.339	XOM_R2OWSG MWD+IFR1+MS
13700.000	90.000	359.700	10843.000	31.718	0.000	44.641	0.000	31.718	0.000	0.000	44.652	40.511	2.805	XOM_R2OWSG MWD+IFR1+MS
13800.000	90.000	359.700	10843.000	32.357	0.000	45.064	0.000	32.357	0.000	0.000	45.080	40.531	3.183	XOM_R2OWSG MWD+IFR1+MS
13900.000	90.000	359.700	10843.000	33.015	0.000	45.505	0.000	33.015	0.000	0.000	45.526	40.539	3.470	XOM_R2OWSG MWD+IFR1+MS
14000.000	90.000	359.700	10843.000	33.660	0.000	45.953	0.000	33.660	0.000	0.000	45.978	40.547	3.700	XOM_R2OWSG MWD+IFR1+MS
14100.000	90.000	359.700	10843.000	34.322	0.000	46.418	0.000	34.322	0.000	0.000	46.447	40.567	3.884	XOM_R2OWSG MWD+IFR1+MS
14200.000	90.000	359.700	10843.000	34.986	0.000	46.889	0.000	34.986	0.000	0.000	46.923	40.586	4.033	XOM_R2OWSG MWD+IFR1+MS
14300.000	90.000	359.700	10843.000	35.665	0.000	47.376	0.000	35.665	0.000	0.000	47.414	40.594	4.140	XOM_R2OWSG MWD+IFR1+MS
14400.000	90.000	359.700	10843.000	36.332	0.000	47.880	0.000	36.332	0.000	0.000	47.922	40.614	4.223	XOM_R2OWSG MWD+IFR1+MS
14500.000	90.000	359.700	10843.000	37.014	0.000	48.388	0.000	37.014	0.000	0.000	48.434	40.634	4.289	XOM_R2OWSG MWD+IFR1+MS
14600.000	90.000	359.700	10843.000	37.696	0.000	48.902	0.000	37.696	0.000	0.000	48.952	40.642	4.335	XOM_R2OWSG MWD+IFR1+MS
14700.000	90.000	359.700	10843.000	38.380	0.000	49.430	0.000	38.380	0.000	0.000	49.483	40.662	4.369	XOM_R2OWSG MWD+IFR1+MS
14800.000	90.000	359.700	10843.000	39.077	0.000	49.973	0.000	39.077	0.000	0.000	50.030	40.682	4.388	XOM_R2OWSG MWD+IFR1+MS
14900.000	90.000	359.700	10843.000	39.762	0.000	50.520	0.000	39.762	0.000	0.000	50.580	40.703	4.399	XOM_R2OWSG MWD+IFR1+MS
15000.000	90.000	359.700	10843.000	40.460	0.000	51.080	0.000	40.460	0.000	0.000	51.143	40.723	4.400	XOM_R2OWSG MWD+IFR1+MS
15100.000	90.000	359.700	10843.000	41.158	0.000	51.654	0.000	41.158	0.000	0.000	51.720	40.744	4.391	XOM_R2OWSG MWD+IFR1+MS
15200.000	90.000	359.700	10843.000	41.869	0.000	52.222	0.000	41.869	0.000	0.000	52.290	40.764	4.383	XOM_R2OWSG MWD+IFR1+MS
15300.000	90.000	359.700	10843.000	42.568	0.000	52.812	0.000	42.568	0.000	0.000	52.883	40.785	4.364	XOM_R2OWSG MWD+IFR1+MS
15400.000	90.000	359.700	10843.000	43.278	0.000	53.404	0.000	43.278	0.000	0.000	53.478	40.818	4.348	XOM_R2OWSG MWD+IFR1+MS



15500.000	90.000	359.700	10843.000	43.989	0.000	54.009	0.000	43.989	0.000	0.000	54.085	40.839	4.321	XOM_R2OWSG MWD+IFR1+MS
15600.000	90.000	359.700	10843.000	44.710	0.000	54.616	0.000	44.710	0.000	0.000	54.694	40.861	4.294	XOM_R2OWSG MWD+IFR1+MS
15700.000	90.000	359.700	10843.000	45.420	0.000	55.226	0.000	45.420	0.000	0.000	55.305	40.894	4.268	XOM_R2OWSG MWD+IFR1+MS
15800.000	90.000	359.700	10843.000	46.141	0.000	55.856	0.000	46.141	0.000	0.000	55.937	40.915	4.233	XOM_R2OWSG MWD+IFR1+MS
15900.000	90.000	359.700	10843.000	46.861	0.000	56.478	0.000	46.861	0.000	0.000	56.561	40.949	4.204	XOM_R2OWSG MWD+IFR1+MS
16000.000	90.000	359.700	10843.000	47.582	0.000	57.120	0.000	47.582	0.000	0.000	57.205	40.971	4.167	XOM_R2OWSG MWD+IFR1+MS
16100.000	90.000	359.700	10843.000	48.311	0.000	57.764	0.000	48.311	0.000	0.000	57.850	41.004	4.133	XOM_R2OWSG MWD+IFR1+MS
16200.000	90.000	359.700	10843.000	49.031	0.000	58.409	0.000	49.031	0.000	0.000	58.497	41.026	4.097	XOM_R2OWSG MWD+IFR1+MS
16300.000	90.000	359.700	10843.000	49.759	0.000	59.064	0.000	49.759	0.000	0.000	59.153	41.060	4.061	XOM_R2OWSG MWD+IFR1+MS
16400.000	90.000	359.700	10843.000	50.488	0.000	59.721	0.000	50.488	0.000	0.000	59.811	41.094	4.024	XOM_R2OWSG MWD+IFR1+MS
16500.000	90.000	359.700	10843.000	51.225	0.000	60.395	0.000	51.225	0.000	0.000	60.486	41.128	3.986	XOM_R2OWSG MWD+IFR1+MS
16600.000	90.000	359.700	10843.000	51.952	0.000	61.061	0.000	51.952	0.000	0.000	61.153	41.150	3.949	XOM_R2OWSG MWD+IFR1+MS
16700.000	90.000	359.700	10843.000	52.688	0.000	61.737	0.000	52.688	0.000	0.000	61.830	41.184	3.910	XOM_R2OWSG MWD+IFR1+MS
16800.000	90.000	359.700	10843.000	53.423	0.000	62.421	0.000	53.423	0.000	0.000	62.515	41.218	3.874	XOM_R2OWSG MWD+IFR1+MS
16900.000	90.000	359.700	10843.000	54.166	0.000	63.106	0.000	54.166	0.000	0.000	63.200	41.252	3.835	XOM_R2OWSG MWD+IFR1+MS
17000.000	90.000	359.700	10843.000	54.900	0.000	63.799	0.000	54.900	0.000	0.000	63.894	41.286	3.799	XOM_R2OWSG MWD+IFR1+MS
17100.000	90.000	359.700	10843.000	55.642	0.000	64.500	0.000	55.642	0.000	0.000	64.596	41.333	3.761	XOM_R2OWSG MWD+IFR1+MS
17200.000	90.000	359.700	10843.000	56.383	0.000	65.201	0.000	56.383	0.000	0.000	65.297	41.367	3.723	XOM_R2OWSG MWD+IFR1+MS
17300.000	90.000	359.700	10843.000	57.123	0.000	65.903	0.000	57.123	0.000	0.000	65.999	41.401	3.688	XOM_R2OWSG MWD+IFR1+MS
17400.000	90.000	359.700	10843.000	57.871	0.000	66.612	0.000	57.871	0.000	0.000	66.709	41.436	3.651	XOM_R2OWSG MWD+IFR1+MS

17500.000	90.000	359.700	10843.000	58.609	0.000	67.328	0.000	58.609	0.000	0.000	67.426	41.482	3.615	XOM_R2OWSG MWD+IFR1+MS
17600.000	90.000	359.700	10843.000	59.355	0.000	68.044	0.000	59.355	0.000	0.000	68.142	41.517	3.579	XOM_R2OWSG MWD+IFR1+MS
17700.000	90.000	359.700	10843.000	60.108	0.000	68.760	0.000	60.108	0.000	0.000	68.859	41.551	3.544	XOM_R2OWSG MWD+IFR1+MS
17800.000	90.000	359.700	10843.000	60.852	0.000	69.490	0.000	60.852	0.000	0.000	69.589	41.597	3.508	XOM_R2OWSG MWD+IFR1+MS
17900.000	90.000	359.700	10843.000	61.604	0.000	70.220	0.000	61.604	0.000	0.000	70.319	41.644	3.472	XOM_R2OWSG MWD+IFR1+MS
18000.000	90.000	359.700	10843.000	62.346	0.000	70.950	0.000	62.346	0.000	0.000	71.049	41.678	3.438	XOM_R2OWSG MWD+IFR1+MS
18100.000	90.000	359.700	10843.000	63.103	0.000	71.685	0.000	63.103	0.000	0.000	71.785	41.725	3.405	XOM_R2OWSG MWD+IFR1+MS
18200.000	90.000	359.700	10843.000	63.851	0.000	72.421	0.000	63.851	0.000	0.000	72.520	41.771	3.371	XOM_R2OWSG MWD+IFR1+MS
18300.000	90.000	359.700	10843.000	64.599	0.000	73.162	0.000	64.599	0.000	0.000	73.262	41.806	3.338	XOM_R2OWSG MWD+IFR1+MS
18400.000	90.000	359.700	10843.000	65.353	0.000	73.910	0.000	65.353	0.000	0.000	74.009	41.852	3.304	XOM_R2OWSG MWD+IFR1+MS
18500.000	90.000	359.700	10843.000	66.106	0.000	74.657	0.000	66.106	0.000	0.000	74.756	41.899	3.273	XOM_R2OWSG MWD+IFR1+MS
18600.000	90.000	359.700	10843.000	66.866	0.000	75.409	0.000	66.866	0.000	0.000	75.509	41.945	3.241	XOM_R2OWSG MWD+IFR1+MS
18700.000	90.000	359.700	10843.000	67.617	0.000	76.161	0.000	67.617	0.000	0.000	76.261	41.992	3.211	XOM_R2OWSG MWD+IFR1+MS
18800.000	90.000	359.700	10843.000	68.374	0.000	76.912	0.000	68.374	0.000	0.000	77.012	42.038	3.180	XOM_R2OWSG MWD+IFR1+MS
18900.000	90.000	359.700	10843.000	69.130	0.000	77.675	0.000	69.130	0.000	0.000	77.775	42.084	3.149	XOM_R2OWSG MWD+IFR1+MS
19000.000	90.000	359.700	10843.000	69.886	0.000	78.437	0.000	69.886	0.000	0.000	78.537	42.131	3.118	XOM_R2OWSG MWD+IFR1+MS
19079.000	90.000	359.700	10843.000	70.484	0.000	79.040	0.000	70.484	0.000	0.000	79.140	42.177	3.096	XOM_R2OWSG MWD+IFR1+MS
19100.000	90.000	359.700	10843.000	70.640	0.000	79.198	0.000	70.640	0.000	0.000	79.297	42.177	3.089	XOM_R2OWSG MWD+IFR1+MS
19129.000	90.000	359.700	10843.000	70.866	0.000	79.425	0.000	70.866	0.000	0.000	79.524	42.200	3.081	XOM_R2OWSG MWD+IFR1+MS

Plan Targets

Corral 17-8 Fed Com 165H\_Updated

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
165H FTP	11522.31	408833.20	602575.50	7836.00	CIRCLE
165H LTP	19049.44	416360.30	602543.30	7836.00	CIRCLE
165H BHL	19099.00	416410.30	602543.10	7836.00	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.

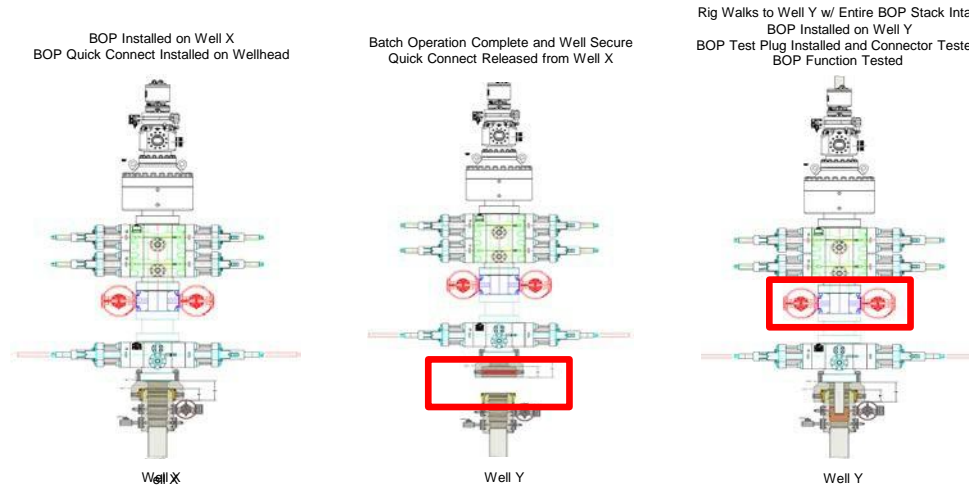
### **Procedures**

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.

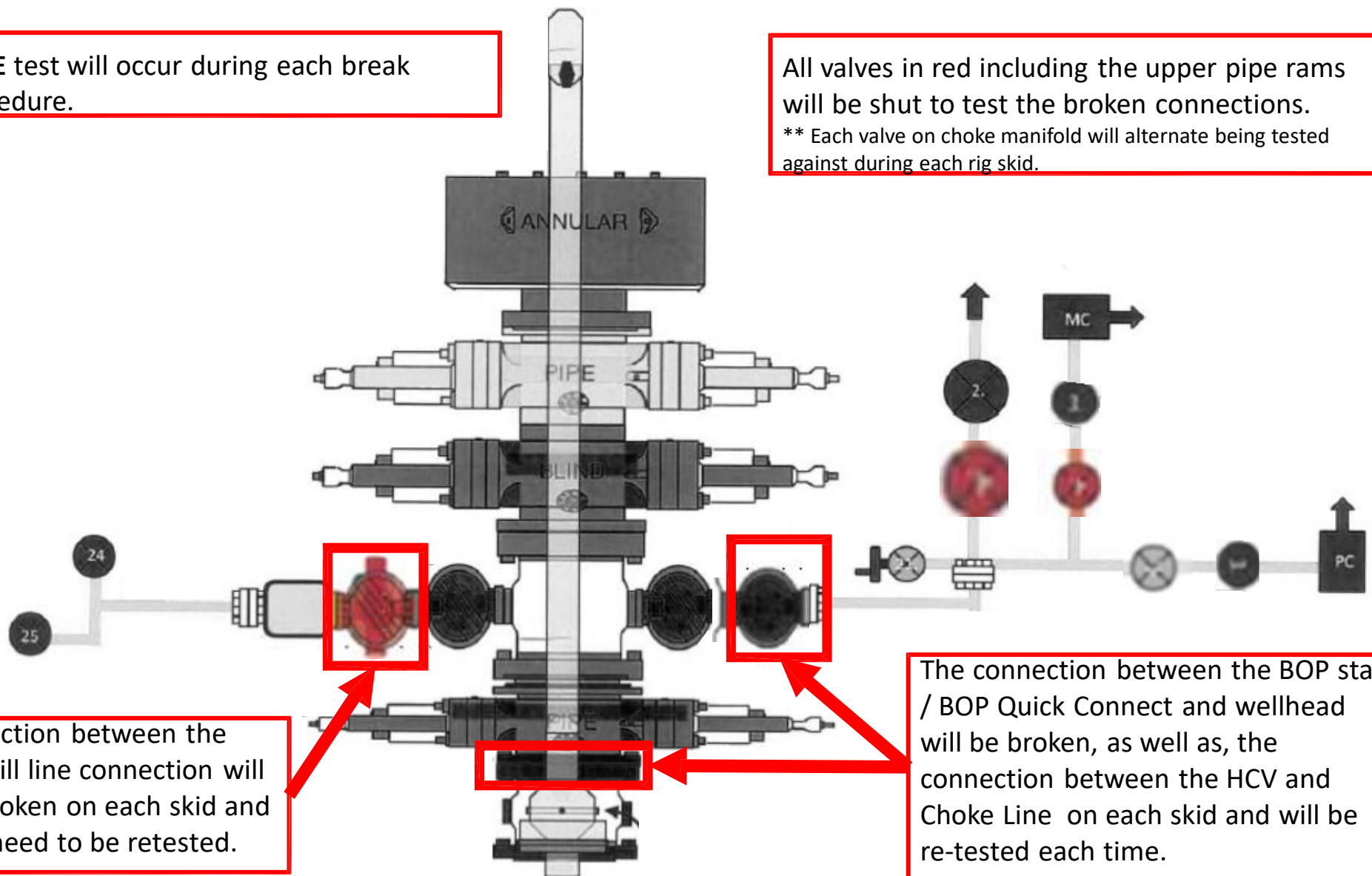
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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 III**  
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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 362883

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  362883
	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