

Well Name: CORRAL CANYON 17-8 FEDERAL	Well Location: T25S / R29E / SEC 17 / SWSE / 32.123613 / -104.00628	County or Parish/State: EDDY / NM
Well Number: 105H	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: 2791063

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 05/17/2024	Time Sundry Submitted: 08:47
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 LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation (Pool). FROM: TO: LTP: 330' FNL & 1170' FEL OF SECTION 8-T25S-R29E 100' FNL & 1170' FEL OF SECTION 8-T25S-R29E BHL: 200' FNL & 1170' FWL OF SECTION 8-T25S-R29E 50' FNL & 1170' FEL OF SECTION 8-T25S-R29E The proposed total depth is changing from 20540' MD; 9993' TVD (Purple Sage/Wolfcamp) to 20902' MD; 9997' TVD (Wolfcamp X/Y). See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

NOI Attachments

Procedure Description

Corral_17_8_Fed_Com_105H___BLM_APD_Change_Sundry_Attachment_20240517084719.pdf

Received by OCD: 7/10/2024 3:13:37 PM

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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: MANISH SAINA	Signed on: MAY 17, 2024 08:47 AM
Name: XTO ENERGY INCORPORATED	
Title: Regulatory Analyst	
Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY	
City: SPRING	State: TX
Phone: (720) 539-1673	
Email address: MANISH.SAINI@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: 07/10/2024
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.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

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

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

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

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

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

Additional Information

Additional Remarks

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

Location of Well

0. SHL: SWSE / 284 FSL / 2556 FEL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123613 / LONG: -104.00628 (TVD: 0 feet, MD: 0 feet)

PPP: SENE / 2652 FSL / 1165 FEL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.130066 / LONG: -104.001808 (TVD: 9993 feet, MD: 13200 feet)

PPP: SESE / 330 FSL / 1170 FEL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123681 / LONG: -104.001804 (TVD: 9993 feet, MD: 10463 feet)

BHL: NENE / 200 FNL / 1170 FEL / TWSP: 25S / RANGE: 29E / SECTION: 8 / LAT: 32.151382 / LONG: -104.001821 (TVD: 9993 feet, MD: 20540 feet)

CONFIDENTIAL

☒ AMENDED REPORT

CC/AI 618.013013.03-05

Intent ☒ As Drilled ☐

API # 30015		
Operator Name: XTO ENERGY, INC	Property Name: CORRAL 17-8 FED COM	Well Number 105H

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 P	Section 17	Township 25S	Range 29E	Lot	Feet 330	From N/S South	Feet 1,170	From E/W East	County Eddy
Latitude 32.123681					Longitude 104.001804				NAD 83

Last Take Point (LTP)

UL A	Section 8	Township 25S	Range 29E	Lot	Feet 100	From N/S North	Feet 1,170	From E/W East	County Eddy
Latitude 32.151657					Longitude 104.001820				NAD 83

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 105H

Projected TD: 20902.61' MD / 9997' TVD

SHL: 284' FSL & 2556' FEL , Section 17, T25S, R29E

BHL: 50' FNL & 1170' 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	619'	Water
Base of Salt	2737'	Water
Delaware	2937'	Water
Brushy Canyon	5435'	Water/Oil/Gas
Bone Spring	6693'	Water
1st Bone Spring	7469'	Water/Oil/Gas
2nd Bone Spring	7895'	Water/Oil/Gas
3rd Bone Spring	8710'	Water/Oil/Gas
Wolfcamp	9872'	Water/Oil/Gas
Wolfcamp X	9895'	Water/Oil/Gas
Wolfcamp Y	9972'	Water/Oil/Gas
Target/Land Curve	9997'	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 @ 584' (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 9350.65' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 20902.61 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9050.65 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 584'	9.625	40	J-55	BTC	New	1.70	10.78	26.97
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.69	2.86	2.01
8.75	4000' – 9350.65'	7.625	29.7	HC L-80	Flush Joint	New	1.96	2.45	2.55
6.75	0' – 9250.65'	5.5	20	RY P-110	Semi-Premium	New	1.26	2.10	2.25
6.75	9250.65' - 20902.61'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.94	2.25

- 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 +/- 584'

Lead: 90 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft³/sx, 10.13 gal/sx water)

Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

Top of Cement: Surface

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

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9350.65'

1st Stage

Optional Lead: 290 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 360 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 5435

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

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft³/sx, 9.61 gal/sx water)

Tail: 610 sxs Class C (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

Top of Cement: 0

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

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5435') 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 +/- 20902.61'

Lead: 20 sxs NeoCem (mixed at 12.8 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 9050.65 feet

Tail: 810 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 9550.65 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 3519 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' - 584'	12.25	FW/Native	8.4-8.9	35-40	NC
584' - 9350.65'	8.75	FW / Cut Brine / Direct Emulsion	9-9.5	30-32	NC
9350.65' - 20902.61'	6.75	OBM	11-11.5	50-60	NC - 20

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

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

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5718 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 105H

Measured Depth:	20902.61 ft
TVD RKB:	9997.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	408801.70 ft
Easting:	601400.10 ft
RKB:	3014.00 ft
Ground Level:	2981.00 ft
North Reference:	Grid
Convergence Angle:	0.17 Deg

Plan Sections		Corral 17-8 Fed Com 105H							
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	
2181.65	21.63	116.35	2156.14	-89.56	180.82	2.00	0.00	2.00	
5288.19	21.63	116.35	5043.86	-597.84	1207.11	0.00	0.00	0.00	
6369.85	0.00	0.00	6100.00	-687.39	1387.94	-2.00	0.00	2.00	
9550.65	0.00	0.00	9280.80	-687.39	1387.94	0.00	0.00	0.00	
10675.65	90.00	359.80	9997.00	28.80	1385.40	8.00	0.00	8.00	105H FTP
20852.61	90.00	359.80	9997.00	10205.70	1349.34	0.00	0.00	0.00	105H LTP
20902.61	90.00	359.80	9997.00	10255.70	1349.17	0.00	0.00	0.00	105H BHL

Position Uncertainty		Corral 17-8 Fed Com 105H							
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	XOM_R2OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.000	0.358	0.179	90.000	XOM_R2OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.309	0.000	0.000	0.717	0.538	90.000	XOM_R2OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.324	0.000	0.000	1.075	0.896	90.000	XOM_R2OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.345	0.000	0.000	1.434	1.255	90.000	XOM_R2OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.372	0.000	0.000	1.792	1.613	90.000	XOM_R2OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.403	0.000	0.000	2.151	1.972	90.000	XOM_R2OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.439	0.000	0.000	2.509	2.330	90.000	XOM_R2OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.480	0.000	0.000	2.868	2.689	90.000	XOM_R2OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.525	0.000	0.000	3.226	3.047	90.000	XOM_R2OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.574	0.000	0.000	3.585	3.405	90.000	XOM_R2OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.626	0.000	0.000	3.943	3.764	90.000	XOM_R2OWSG MWD+IFR1+MS
1200.000	2.000	116.347	1199.980	4.143	0.000	4.255	-0.000	2.681	0.000	0.000	4.289	4.110	90.027	XOM_R2OWSG MWD+IFR1+MS
1300.000	4.000	116.347	1299.838	4.473	0.000	4.592	-0.000	2.737	0.000	0.000	4.627	4.446	90.000	XOM_R2OWSG MWD+IFR1+MS
1400.000	6.000	116.347	1399.452	4.800	0.000	4.934	-0.000	2.795	0.000	0.000	4.969	4.787	90.071	XOM_R2OWSG MWD+IFR1+MS
1500.000	8.000	116.347	1498.702	5.126	0.000	5.281	-0.000	2.853	0.000	0.000	5.316	5.130	90.377	XOM_R2OWSG MWD+IFR1+MS
1600.000	10.000	116.347	1597.465	5.450	0.000	5.633	-0.000	2.914	0.000	0.000	5.667	5.477	91.035	XOM_R2OWSG MWD+IFR1+MS
1700.000	12.000	116.347	1695.623	5.771	0.000	5.990	-0.000	2.976	0.000	0.000	6.023	5.826	92.136	XOM_R2OWSG MWD+IFR1+MS
1800.000	14.000	116.347	1793.055	6.090	0.000	6.355	-0.000	3.042	0.000	0.000	6.385	6.179	93.730	XOM_R2OWSG MWD+IFR1+MS

1900.000	16.000	116.347	1889.643	6.409	0.000	6.728	-0.000	3.112	0.000	0.000	6.754	6.535	95.808	XOM_R2OWSG MWD+IFR1+MS
2000.000	18.000	116.347	1985.268	6.726	0.000	7.110	-0.000	3.188	0.000	0.000	7.133	6.893	98.286	XOM_R2OWSG MWD+IFR1+MS
2100.000	20.000	116.347	2079.816	7.042	0.000	7.503	-0.000	3.270	0.000	0.000	7.522	7.255	101.001	XOM_R2OWSG MWD+IFR1+MS
2181.654	21.633	116.347	2156.138	7.301	0.000	7.833	-0.000	3.342	0.000	0.000	7.848	7.552	103.194	XOM_R2OWSG MWD+IFR1+MS
2200.000	21.633	116.347	2173.192	7.371	0.000	7.908	-0.000	3.355	0.000	0.000	7.923	7.620	103.588	XOM_R2OWSG MWD+IFR1+MS
2300.000	21.633	116.347	2266.148	7.756	0.000	8.325	-0.000	3.473	0.000	0.000	8.335	7.980	106.249	XOM_R2OWSG MWD+IFR1+MS
2400.000	21.633	116.347	2359.105	8.147	0.000	8.749	-0.000	3.597	0.000	0.000	8.757	8.343	108.321	XOM_R2OWSG MWD+IFR1+MS
2500.000	21.633	116.347	2452.061	8.543	0.000	9.179	-0.000	3.727	0.000	0.000	9.185	8.711	109.960	XOM_R2OWSG MWD+IFR1+MS
2600.000	21.633	116.347	2545.018	8.944	0.000	9.616	-0.000	3.862	0.000	0.000	9.620	9.083	111.279	XOM_R2OWSG MWD+IFR1+MS
2700.000	21.633	116.347	2637.974	9.349	0.000	10.057	-0.000	4.002	0.000	0.000	10.060	9.458	112.360	XOM_R2OWSG MWD+IFR1+MS
2800.000	21.633	116.347	2730.930	9.757	0.000	10.503	-0.000	4.147	0.000	0.000	10.505	9.836	113.257	XOM_R2OWSG MWD+IFR1+MS
2900.000	21.633	116.347	2823.887	10.168	0.000	10.953	-0.000	4.295	0.000	0.000	10.954	10.216	114.012	XOM_R2OWSG MWD+IFR1+MS
3000.000	21.633	116.347	2916.843	10.581	0.000	11.406	-0.000	4.447	0.000	0.000	11.406	10.599	114.656	XOM_R2OWSG MWD+IFR1+MS
3100.000	21.633	116.347	3009.800	10.997	0.000	11.862	-0.000	4.603	0.000	0.000	11.862	10.984	115.210	XOM_R2OWSG MWD+IFR1+MS
3200.000	21.633	116.347	3102.756	11.415	0.000	12.320	-0.000	4.762	0.000	0.000	12.320	11.372	115.691	XOM_R2OWSG MWD+IFR1+MS
3300.000	21.633	116.347	3195.713	11.835	0.000	12.781	-0.000	4.924	0.000	0.000	12.781	11.760	116.113	XOM_R2OWSG MWD+IFR1+MS
3400.000	21.633	116.347	3288.669	12.257	0.000	13.244	-0.000	5.088	0.000	0.000	13.244	12.151	116.486	XOM_R2OWSG MWD+IFR1+MS
3500.000	21.633	116.347	3381.625	12.680	0.000	13.709	-0.000	5.255	0.000	0.000	13.709	12.543	116.818	XOM_R2OWSG MWD+IFR1+MS
3600.000	21.633	116.347	3474.582	13.104	0.000	14.176	-0.000	5.425	0.000	0.000	14.176	12.936	117.115	XOM_R2OWSG MWD+IFR1+MS
3700.000	21.633	116.347	3567.538	13.530	0.000	14.644	-0.000	5.596	0.000	0.000	14.644	13.331	117.381	XOM_R2OWSG MWD+IFR1+MS

3800.000	21.633	116.347	3660.495	13.957	0.000	15.113	-0.000	5.770	0.000	0.000	15.114	13.727	117.623	XOM_R2OWSG MWD+IFR1+MS
3900.000	21.633	116.347	3753.451	14.384	0.000	15.584	-0.000	5.945	0.000	0.000	15.585	14.124	117.842	XOM_R2OWSG MWD+IFR1+MS
4000.000	21.633	116.347	3846.408	14.813	0.000	16.056	-0.000	6.123	0.000	0.000	16.058	14.522	118.042	XOM_R2OWSG MWD+IFR1+MS
4100.000	21.633	116.347	3939.364	15.243	0.000	16.530	-0.000	6.302	0.000	0.000	16.531	14.920	118.226	XOM_R2OWSG MWD+IFR1+MS
4200.000	21.633	116.347	4032.320	15.673	0.000	17.004	-0.000	6.483	0.000	0.000	17.006	15.320	118.394	XOM_R2OWSG MWD+IFR1+MS
4300.000	21.633	116.347	4125.277	16.104	0.000	17.479	-0.000	6.666	0.000	0.000	17.481	15.720	118.550	XOM_R2OWSG MWD+IFR1+MS
4400.000	21.633	116.347	4218.233	16.536	0.000	17.954	-0.000	6.850	0.000	0.000	17.957	16.122	118.694	XOM_R2OWSG MWD+IFR1+MS
4500.000	21.633	116.347	4311.190	16.968	0.000	18.431	-0.000	7.036	0.000	0.000	18.434	16.523	118.827	XOM_R2OWSG MWD+IFR1+MS
4600.000	21.633	116.347	4404.146	17.401	0.000	18.908	-0.000	7.224	0.000	0.000	18.912	16.926	118.952	XOM_R2OWSG MWD+IFR1+MS
4700.000	21.633	116.347	4497.103	17.835	0.000	19.386	-0.000	7.413	0.000	0.000	19.391	17.329	119.068	XOM_R2OWSG MWD+IFR1+MS
4800.000	21.633	116.347	4590.059	18.269	0.000	19.865	-0.000	7.603	0.000	0.000	19.870	17.733	119.176	XOM_R2OWSG MWD+IFR1+MS
4900.000	21.633	116.347	4683.015	18.703	0.000	20.344	-0.000	7.795	0.000	0.000	20.349	18.137	119.278	XOM_R2OWSG MWD+IFR1+MS
5000.000	21.633	116.347	4775.972	19.138	0.000	20.824	-0.000	7.989	0.000	0.000	20.830	18.541	119.374	XOM_R2OWSG MWD+IFR1+MS
5100.000	21.633	116.347	4868.928	19.573	0.000	21.304	-0.000	8.184	0.000	0.000	21.310	18.947	119.463	XOM_R2OWSG MWD+IFR1+MS
5200.000	21.633	116.347	4961.885	20.009	0.000	21.784	-0.000	8.380	0.000	0.000	21.791	19.352	119.548	XOM_R2OWSG MWD+IFR1+MS
5288.192	21.633	116.347	5043.862	20.393	0.000	22.208	-0.000	8.554	0.000	0.000	22.216	19.710	119.619	XOM_R2OWSG MWD+IFR1+MS
5300.000	21.397	116.347	5054.847	20.451	0.000	22.265	-0.000	8.578	0.000	0.000	22.273	19.758	119.629	XOM_R2OWSG MWD+IFR1+MS
5400.000	19.397	116.347	5148.573	20.925	0.000	22.735	-0.000	8.773	0.000	0.000	22.743	20.160	119.706	XOM_R2OWSG MWD+IFR1+MS
5500.000	17.397	116.347	5243.457	21.366	0.000	23.187	-0.000	8.961	0.000	0.000	23.196	20.557	119.785	XOM_R2OWSG MWD+IFR1+MS
5600.000	15.397	116.347	5339.385	21.773	0.000	23.620	-0.000	9.139	0.000	0.000	23.630	20.949	119.864	XOM_R2OWSG MWD+IFR1+MS

5700.000	13.397	116.347	5436.240	22.144	0.000	24.036	-0.000	9.306	0.000	0.000	24.046	21.333	119.944	XOM_R2OWSG MWD+IFR1+MS
5800.000	11.397	116.347	5533.903	22.479	0.000	24.433	-0.000	9.463	0.000	0.000	24.443	21.710	120.024	XOM_R2OWSG MWD+IFR1+MS
5900.000	9.397	116.347	5632.257	22.777	0.000	24.812	-0.000	9.612	0.000	0.000	24.823	22.078	120.101	XOM_R2OWSG MWD+IFR1+MS
6000.000	7.397	116.347	5731.180	23.039	0.000	25.175	-0.000	9.753	0.000	0.000	25.186	22.437	120.176	XOM_R2OWSG MWD+IFR1+MS
6100.000	5.397	116.347	5830.552	23.263	0.000	25.520	-0.000	9.886	0.000	0.000	25.532	22.784	120.247	XOM_R2OWSG MWD+IFR1+MS
6200.000	3.397	116.347	5930.253	23.449	0.000	25.850	-0.000	10.012	0.000	0.000	25.863	23.121	120.312	XOM_R2OWSG MWD+IFR1+MS
6300.000	1.397	116.347	6030.160	23.598	0.000	26.165	-0.000	10.133	0.000	0.000	26.178	23.446	120.371	XOM_R2OWSG MWD+IFR1+MS
6369.847	0.000	0.000	6100.000	25.717	0.000	24.385	0.000	10.215	0.000	0.000	26.384	23.661	120.338	XOM_R2OWSG MWD+IFR1+MS
6400.000	0.000	0.000	6130.153	25.805	0.000	24.471	0.000	10.250	0.000	0.000	26.470	23.750	120.294	XOM_R2OWSG MWD+IFR1+MS
6500.000	0.000	0.000	6230.153	26.099	0.000	24.759	0.000	10.367	0.000	0.000	26.755	24.049	120.146	XOM_R2OWSG MWD+IFR1+MS
6600.000	0.000	0.000	6330.153	26.395	0.000	25.050	0.000	10.487	0.000	0.000	27.042	24.349	120.000	XOM_R2OWSG MWD+IFR1+MS
6700.000	0.000	0.000	6430.153	26.692	0.000	25.342	0.000	10.609	0.000	0.000	27.330	24.651	119.856	XOM_R2OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6530.153	26.990	0.000	25.635	0.000	10.735	0.000	0.000	27.621	24.955	119.715	XOM_R2OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6630.153	27.290	0.000	25.931	0.000	10.864	0.000	0.000	27.912	25.259	119.574	XOM_R2OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6730.153	27.591	0.000	26.227	0.000	10.995	0.000	0.000	28.206	25.565	119.436	XOM_R2OWSG MWD+IFR1+MS
7100.000	0.000	0.000	6830.153	27.894	0.000	26.526	0.000	11.130	0.000	0.000	28.501	25.873	119.300	XOM_R2OWSG MWD+IFR1+MS
7200.000	0.000	0.000	6930.153	28.198	0.000	26.826	0.000	11.268	0.000	0.000	28.797	26.181	119.165	XOM_R2OWSG MWD+IFR1+MS
7300.000	0.000	0.000	7030.153	28.503	0.000	27.127	0.000	11.409	0.000	0.000	29.095	26.491	119.032	XOM_R2OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7130.153	28.810	0.000	27.429	0.000	11.552	0.000	0.000	29.394	26.802	118.900	XOM_R2OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7230.153	29.117	0.000	27.733	0.000	11.699	0.000	0.000	29.695	27.114	118.770	XOM_R2OWSG MWD+IFR1+MS

7600.000	0.000	0.000	7330.153	29.426	0.000	28.039	0.000	11.849	0.000	0.000	29.997	27.428	118.642	XOM_R2OWSG MWD+IFR1+MS
7700.000	0.000	0.000	7430.153	29.736	0.000	28.345	0.000	12.003	0.000	0.000	30.300	27.742	118.516	XOM_R2OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7530.153	30.047	0.000	28.653	0.000	12.159	0.000	0.000	30.604	28.057	118.391	XOM_R2OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7630.153	30.359	0.000	28.962	0.000	12.319	0.000	0.000	30.910	28.374	118.267	XOM_R2OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7730.153	30.672	0.000	29.272	0.000	12.481	0.000	0.000	31.216	28.691	118.146	XOM_R2OWSG MWD+IFR1+MS
8100.000	0.000	0.000	7830.153	30.986	0.000	29.583	0.000	12.647	0.000	0.000	31.524	29.009	118.025	XOM_R2OWSG MWD+IFR1+MS
8200.000	0.000	0.000	7930.153	31.301	0.000	29.895	0.000	12.817	0.000	0.000	31.833	29.329	117.906	XOM_R2OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8030.153	31.617	0.000	30.208	0.000	12.989	0.000	0.000	32.143	29.649	117.789	XOM_R2OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8130.153	31.934	0.000	30.522	0.000	13.165	0.000	0.000	32.454	29.970	117.673	XOM_R2OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8230.153	32.252	0.000	30.838	0.000	13.344	0.000	0.000	32.765	30.291	117.558	XOM_R2OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8330.153	32.570	0.000	31.154	0.000	13.526	0.000	0.000	33.078	30.614	117.445	XOM_R2OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8430.153	32.890	0.000	31.471	0.000	13.711	0.000	0.000	33.392	30.937	117.334	XOM_R2OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8530.153	33.210	0.000	31.789	0.000	13.900	0.000	0.000	33.707	31.261	117.223	XOM_R2OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8630.153	33.531	0.000	32.107	0.000	14.092	0.000	0.000	34.022	31.586	117.114	XOM_R2OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8730.153	33.853	0.000	32.427	0.000	14.288	0.000	0.000	34.339	31.911	117.006	XOM_R2OWSG MWD+IFR1+MS
9100.000	0.000	0.000	8830.153	34.175	0.000	32.747	0.000	14.486	0.000	0.000	34.656	32.238	116.900	XOM_R2OWSG MWD+IFR1+MS
9200.000	0.000	0.000	8930.153	34.498	0.000	33.068	0.000	14.688	0.000	0.000	34.974	32.564	116.794	XOM_R2OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9030.153	34.822	0.000	33.390	0.000	14.894	0.000	0.000	35.293	32.892	116.691	XOM_R2OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9130.153	35.147	0.000	33.713	0.000	15.103	0.000	0.000	35.613	33.220	116.588	XOM_R2OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9230.153	35.472	0.000	34.036	0.000	15.315	0.000	0.000	35.933	33.549	116.486	XOM_R2OWSG MWD+IFR1+MS

9550.650	0.000	0.000	9280.803	35.637	0.000	34.200	0.000	15.423	0.000	0.000	36.096	33.715	116.435	XOM_R2OWSG MWD+IFR1+MS
9600.000	3.948	359.797	9330.114	35.576	0.000	34.365	0.000	15.529	0.000	0.000	36.253	33.875	116.404	XOM_R2OWSG MWD+IFR1+MS
9700.000	11.948	359.797	9429.073	35.036	0.000	34.674	0.000	15.740	0.000	0.000	36.561	34.181	116.464	XOM_R2OWSG MWD+IFR1+MS
9800.000	19.948	359.797	9525.146	33.942	0.000	34.963	0.000	15.946	0.000	0.000	36.849	34.461	116.693	XOM_R2OWSG MWD+IFR1+MS
9900.000	27.948	359.797	9616.463	32.339	0.000	35.230	0.000	16.152	0.000	0.000	37.109	34.712	117.102	XOM_R2OWSG MWD+IFR1+MS
10000.000	35.948	359.797	9701.247	30.295	0.000	35.471	0.000	16.361	0.000	0.000	37.333	34.933	117.673	XOM_R2OWSG MWD+IFR1+MS
10100.000	43.948	359.797	9777.848	27.913	0.000	35.688	0.000	16.579	0.000	0.000	37.519	35.126	118.373	XOM_R2OWSG MWD+IFR1+MS
10200.000	51.948	359.797	9844.774	25.332	0.000	35.878	0.000	16.813	0.000	0.000	37.664	35.294	119.161	XOM_R2OWSG MWD+IFR1+MS
10300.000	59.948	359.797	9900.723	22.750	0.000	36.043	0.000	17.069	0.000	0.000	37.768	35.440	119.992	XOM_R2OWSG MWD+IFR1+MS
10400.000	67.948	359.797	9944.606	20.438	0.000	36.184	0.000	17.351	0.000	0.000	37.833	35.570	120.810	XOM_R2OWSG MWD+IFR1+MS
10500.000	75.948	359.797	9975.569	18.744	0.000	36.302	0.000	17.662	0.000	0.000	37.861	35.687	121.542	XOM_R2OWSG MWD+IFR1+MS
10600.000	83.948	359.797	9993.009	18.028	0.000	36.396	0.000	18.000	0.000	0.000	37.859	35.796	122.079	XOM_R2OWSG MWD+IFR1+MS
10675.650	90.000	359.797	9997.000	18.271	0.000	36.451	0.000	18.271	0.000	0.000	37.841	35.874	122.242	XOM_R2OWSG MWD+IFR1+MS
10700.000	90.000	359.797	9997.000	18.361	0.000	36.467	0.000	18.361	0.000	0.000	37.834	35.899	122.251	XOM_R2OWSG MWD+IFR1+MS
10800.000	90.000	359.797	9997.000	18.746	0.000	36.548	0.000	18.746	0.000	0.000	37.806	36.014	122.571	XOM_R2OWSG MWD+IFR1+MS
10900.000	90.000	359.797	9997.000	19.155	0.000	36.650	0.000	19.155	0.000	0.000	37.786	36.143	123.269	XOM_R2OWSG MWD+IFR1+MS
11000.000	90.000	359.797	9997.000	19.587	0.000	36.773	0.000	19.587	0.000	0.000	37.773	36.285	124.468	XOM_R2OWSG MWD+IFR1+MS
11100.000	90.000	359.797	9997.000	20.041	0.000	36.917	0.000	20.041	0.000	0.000	37.769	36.440	126.355	XOM_R2OWSG MWD+IFR1+MS
11200.000	90.000	359.797	9997.000	20.514	0.000	37.081	0.000	20.514	0.000	0.000	37.777	36.603	129.210	XOM_R2OWSG MWD+IFR1+MS
11300.000	90.000	359.797	9997.000	21.007	0.000	37.265	0.000	21.007	0.000	0.000	37.803	36.770	133.423	XOM_R2OWSG MWD+IFR1+MS

11400.000	90.000	359.797	9997.000	21.516	0.000	37.469	0.000	21.516	0.000	0.000	37.855	36.930	-40.611	XOM_R2OWSG MWD+IFR1+MS
11500.000	90.000	359.797	9997.000	22.042	0.000	37.692	0.000	22.042	0.000	0.000	37.945	37.072	-32.902	XOM_R2OWSG MWD+IFR1+MS
11600.000	90.000	359.797	9997.000	22.583	0.000	37.935	0.000	22.583	0.000	0.000	38.085	37.183	-24.447	XOM_R2OWSG MWD+IFR1+MS
11700.000	90.000	359.797	9997.000	23.138	0.000	38.196	0.000	23.138	0.000	0.000	38.278	37.261	-16.834	XOM_R2OWSG MWD+IFR1+MS
11800.000	90.000	359.797	9997.000	23.705	0.000	38.476	0.000	23.705	0.000	0.000	38.517	37.313	-10.941	XOM_R2OWSG MWD+IFR1+MS
11900.000	90.000	359.797	9997.000	24.285	0.000	38.774	0.000	24.285	0.000	0.000	38.792	37.346	-6.696	XOM_R2OWSG MWD+IFR1+MS
12000.000	90.000	359.797	9997.000	24.876	0.000	39.089	0.000	24.876	0.000	0.000	39.095	37.369	-3.691	XOM_R2OWSG MWD+IFR1+MS
12100.000	90.000	359.797	9997.000	25.478	0.000	39.421	0.000	25.478	0.000	0.000	39.422	37.386	-1.545	XOM_R2OWSG MWD+IFR1+MS
12200.000	90.000	359.797	9997.000	26.089	0.000	39.770	0.000	26.089	0.000	0.000	39.770	37.399	0.013	XOM_R2OWSG MWD+IFR1+MS
12300.000	90.000	359.797	9997.000	26.710	0.000	40.136	0.000	26.710	0.000	0.000	40.137	37.410	1.164	XOM_R2OWSG MWD+IFR1+MS
12400.000	90.000	359.797	9997.000	27.339	0.000	40.517	0.000	27.339	0.000	0.000	40.522	37.420	2.026	XOM_R2OWSG MWD+IFR1+MS
12500.000	90.000	359.797	9997.000	27.975	0.000	40.914	0.000	27.975	0.000	0.000	40.922	37.430	2.680	XOM_R2OWSG MWD+IFR1+MS
12600.000	90.000	359.797	9997.000	28.620	0.000	41.325	0.000	28.620	0.000	0.000	41.338	37.439	3.181	XOM_R2OWSG MWD+IFR1+MS
12700.000	90.000	359.797	9997.000	29.270	0.000	41.752	0.000	29.270	0.000	0.000	41.769	37.449	3.566	XOM_R2OWSG MWD+IFR1+MS
12800.000	90.000	359.797	9997.000	29.928	0.000	42.192	0.000	29.928	0.000	0.000	42.214	37.459	3.864	XOM_R2OWSG MWD+IFR1+MS
12900.000	90.000	359.797	9997.000	30.591	0.000	42.646	0.000	30.591	0.000	0.000	42.673	37.469	4.093	XOM_R2OWSG MWD+IFR1+MS
13000.000	90.000	359.797	9997.000	31.260	0.000	43.113	0.000	31.260	0.000	0.000	43.145	37.481	4.270	XOM_R2OWSG MWD+IFR1+MS
13100.000	90.000	359.797	9997.000	31.935	0.000	43.593	0.000	31.935	0.000	0.000	43.630	37.492	4.404	XOM_R2OWSG MWD+IFR1+MS
13200.000	90.000	359.797	9997.000	32.614	0.000	44.085	0.000	32.614	0.000	0.000	44.126	37.505	4.505	XOM_R2OWSG MWD+IFR1+MS
13300.000	90.000	359.797	9997.000	33.298	0.000	44.589	0.000	33.298	0.000	0.000	44.635	37.518	4.578	XOM_R2OWSG MWD+IFR1+MS

13400.000	90.000	359.797	9997.000	33.986	0.000	45.105	0.000	33.986	0.000	0.000	45.155	37.532	4.630	XOM_R2OWSG MWD+IFR1+MS
13500.000	90.000	359.797	9997.000	34.678	0.000	45.632	0.000	34.678	0.000	0.000	45.685	37.547	4.664	XOM_R2OWSG MWD+IFR1+MS
13600.000	90.000	359.797	9997.000	35.374	0.000	46.170	0.000	35.374	0.000	0.000	46.227	37.563	4.684	XOM_R2OWSG MWD+IFR1+MS
13700.000	90.000	359.797	9997.000	36.074	0.000	46.718	0.000	36.074	0.000	0.000	46.778	37.579	4.691	XOM_R2OWSG MWD+IFR1+MS
13800.000	90.000	359.797	9997.000	36.778	0.000	47.276	0.000	36.778	0.000	0.000	47.340	37.596	4.689	XOM_R2OWSG MWD+IFR1+MS
13900.000	90.000	359.797	9997.000	37.484	0.000	47.844	0.000	37.484	0.000	0.000	47.911	37.614	4.679	XOM_R2OWSG MWD+IFR1+MS
14000.000	90.000	359.797	9997.000	38.194	0.000	48.421	0.000	38.194	0.000	0.000	48.491	37.633	4.662	XOM_R2OWSG MWD+IFR1+MS
14100.000	90.000	359.797	9997.000	38.906	0.000	49.008	0.000	38.906	0.000	0.000	49.080	37.652	4.640	XOM_R2OWSG MWD+IFR1+MS
14200.000	90.000	359.797	9997.000	39.621	0.000	49.603	0.000	39.621	0.000	0.000	49.677	37.672	4.613	XOM_R2OWSG MWD+IFR1+MS
14300.000	90.000	359.797	9997.000	40.339	0.000	50.206	0.000	40.339	0.000	0.000	50.283	37.693	4.583	XOM_R2OWSG MWD+IFR1+MS
14400.000	90.000	359.797	9997.000	41.059	0.000	50.818	0.000	41.059	0.000	0.000	50.896	37.715	4.549	XOM_R2OWSG MWD+IFR1+MS
14500.000	90.000	359.797	9997.000	41.782	0.000	51.437	0.000	41.782	0.000	0.000	51.518	37.737	4.513	XOM_R2OWSG MWD+IFR1+MS
14600.000	90.000	359.797	9997.000	42.506	0.000	52.064	0.000	42.506	0.000	0.000	52.146	37.761	4.475	XOM_R2OWSG MWD+IFR1+MS
14700.000	90.000	359.797	9997.000	43.233	0.000	52.698	0.000	43.233	0.000	0.000	52.782	37.785	4.436	XOM_R2OWSG MWD+IFR1+MS
14800.000	90.000	359.797	9997.000	43.962	0.000	53.339	0.000	43.962	0.000	0.000	53.425	37.809	4.395	XOM_R2OWSG MWD+IFR1+MS
14900.000	90.000	359.797	9997.000	44.693	0.000	53.987	0.000	44.693	0.000	0.000	54.074	37.835	4.353	XOM_R2OWSG MWD+IFR1+MS
15000.000	90.000	359.797	9997.000	45.425	0.000	54.641	0.000	45.425	0.000	0.000	54.730	37.861	4.311	XOM_R2OWSG MWD+IFR1+MS
15100.000	90.000	359.797	9997.000	46.160	0.000	55.302	0.000	46.160	0.000	0.000	55.391	37.887	4.268	XOM_R2OWSG MWD+IFR1+MS
15200.000	90.000	359.797	9997.000	46.896	0.000	55.969	0.000	46.896	0.000	0.000	56.059	37.915	4.225	XOM_R2OWSG MWD+IFR1+MS
15300.000	90.000	359.797	9997.000	47.633	0.000	56.641	0.000	47.633	0.000	0.000	56.733	37.943	4.182	XOM_R2OWSG MWD+IFR1+MS

15400.000	90.000	359.797	9997.000	48.372	0.000	57.319	0.000	48.372	0.000	0.000	57.412	37.972	4.138	XOM_R2OWSG MWD+IFR1+MS
15500.000	90.000	359.797	9997.000	49.112	0.000	58.003	0.000	49.112	0.000	0.000	58.096	38.002	4.095	XOM_R2OWSG MWD+IFR1+MS
15600.000	90.000	359.797	9997.000	49.854	0.000	58.692	0.000	49.854	0.000	0.000	58.786	38.032	4.052	XOM_R2OWSG MWD+IFR1+MS
15700.000	90.000	359.797	9997.000	50.597	0.000	59.386	0.000	50.597	0.000	0.000	59.481	38.063	4.008	XOM_R2OWSG MWD+IFR1+MS
15800.000	90.000	359.797	9997.000	51.341	0.000	60.085	0.000	51.341	0.000	0.000	60.180	38.095	3.966	XOM_R2OWSG MWD+IFR1+MS
15900.000	90.000	359.797	9997.000	52.087	0.000	60.788	0.000	52.087	0.000	0.000	60.884	38.127	3.923	XOM_R2OWSG MWD+IFR1+MS
16000.000	90.000	359.797	9997.000	52.833	0.000	61.496	0.000	52.833	0.000	0.000	61.593	38.160	3.881	XOM_R2OWSG MWD+IFR1+MS
16100.000	90.000	359.797	9997.000	53.581	0.000	62.209	0.000	53.581	0.000	0.000	62.306	38.193	3.840	XOM_R2OWSG MWD+IFR1+MS
16200.000	90.000	359.797	9997.000	54.330	0.000	62.926	0.000	54.330	0.000	0.000	63.023	38.228	3.799	XOM_R2OWSG MWD+IFR1+MS
16300.000	90.000	359.797	9997.000	55.080	0.000	63.647	0.000	55.080	0.000	0.000	63.744	38.263	3.758	XOM_R2OWSG MWD+IFR1+MS
16400.000	90.000	359.797	9997.000	55.830	0.000	64.372	0.000	55.830	0.000	0.000	64.469	38.298	3.718	XOM_R2OWSG MWD+IFR1+MS
16500.000	90.000	359.797	9997.000	56.582	0.000	65.100	0.000	56.582	0.000	0.000	65.198	38.335	3.678	XOM_R2OWSG MWD+IFR1+MS
16600.000	90.000	359.797	9997.000	57.334	0.000	65.833	0.000	57.334	0.000	0.000	65.931	38.371	3.639	XOM_R2OWSG MWD+IFR1+MS
16700.000	90.000	359.797	9997.000	58.088	0.000	66.569	0.000	58.088	0.000	0.000	66.667	38.409	3.601	XOM_R2OWSG MWD+IFR1+MS
16800.000	90.000	359.797	9997.000	58.842	0.000	67.308	0.000	58.842	0.000	0.000	67.407	38.447	3.562	XOM_R2OWSG MWD+IFR1+MS
16900.000	90.000	359.797	9997.000	59.597	0.000	68.051	0.000	59.597	0.000	0.000	68.149	38.486	3.525	XOM_R2OWSG MWD+IFR1+MS
17000.000	90.000	359.797	9997.000	60.353	0.000	68.797	0.000	60.353	0.000	0.000	68.896	38.525	3.488	XOM_R2OWSG MWD+IFR1+MS
17100.000	90.000	359.797	9997.000	61.109	0.000	69.547	0.000	61.109	0.000	0.000	69.645	38.566	3.452	XOM_R2OWSG MWD+IFR1+MS
17200.000	90.000	359.797	9997.000	61.866	0.000	70.299	0.000	61.866	0.000	0.000	70.397	38.606	3.416	XOM_R2OWSG MWD+IFR1+MS
17300.000	90.000	359.797	9997.000	62.624	0.000	71.054	0.000	62.624	0.000	0.000	71.152	38.647	3.381	XOM_R2OWSG MWD+IFR1+MS

17400.000	90.000	359.797	9997.000	63.383	0.000	71.812	0.000	63.383	0.000	0.000	71.910	38.689	3.346	XOM_R2OWSG MWD+IFR1+MS
17500.000	90.000	359.797	9997.000	64.142	0.000	72.573	0.000	64.142	0.000	0.000	72.671	38.732	3.312	XOM_R2OWSG MWD+IFR1+MS
17600.000	90.000	359.797	9997.000	64.902	0.000	73.337	0.000	64.902	0.000	0.000	73.435	38.775	3.278	XOM_R2OWSG MWD+IFR1+MS
17700.000	90.000	359.797	9997.000	65.662	0.000	74.103	0.000	65.662	0.000	0.000	74.201	38.819	3.245	XOM_R2OWSG MWD+IFR1+MS
17800.000	90.000	359.797	9997.000	66.423	0.000	74.872	0.000	66.423	0.000	0.000	74.969	38.863	3.212	XOM_R2OWSG MWD+IFR1+MS
17900.000	90.000	359.797	9997.000	67.184	0.000	75.643	0.000	67.184	0.000	0.000	75.740	38.908	3.180	XOM_R2OWSG MWD+IFR1+MS
18000.000	90.000	359.797	9997.000	67.946	0.000	76.416	0.000	67.946	0.000	0.000	76.513	38.954	3.148	XOM_R2OWSG MWD+IFR1+MS
18100.000	90.000	359.797	9997.000	68.709	0.000	77.192	0.000	68.709	0.000	0.000	77.289	39.000	3.117	XOM_R2OWSG MWD+IFR1+MS
18200.000	90.000	359.797	9997.000	69.472	0.000	77.970	0.000	69.472	0.000	0.000	78.067	39.046	3.087	XOM_R2OWSG MWD+IFR1+MS
18300.000	90.000	359.797	9997.000	70.235	0.000	78.750	0.000	70.235	0.000	0.000	78.847	39.094	3.057	XOM_R2OWSG MWD+IFR1+MS
18400.000	90.000	359.797	9997.000	70.999	0.000	79.533	0.000	70.999	0.000	0.000	79.629	39.142	3.027	XOM_R2OWSG MWD+IFR1+MS
18500.000	90.000	359.797	9997.000	71.764	0.000	80.317	0.000	71.764	0.000	0.000	80.413	39.190	2.998	XOM_R2OWSG MWD+IFR1+MS
18600.000	90.000	359.797	9997.000	72.528	0.000	81.103	0.000	72.528	0.000	0.000	81.199	39.239	2.969	XOM_R2OWSG MWD+IFR1+MS
18700.000	90.000	359.797	9997.000	73.294	0.000	81.892	0.000	73.294	0.000	0.000	81.987	39.289	2.941	XOM_R2OWSG MWD+IFR1+MS
18800.000	90.000	359.797	9997.000	74.059	0.000	82.682	0.000	74.059	0.000	0.000	82.776	39.339	2.913	XOM_R2OWSG MWD+IFR1+MS
18900.000	90.000	359.797	9997.000	74.825	0.000	83.474	0.000	74.825	0.000	0.000	83.568	39.390	2.886	XOM_R2OWSG MWD+IFR1+MS
19000.000	90.000	359.797	9997.000	75.592	0.000	84.267	0.000	75.592	0.000	0.000	84.361	39.441	2.859	XOM_R2OWSG MWD+IFR1+MS
19100.000	90.000	359.797	9997.000	76.359	0.000	85.063	0.000	76.359	0.000	0.000	85.156	39.493	2.832	XOM_R2OWSG MWD+IFR1+MS
19200.000	90.000	359.797	9997.000	77.126	0.000	85.860	0.000	77.126	0.000	0.000	85.953	39.545	2.806	XOM_R2OWSG MWD+IFR1+MS
19300.000	90.000	359.797	9997.000	77.893	0.000	86.658	0.000	77.893	0.000	0.000	86.752	39.598	2.781	XOM_R2OWSG MWD+IFR1+MS

19400.000	90.000	359.797	9997.000	78.661	0.000	87.459	0.000	78.661	0.000	0.000	87.551	39.652	2.755	XOM_R2OWSG MWD+IFR1+MS
19500.000	90.000	359.797	9997.000	79.430	0.000	88.260	0.000	79.430	0.000	0.000	88.353	39.706	2.730	XOM_R2OWSG MWD+IFR1+MS
19600.000	90.000	359.797	9997.000	80.198	0.000	89.064	0.000	80.198	0.000	0.000	89.156	39.760	2.706	XOM_R2OWSG MWD+IFR1+MS
19700.000	90.000	359.797	9997.000	80.967	0.000	89.868	0.000	80.967	0.000	0.000	89.960	39.816	2.682	XOM_R2OWSG MWD+IFR1+MS
19800.000	90.000	359.797	9997.000	81.736	0.000	90.675	0.000	81.736	0.000	0.000	90.766	39.871	2.658	XOM_R2OWSG MWD+IFR1+MS
19900.000	90.000	359.797	9997.000	82.505	0.000	91.482	0.000	82.505	0.000	0.000	91.573	39.928	2.635	XOM_R2OWSG MWD+IFR1+MS
20000.000	90.000	359.797	9997.000	83.275	0.000	92.291	0.000	83.275	0.000	0.000	92.382	39.984	2.612	XOM_R2OWSG MWD+IFR1+MS
20100.000	90.000	359.797	9997.000	84.045	0.000	93.101	0.000	84.045	0.000	0.000	93.191	40.042	2.589	XOM_R2OWSG MWD+IFR1+MS
20200.000	90.000	359.797	9997.000	84.815	0.000	93.913	0.000	84.815	0.000	0.000	94.002	40.100	2.566	XOM_R2OWSG MWD+IFR1+MS
20300.000	90.000	359.797	9997.000	85.586	0.000	94.725	0.000	85.586	0.000	0.000	94.815	40.158	2.544	XOM_R2OWSG MWD+IFR1+MS
20400.000	90.000	359.797	9997.000	86.357	0.000	95.539	0.000	86.357	0.000	0.000	95.628	40.217	2.523	XOM_R2OWSG MWD+IFR1+MS
20500.000	90.000	359.797	9997.000	87.128	0.000	96.354	0.000	87.128	0.000	0.000	96.443	40.276	2.501	XOM_R2OWSG MWD+IFR1+MS
20600.000	90.000	359.797	9997.000	87.899	0.000	97.170	0.000	87.899	0.000	0.000	97.259	40.336	2.480	XOM_R2OWSG MWD+IFR1+MS
20700.000	90.000	359.797	9997.000	88.671	0.000	97.988	0.000	88.671	0.000	0.000	98.075	40.397	2.459	XOM_R2OWSG MWD+IFR1+MS
20800.000	90.000	359.797	9997.000	89.442	0.000	98.806	0.000	89.442	0.000	0.000	98.893	40.458	2.439	XOM_R2OWSG MWD+IFR1+MS
20852.610	90.000	359.797	9997.000	89.848	0.000	99.236	0.000	89.848	0.000	0.000	99.324	40.490	2.428	XOM_R2OWSG MWD+IFR1+MS
20902.610	90.000	359.797	9997.000	90.234	0.000	99.646	0.000	90.234	0.000	0.000	99.733	40.521	2.418	XOM_R2OWSG MWD+IFR1+MS

Plan Targets

Corral 17-8 Fed Com 105H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
105H LTP	20852.61	419007.40	602749.50	6983.00	CIRCLE

105H BHL	20902.61	419057.40	602749.40	6983.00	CIRCLE
105H FTP	10675.61	408830.50	602785.50	6983.00	CIRCLE

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ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC			
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			
XTO ENERGY INC DELAWARE BASIN		DRAWN VJK 31MAR22	
DRAWING NO. HBE0000479		APPRV	

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

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

Background

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

Supporting Documentation

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



Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System

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

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API STANDARD 53

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

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

^a Pressure test evaluation periods shall be a minimum of five minutes.

No visible leaks.

The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

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

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

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

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

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

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

XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after

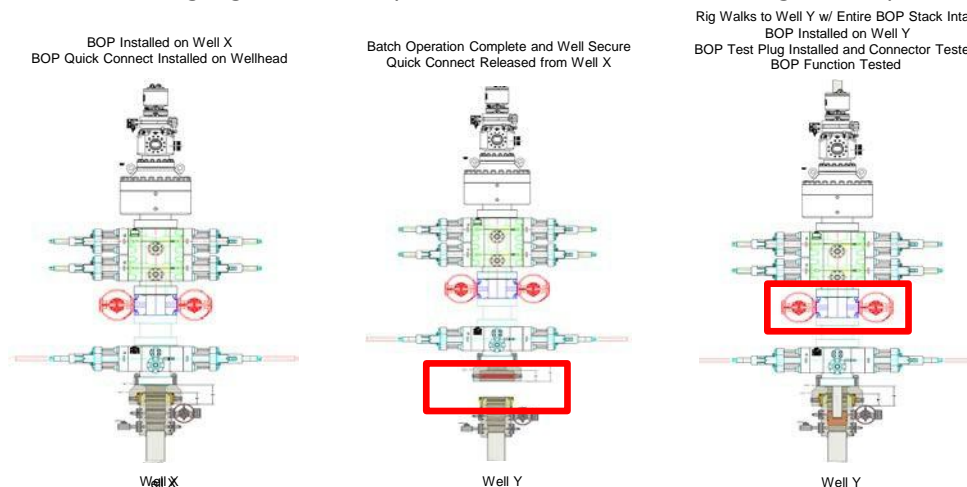
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

Procedures

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

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

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



Summary

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

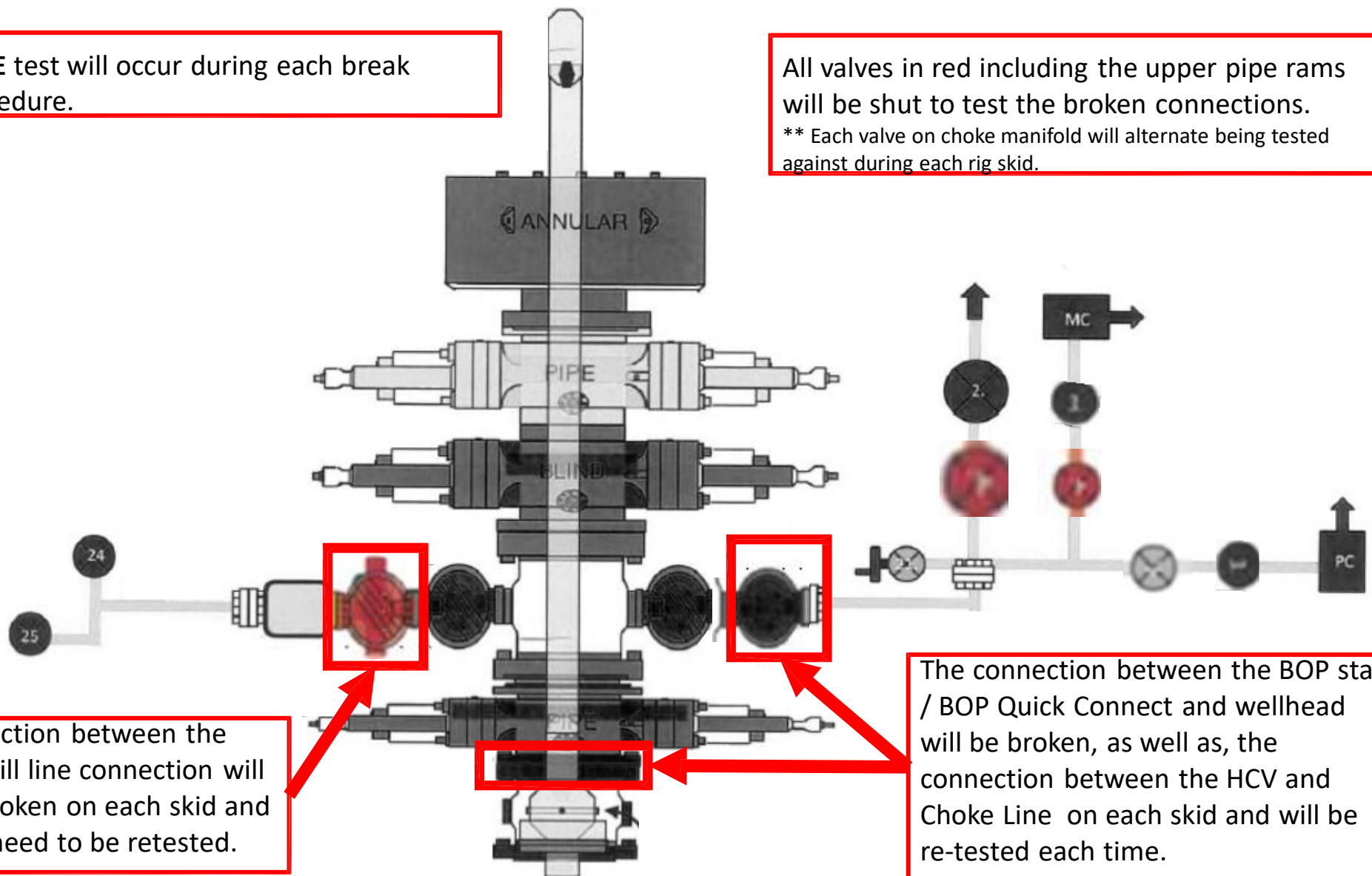
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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

1. After a full BOP test is conducted on the first well on the pad.
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
4. Full BOP test will be required prior to drilling the production hole.

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

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.



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

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

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per 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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Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 362930

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 362930
	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.	7/16/2024