

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form C-101  
August 1, 2011  
Permit 308339

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707		2. OGRID Number 5380
		3. API Number 30-015-49289
4. Property Code 317790	5. Property Name REMUDA NORTH 25 STATE	6. Well No. 705H

**7. Surface Location**

UL - Lot E	Section 30	Township 23S	Range 30E	Lot Idn	Feet From 2370	N/S Line N	Feet From 600	E/W Line W	County Eddy
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**8. Proposed Bottom Hole Location**

UL - Lot B	Section 24	Township 23N	Range 29E	Lot Idn B	Feet From 200	N/S Line N	Feet From 1430	E/W Line E	County Eddy
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**9. Pool Information**

FORTY NINER RIDGE BONE SPRING, WEST	96526
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**Additional Well Information**

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3112
16. Multiple N	17. Proposed Depth 17158	18. Formation Bone Spring	19. Contractor	20. Spud Date 4/6/2022
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

We will be using a closed-loop system in lieu of lined pits

**21. Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	379	490	0
Int1	12.25	9.625	53.5	3218	1030	0
Prod	8.5	5.5	20	17158	2460	2718

**Casing/Cement Program: Additional Comments**

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 the option to offline cement and remediate (if needed) surface, intermediate, and production 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.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	2045	3000	Camron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. <b>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.</b>	<b>OIL CONSERVATION DIVISION</b>
Signature:	
Printed Name: Electronically filed by Tiffany Yancey	Approved By: Katherine Pickford
Title: Production Analyst	Title: Geoscientist
Email Address: tiffany.yancey@exxonmobil.com	Approved Date: 2/21/2022
Date: 2/15/2022	Phone: 432-215-8939
	Expiration Date: 2/21/2024
	Conditions of Approval Attached



Intent  As Drilled

API #

Operator Name: XTO ENERGY INC	Property Name: REMUDA NORTH 25 STATE	Well Number 705H
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Kick Off Point (KOP)

UL E	Section 30	Township 23S	Range 30S	Lot	Feet 2370	From N/S North	Feet 600	From E/W WEST	County EDDY
Latitude 32.276637					Longitude -103.927643				NAD NAD83

First Take Point (FTP)

UL G	Section 25	Township 23S	Range 29E	Lot	Feet 2280	From N/S North	Feet 1430	From E/W East	County EDDY
Latitude 32.276902					Longitude -103.934211				NAD NAD83

Last Take Point (LTP)

UL B	Section 24	Township 23S	Range 29E	Lot	Feet 330	From N/S North	Feet 1430	From E/W East	County EDDY
Latitude 32.296854					Longitude -103.934277				NAD NAD83

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

Is this well an infill well?  Y

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

API #

Operator Name: XTO ENERGY INC	Property Name:	Well Number
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**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form APD Comments

Permit 308339

**PERMIT COMMENTS**

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-49289
	Well: REMUDA NORTH 25 STATE #705H

Created By	Comment	Comment Date
cevans	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 NMOCD 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.	2/14/2022

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Form APD Conditions

Permit 308339

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-49289
	Well: REMUDA NORTH 25 STATE #705H

OCD Reviewer	Condition
kpickford	Will require a administrative order for non-standard location prior to placing the well on production
kpickford	Notify OCD 24 hours prior to casing & cement
kpickford	Will require a File As Drilled C-102 and a Directional Survey with the C-104
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system

**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 (OOGO) No. 2, 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. OOGO No. 2, Section I.D.2 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 OOGO No. 2, Section IV., XTO Energy submits this request for the variance.

### **Supporting Documentation**

OOGO No. 2 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 OOGO No. 2 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

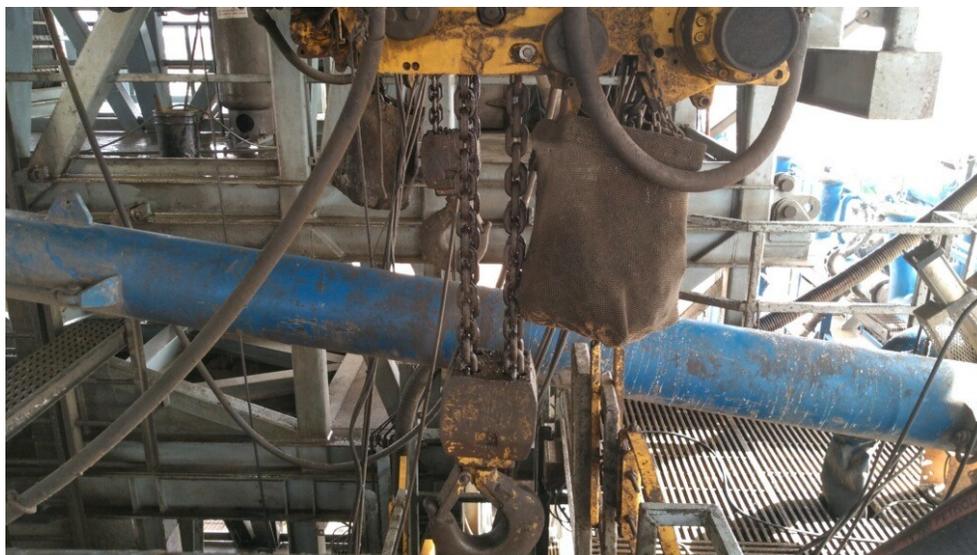


Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. OOGO No. 2 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.

62 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>b</sup>	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers <sup>bd</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	
<sup>a</sup> Pressure test evaluation periods shall be a minimum of five minutes. No visible leaks. The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure. <sup>b</sup> Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program. <sup>c</sup> For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. <sup>d</sup> For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually. <sup>e</sup> Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.			

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

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

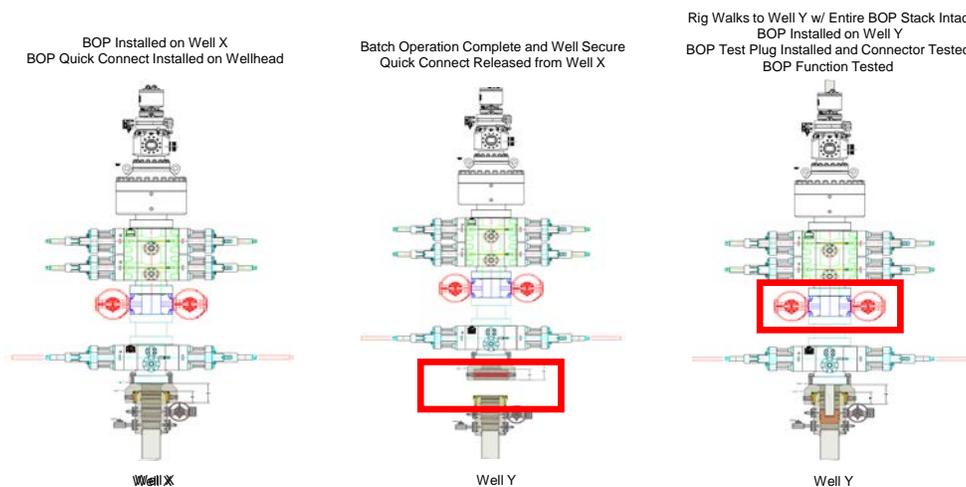
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of OOGO No. 2 (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 OOGO No.2.

### **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.

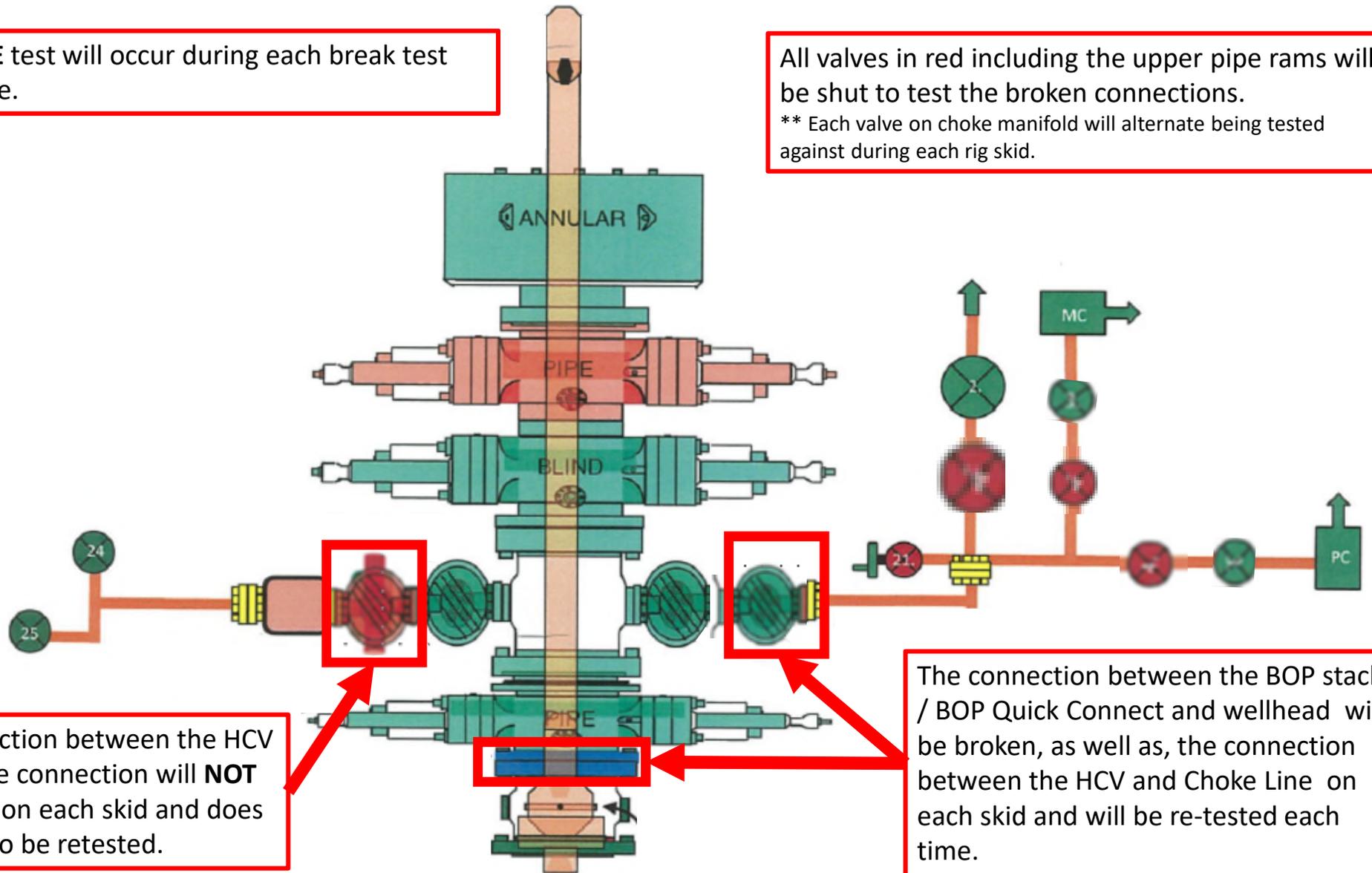
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.

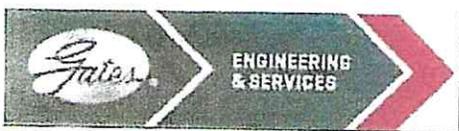
Only **ONE** test will occur during each break test procedure.

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.



GATES E & S NORTH AMERICA, INC  
DU-TEX  
134 44TH STREET  
CORPUS CHRISTI, TEXAS 78405

PHONE: 361-887-9807  
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EMAIL: crpe&s@gates.com  
WEB: www.gates.com

### GRADE D PRESSURE TEST CERTIFICATE

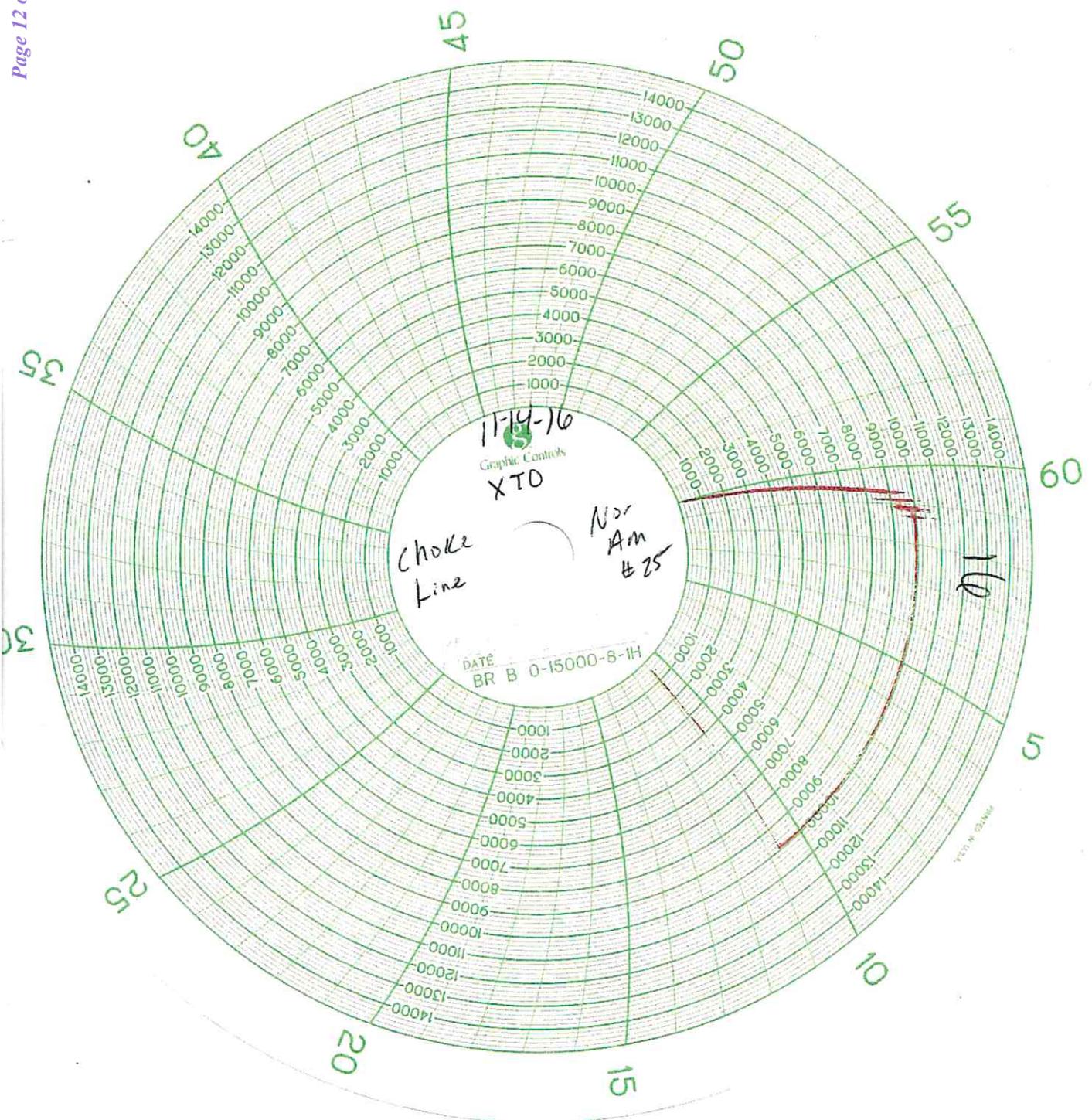
Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

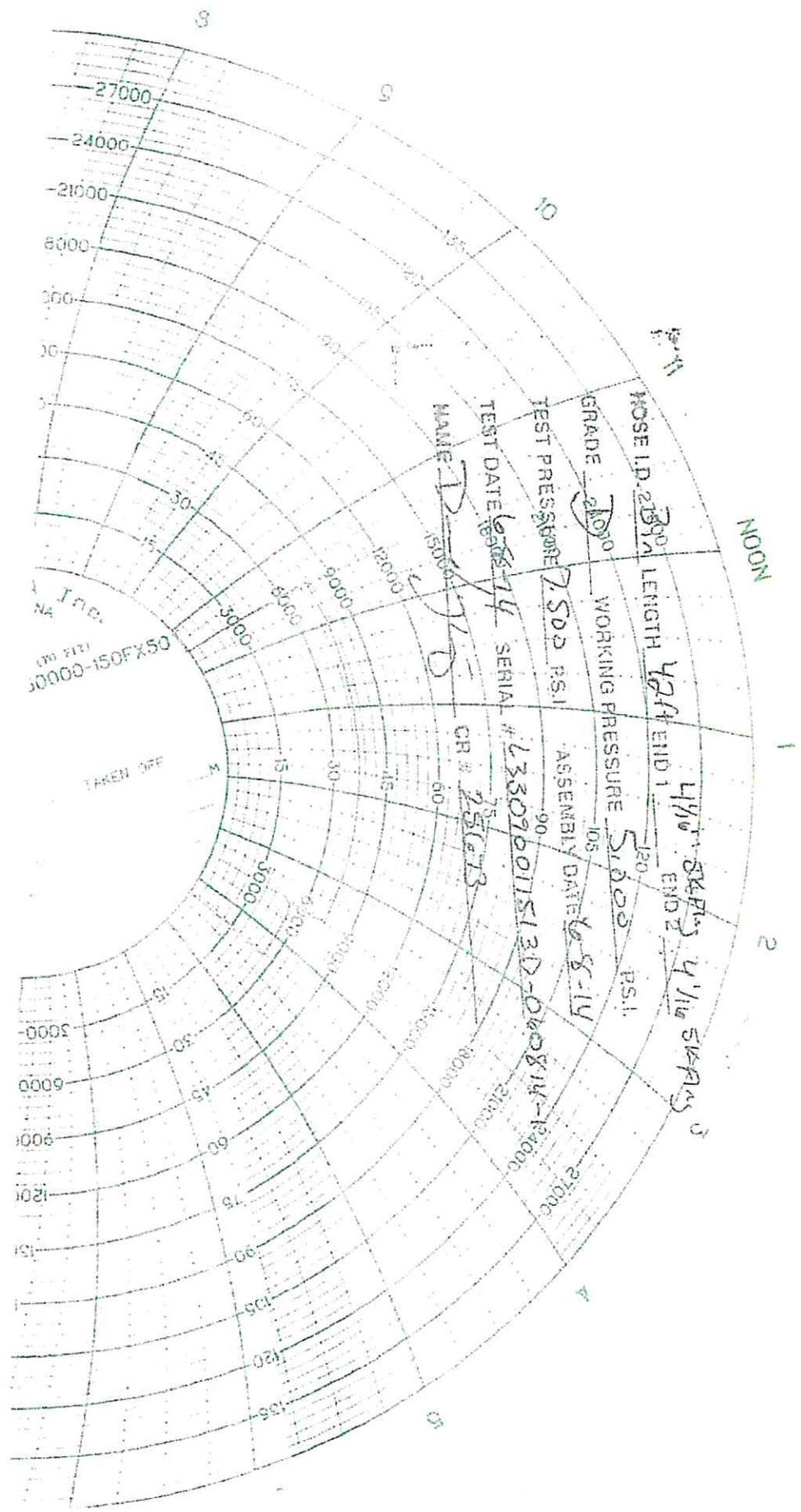
Product Description: FD3.042.0R41/16.5KFLGE/E LE

End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :	<i>[Signature]</i>	Signature :	<i>[Signature]</i>





NA Inc.  
(700 717)  
10000-150FX50

TAKEN OFF

HOSE I.D. 2 1/2" LENGTH 424' END 1 4 1/2" BEARING 4 1/2" STARS  
 GRADE 2100 WORKING PRESSURE 5100 PS.I  
 TEST PRESSURE 7500 PS.I ASSEMBLY DATE 10-8-14  
 TEST DATE 10-8-14 SERIAL # L33096017513D-0140814-124000  
 NAME D. J. D. CR # 25013

NOON

1

2

State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description Effective May 25, 2021

**I. Operator:** XTO Energy, Inc. **OGRID:** 05380 **Date:** 02 / 18 / 2022

**II. Type:**  Original  Amendment due to  19.15.27.9.D(6)(a) NMAC  19.15.27.9.D(6)(b) NMAC  Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Remuda South 25 State 801H		K-25-23S-29E	2369'FSL & 1949'FWL	1500	2600	1000
Remuda North 25 State 701H		K-25-23S-29E	2369'FSL & 1949'FWL	1500	2600	1000
Remuda North 25 State 702H		K-25-23S-29E	2369'FSL & 2009'FWL	1500	2600	1000
Remuda North 25 State 703H		K-25-23S-29E	2370'FSL & 2090'FWL	1500	2600	1000
Remuda North 25 State 708H		K-25-23S-29E	2369'FSL & 1979'FWL	1500	2600	1000
Remuda North 25 State 705H		E-30-23S-29E	2370'FNL & 600'FWL	1500	2600	1000
Remuda North 25 State 706H		E-30-23S-29E	2370'FNL & 630'FWL	1500	2600	1000
Remuda North 25 State 707H		E-30-23S-29E	2370'FNL & 660'FWL	1500	2600	1000
Remuda North 25 State 708H		E-30-23S-29E	2370'FNL & 690'FWL	1500	2600	1000
Remuda North 25 State 704H		E-30-23S-29E	2370'FNL & 570'FWL	1500	2600	1000

**IV. Central Delivery Point Name:** Remuda 500 TB \_\_\_\_\_ [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Remuda South 25 State 801H		04/09/2022	04/21/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 701H		04/08/2022	04/20/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 702H		04/11/2022	05/01/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 703H		04/12/2022	05/02/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 708H		04/08/2022	04/20/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 705H		04/05/2022	04/17/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 706H		04/06/2022	04/18/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 707H		04/07/2022	04/19/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 708H		04/08/2022	04/20/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled
Remuda North 25 State 704H		04/04/2022	04/16/22	Not yet Scheduled	Not yet Scheduled	Not yet Scheduled

## VI. Separation Equipment:

XTO Permian Operating, LLC. production tank batteries include separation equipment designed to efficiently separate gas from liquid phases to optimize gas capture based on projected and estimated volumes from the targeted pool in conjunction with the total number of wells planned to or existing within the facility. Separation equipment is upgraded prior to well being drilled or completed, if determined to be undersized or needed. The separation equipment is designed and built according to the relevant industry specifications (API Specification 12J and ASME Sec VIII Div I). Other recognized industry publications such as the Gas Processors Suppliers Association (GPSA) are referenced when designing separation equipment to optimize gas capture.

## VII. Operational Practices:

### 1. Subsection B.

- During drilling, flare stacks will be located a minimum of 150 feet from the nearest surface hole location. All gas is captured or combusted. If an emergency or malfunction occurs, gas will be flared or vented for public health, safety and the environment and be properly reported to the NMOCD pursuant to 19.15.27.8.G.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

### 2. Subsection C.

- During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.

For emergencies, equipment malfunction, or if the operator decides to produce oil and gas during well completion:

- Flowlines will be routed for flowback fluids into a completion or storage tank and, if feasible under well conditions, flare rather than vent and commence operation of a separator as soon as it is technically feasible for a separator to function.
- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.

### 3. Subsection D.

- At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.
- Monitor manual liquid unloading for wells on-site or in close proximity (<30 minutes' drive time), take reasonable actions to achieve a stabilized rate and pressure at the earliest practical time, and take reasonable actions to minimize venting to the maximum extent practicable.

- Measure or estimate the volume of natural gas that is vented, flared or beneficially used during drilling, completion and production operations, regardless of the reason or authorization for such venting or flaring.
4. Subsection E.
- All tanks and separation equipment are designed for maximum throughput and pressure to minimize waste.
  - Flare stack was installed prior to May 25, 2021 but has been designed for proper size and combustion efficiency. Flare currently has a continuous pilot and is located more than 100 feet from any known well and storage tanks.
  - At any point in the well life (drilling, completion, production, inactive) an audio, visual and olfactory (AVO) inspection will be performed weekly (at minimum) to confirm that all production equipment is operating properly and there are no leaks or releases except as allowed in Subsection D of 19.15.27.8 NMAC.
5. Subsection F.
- Measurement equipment is installed to measure the volume of natural gas flared from process piping or a flowline piped from the equipment associated with a well and facility associated with the approved application for permit to drill that has an average daily production greater than 60 mcf of natural gas.
  - Measurement equipment installed is not designed or equipped with a manifold to allow diversion of natural gas around the metering equipment, except for the sole purpose of inspecting and servicing the measurement equipment, as noted in NMAC 19.15.27.8 Subsection G.

#### **VIII. Best Management Practices:**

1. During completion operations, operator does not produce oil or gas but maintains adequate well control through completion operations.
2. Operator does not flow well (well shut in) during initial production until all flowlines, tank batteries, and oil/gas takeaway are installed, tested, and determined operational.
3. Operator equips storage tanks with an automatic gauging system to reduce venting of natural gas.
4. Operator reduces the number of blowdowns by looking for opportunities to coordinate repair and maintenance activities.
5. Operator combusts natural gas that would otherwise be vented or flared, when feasible.
6. Operator has a flare stack designed in accordance with need and to handle sufficient volume to ensure proper combustion efficiency. Flare stacks are equipped with continuous pilots and securely anchored at least 100 feet (at minimum) from storage tanks and wells.
7. Operator minimizes venting (when feasible) through pump downs of vessels and reducing time required to purge equipment before returning equipment to service.
8. Operator will shut in wells (when feasible) in the event of a takeaway disruption, emergency situation, or other operations where venting or flaring may occur due to equipment failures.

**VI. Separation Equipment:**  Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:**  Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:**  Attach a complete description of Operator’s best management practices to minimize venting during active and planned maintenance.

**Section 2 – Enhanced Plan**  
**EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

**IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

**X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.**  Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system  will  will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator  does  does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator’s plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:**  Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

### **Section 3 - Certifications**

**Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

***If Operator checks this box, Operator will select one of the following:***

**Well Shut-In.**  Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.**  Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

### **Section 4 - Notices**

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

**I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.**

Signature:
Printed Name: Cassie Evans
Title: Regulatory Analyst
E-mail Address: cassie.evans@exxonmobil.com
Date: 02/18/2022
Phone:432-218-3671
<b>OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

### **Cement Variance Request**

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 Brushy Canyon (5832') 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 include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

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 to surface on the first stage. If cement is brought to surface, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

In the event cement is not circulated to surface on the first stage, whether intentionally or unintentionally, 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 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 GE procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

## Well Plan Report - Remuda North 25 State 705H

Measured Depth: 17157.00 ft

TVD RKB: 9000.00 ft

**Location**

Cartographic Reference System: New Mexico East - NAD 27

Northing: 464587.94 ft

Easting: 625545.56 ft

RKB: 3095.00 ft

Ground Level: 3065.00 ft

North Reference: Grid

Convergence Angle: 0.22 Deg

Site: North Pad 5

Slot: 2

Plan Sections		Remuda North 25 State 705H					
Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	
0	0	0	0	0	0	0	
2500	0	0	2500	0	0	0	
3490.7	19.81	249.46	3471.07	-59.5	-158.82	2	
8562.16	19.81	249.46	8242.29	-662.54	-1768.63	0	
9771.02	90	359.62	9000	47.06	-2029.54	5.81	
17157.95	90	359.62	9000	7433.83	-2077.76	0	

## Position Uncertainty

Remuda North 25 State  
705H

Measured				TVD	Highside		Lateral
Depth	Inclination	Azimuth		RKB	Error	Bias	Error
(ft)	(°)	(°)		(ft)	(ft)	(ft)	(ft)
0	0	0		0	0	0	0
100	0	0		100	0.468	0	0.468
200	0	0		200	0.983	0	0.983
300	0	0		300	1.403	0	1.403
400	0	0		400	1.797	0	1.797
500	0	0		500	2.179	0	2.179
600	0	0		600	2.554	0	2.554
700	0	0		700	2.925	0	2.925
800	0	0		800	3.292	0	3.292
900	0	0		900	3.659	0	3.659
1000	0	0		1000	4.024	0	4.024
1100	0	0		1100	4.387	0	4.387
1200	0	0		1200	4.751	0	4.751
1300	0	0		1300	5.113	0	5.113
1400	0	0		1400	5.474	0	5.474
1500	0	0		1500	5.836	0	5.836
1600	0	0		1600	6.197	0	6.197
1700	0	0		1700	6.558	0	6.558
1800	0	0		1800	6.918	0	6.918
1900	0	0		1900	7.279	0	7.279
2000	0	0		2000	7.639	0	7.639
2100	0	0		2100	7.999	0	7.999
2200	0	0		2200	8.359	0	8.359
2300	0	0		2300	8.718	0	8.718

2400	0	0	2400	9.079	0	9.079
2500	0	0	2500	9.437	0	9.437
2600	1.999	249.4	2599.98	10.083	0	9.479
2700	4	249.4	2699.838	10.632	0	9.824
2800	6	249.4	2799.452	11.156	0	10.17
2900	7.999	249.4	2898.702	11.653	0	10.518
3000	10	249.4	2997.465	12.127	0	10.865
3100	11.99	249.4	3095.623	12.576	0	11.214
3200	14	249.4	3193.055	13.005	0	11.561
3300	15.99	249.4	3289.643	13.413	0	11.907
3400	18	249.4	3385.268	13.803	0	12.257
3490.6	19.81	249.4	3471.067	14.11	0	12.573
3500	19.81	249.4	3479.821	14.137	0	12.604
3600	19.81	249.4	3573.901	14.438	0	12.945
3700	19.81	249.4	3667.98	14.757	0	13.302
3800	19.81	249.4	3762.06	15.077	0	13.66
3900	19.81	249.4	3856.14	15.408	0	14.023
4000	19.81	249.4	3950.22	15.739	0	14.387
4100	19.81	249.4	4044.3	16.077	0	14.753
4200	19.81	249.4	4138.38	16.419	0	15.123
4300	19.81	249.4	4232.459	16.766	0	15.493
4400	19.81	249.4	4326.539	17.117	0	15.865
4500	19.81	249.4	4420.619	17.47	0	16.24
4600	19.81	249.4	4514.699	17.826	0	16.615
4700	19.81	249.4	4608.779	18.187	0	16.994
4800	19.81	249.4	4702.859	18.551	0	17.373
4900	19.81	249.4	4796.939	18.916	0	17.753
5000	19.81	249.4	4891.018	19.285	0	18.135
5100	19.81	249.4	4985.098	19.658	0	18.518

5200	19.81	249.4	5079.178	20.031	0	18.901
5300	19.81	249.4	5173.258	20.407	0	19.286
5400	19.81	249.4	5267.338	20.786	0	19.672
5500	19.81	249.4	5361.418	21.167	0	20.06
5600	19.81	249.4	5455.498	21.549	0	20.447
5700	19.81	249.4	5549.577	21.934	0	20.835
5800	19.81	249.4	5643.657	22.319	0	21.223
5900	19.81	249.4	5737.737	22.706	0	21.613
6000	19.81	249.4	5831.817	23.096	0	22.005
6100	19.81	249.4	5925.897	23.486	0	22.397
6200	19.81	249.4	6019.977	23.879	0	22.788
6300	19.81	249.4	6114.057	24.273	0	23.18
6400	19.81	249.4	6208.136	24.666	0	23.573
6500	19.81	249.4	6302.216	25.063	0	23.966
6600	19.81	249.4	6396.296	25.459	0	24.361
6700	19.81	249.4	6490.376	25.858	0	24.756
6800	19.81	249.4	6584.456	26.257	0	25.15
6900	19.81	249.4	6678.536	26.656	0	25.546
7000	19.81	249.4	6772.615	27.058	0	25.941
7100	19.81	249.4	6866.695	27.46	0	26.338
7200	19.81	249.4	6960.775	27.864	0	26.735
7300	19.81	249.4	7054.855	28.267	0	27.132
7400	19.81	249.4	7148.935	28.671	0	27.529
7500	19.81	249.4	7243.015	29.076	0	27.927
7600	19.81	249.4	7337.095	29.483	0	28.325
7700	19.81	249.4	7431.174	29.89	0	28.723
7800	19.81	249.4	7525.254	30.297	0	29.121
7900	19.81	249.4	7619.334	30.706	0	29.521
8000	19.81	249.4	7713.414	31.114	0	29.92

8100	19.81	249.4	7807.494	31.523	0	30.319
8200	19.81	249.4	7901.574	31.934	0	30.719
8300	19.81	249.4	7995.654	32.335	0	31.117
8400	19.81	249.4	8089.733	32.756	0	31.52
8500	19.81	249.4	8183.813	33.161	0	31.916
8562.1	19.81	249.4	8242.29	33.416	0	32.166
8600	19.03	258.2	8277.987	33.662	0	32.253
8700	19.16	282.8	8372.637	33.803	0	33.197
8800	22.25	303.9	8466.293	33.549	0	34.798
8900	27.33	318.7	8557.132	33.38	0	35.813
9000	33.49	328.8	8643.386	33.172	0	36.332
9100	40.24	336	8723.375	32.718	0	36.581
9200	47.33	341.4	8795.544	31.981	0	36.725
9300	54.61	345.7	8858.487	31.051	0	36.799
9400	62.02	349.2	8910.979	30.052	0	36.843
9500	69.51	352.3	8951.999	29.153	0	36.851
9600	77.05	355.1	8980.748	28.543	0	36.83
9700	84.61	357.8	8996.667	28.392	0	36.774
9771	90	359.6	9000	28.167	0	36.683
9800	90	359.6	9000	28.263	0	36.697
9900	90	359.6	9000	28.555	0	36.725
10000	90	359.6	9000	28.867	0	36.768
10100	90	359.6	9000	29.198	0	36.824
10200	90	359.6	9000	29.547	0	36.893
10300	90	359.6	9000	29.912	0	36.975
10400	90	359.6	9000	30.292	0	37.071
10500	90	359.6	9000	30.687	0	37.181
10600	90	359.6	9000	31.098	0	37.29
10700	90	359.6	9000	31.521	0	37.425

10800	90	359.6	9000	31.953	0	37.56
10900	90	359.6	9000	32.404	0	37.707
11000	90	359.6	9000	32.863	0	37.881
11100	90	359.6	9000	33.347	0	38.053
11200	90	359.6	9000	33.838	0	38.225
11300	90	359.6	9000	34.337	0	38.422
11400	90	359.6	9000	34.843	0	38.631
11500	90	359.6	9000	35.355	0	38.852
11600	90	359.6	9000	35.889	0	39.072
11700	90	359.6	9000	36.428	0	39.303
11800	90	359.6	9000	36.973	0	39.558
11900	90	359.6	9000	37.523	0	39.811
12000	90	359.6	9000	38.092	0	40.075
12100	90	359.6	9000	38.665	0	40.35
12200	90	359.6	9000	39.243	0	40.635
12300	90	359.6	9000	39.825	0	40.919
12400	90	359.6	9000	40.423	0	41.224
12500	90	359.6	9000	41.024	0	41.54
12600	90	359.6	9000	41.629	0	41.853
12700	90	359.6	9000	42.237	0	42.176
12800	90	359.6	9000	42.849	0	42.507
12900	90	359.6	9000	43.474	0	42.849
13000	90	359.6	9000	44.102	0	43.198
13100	90	359.6	9000	44.733	0	43.557
13200	90	359.6	9000	45.365	0	43.924
13300	90	359.6	9000	46.011	0	44.299
13400	90	359.6	9000	46.658	0	44.671
13500	90	359.6	9000	47.308	0	45.052
13600	90	359.6	9000	47.958	0	45.451

13700	90	359.6	9000	48.621	0	45.846
13800	90	359.6	9000	49.285	0	46.249
13900	90	359.6	9000	49.95	0	46.659
14000	90	359.6	9000	50.616	0	47.076
14100	90	359.6	9000	51.284	0	47.501
14200	90	359.6	9000	51.962	0	47.921
14300	90	359.6	9000	52.64	0	48.358
14400	90	359.6	9000	53.32	0	48.792
14500	90	359.6	9000	54.009	0	49.231
14600	90	359.6	9000	54.69	0	49.687
14700	90	359.6	9000	55.381	0	50.139
14800	90	359.6	9000	56.071	0	50.597
14900	90	359.6	9000	56.771	0	51.051
15000	90	359.6	9000	57.463	0	51.52
15100	90	359.6	9000	58.164	0	51.994
15200	90	359.6	9000	58.864	0	52.464
15300	90	359.6	9000	59.565	0	52.949
15400	90	359.6	9000	60.274	0	53.43
15500	90	359.6	9000	60.975	0	53.915
15600	90	359.6	9000	61.685	0	54.405
15700	90	359.6	9000	62.402	0	54.9
15800	90	359.6	9000	63.111	0	55.4
15900	90	359.6	9000	63.828	0	55.904
16000	90	359.6	9000	64.537	0	56.413
16100	90	359.6	9000	65.261	0	56.916
16200	90	359.6	9000	65.977	0	57.433
16300	90	359.6	9000	66.701	0	57.946
16400	90	359.6	9000	67.417	0	58.462
16500	90	359.6	9000	68.14	0	58.982

16600	90	359.6	9000	68.869	0	59.507
16700	90	359.6	9000	69.592	0	60.035
16800	90	359.6	9000	70.321	0	60.566
16900	90	359.6	9000	71.049	0	61.093
17000	90	359.6	9000	71.777	0	61.632
17100	90	359.6	9000	72.505	0	62.166
17157	90	359.6	9000	72.931	0	62.479

Plan Targets		Remuda North 25 State 705H			
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 10	9771	464635	623516.02	5905	CIRCLE
LTP 5	17028.09	471891.91	623468.9	5905	CIRCLE
BHL 10	17157.95	472021.77	623467.8	5905	CIRCLE

Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0	0	
0	0	
0	2	
0	0	
9.11	8 FTP 10	
0	0 BHL 10	

Bias (ft)	Vertical Error (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Tool Azimuth (°)	Used
0	2.297	0	0	0	0	MWD+IFR1+MS
0	2.299	0	0	0.556	0.358	135 MWD+IFR1+MS
0	2.307	0	0	1.191	0.717	135 MWD+IFR1+MS
0	2.321	0	0	1.668	1.075	135 MWD+IFR1+MS
0	2.34	0	0	2.099	1.434	135 MWD+IFR1+MS
0	2.364	0	0	2.507	1.792	135 MWD+IFR1+MS
0	2.393	0	0	2.902	2.151	135 MWD+IFR1+MS
0	2.428	0	0	3.288	2.509	135 MWD+IFR1+MS
0	2.467	0	0	3.669	2.867	135 MWD+IFR1+MS
0	2.511	0	0	4.046	3.226	135 MWD+IFR1+MS
0	2.559	0	0	4.42	3.584	135 MWD+IFR1+MS
0	2.613	0	0	4.791	3.943	135 MWD+IFR1+MS
0	2.67	0	0	5.161	4.302	135 MWD+IFR1+MS
0	2.731	0	0	5.529	4.66	135 MWD+IFR1+MS
0	2.797	0	0	5.896	5.018	135 MWD+IFR1+MS
0	2.866	0	0	6.262	5.377	135 MWD+IFR1+MS
0	2.939	0	0	6.627	5.735	135 MWD+IFR1+MS
0	3.015	0	0	6.992	6.094	135 MWD+IFR1+MS
0	3.095	0	0	7.355	6.452	135 MWD+IFR1+MS
0	3.178	0	0	7.719	6.811	135 MWD+IFR1+MS
0	3.265	0	0	8.081	7.169	135 MWD+IFR1+MS
0	3.354	0	0	8.444	7.527	135 MWD+IFR1+MS
0	3.447	0	0	8.806	7.886	135 MWD+IFR1+MS
0	3.544	0	0	9.168	8.244	135 MWD+IFR1+MS

0	3.643	0	0	9.53	8.603	135	MWD+IFR1+ MS
0	3.744	0	0	9.891	8.961	135	MWD+IFR1+ MS
0	3.848	0	0	10.219	9.338	-43.703	MWD+IFR1+ MS
0	3.956	0	0	10.713	9.759	-35.43	MWD+IFR1+ MS
0	4.068	0	0	11.224	10.145	-29.187	MWD+IFR1+ MS
0	4.186	0	0	11.739	10.511	-24.815	MWD+IFR1+ MS
0	4.31	0	0	12.25	10.864	-21.665	MWD+IFR1+ MS
0	4.444	0	0	12.75	11.213	-19.415	MWD+IFR1+ MS
0	4.587	0	0	13.242	11.557	-17.659	MWD+IFR1+ MS
0	4.741	0	0	13.721	11.896	-16.291	MWD+IFR1+ MS
0	4.908	0	0	14.193	12.238	-15.168	MWD+IFR1+ MS
0	5.061	0	0	14.583	12.548	-14.485	MWD+IFR1+ MS
0	5.069	0	0	14.61	12.579	-14.494	MWD+IFR1+ MS
0	5.208	0	0	14.896	12.92	-14.355	MWD+IFR1+ MS
0	5.355	0	0	15.199	13.274	-13.975	MWD+IFR1+ MS
0	5.507	0	0	15.502	13.63	-13.607	MWD+IFR1+ MS
0	5.664	0	0	15.816	13.991	-13.231	MWD+IFR1+ MS
0	5.826	0	0	16.13	14.353	-12.866	MWD+IFR1+ MS
0	5.991	0	0	16.451	14.716	-12.486	MWD+IFR1+ MS
0	6.16	0	0	16.774	15.084	-12.126	MWD+IFR1+ MS
0	6.334	0	0	17.103	15.452	-11.742	MWD+IFR1+ MS
0	6.511	0	0	17.435	15.821	-11.367	MWD+IFR1+ MS
0	6.691	0	0	17.769	16.194	-11.01	MWD+IFR1+ MS
0	6.875	0	0	18.106	16.567	-10.659	MWD+IFR1+ MS
0	7.063	0	0	18.447	16.944	-10.306	MWD+IFR1+ MS
0	7.253	0	0	18.793	17.321	-9.936	MWD+IFR1+ MS
0	7.446	0	0	19.138	17.698	-9.587	MWD+IFR1+ MS
0	7.642	0	0	19.488	18.079	-9.241	MWD+IFR1+ MS
0	7.842	0	0	19.841	18.459	-8.882	MWD+IFR1+ MS

0	8.044	0	0	20.193	18.84	-8.542	MWD+IFR1+ MS
0	8.248	0	0	20.549	19.223	-8.205	MWD+IFR1+ MS
0	8.456	0	0	20.909	19.606	-7.857	MWD+IFR1+ MS
0	8.665	0	0	21.27	19.992	-7.527	MWD+IFR1+ MS
0	8.877	0	0	21.632	20.378	-7.202	MWD+IFR1+ MS
0	9.093	0	0	21.997	20.764	-6.867	MWD+IFR1+ MS
0	9.311	0	0	22.363	21.15	-6.54	MWD+IFR1+ MS
0	9.531	0	0	22.729	21.538	-6.228	MWD+IFR1+ MS
0	9.753	0	0	23.099	21.928	-5.922	MWD+IFR1+ MS
0	9.978	0	0	23.469	22.318	-5.622	MWD+IFR1+ MS
0	10.203	0	0	23.842	22.708	-5.317	MWD+IFR1+ MS
0	10.436	0	0	24.216	23.098	-5.018	MWD+IFR1+ MS
0	10.663	0	0	24.59	23.489	-4.734	MWD+IFR1+ MS
0	10.9	0	0	24.966	23.881	-4.449	MWD+IFR1+ MS
0	11.136	0	0	25.343	24.274	-4.178	MWD+IFR1+ MS
0	11.375	0	0	25.722	24.667	-3.907	MWD+IFR1+ MS
0	11.615	0	0	26.102	25.06	-3.643	MWD+IFR1+ MS
0	11.857	0	0	26.482	25.454	-3.394	MWD+IFR1+ MS
0	12.104	0	0	26.864	25.848	-3.145	MWD+IFR1+ MS
0	12.353	0	0	27.246	26.244	-2.91	MWD+IFR1+ MS
0	12.602	0	0	27.63	26.64	-2.676	MWD+IFR1+ MS
0	12.853	0	0	28.014	27.035	-2.451	MWD+IFR1+ MS
0	13.107	0	0	28.399	27.432	-2.239	MWD+IFR1+ MS
0	13.364	0	0	28.785	27.829	-2.031	MWD+IFR1+ MS
0	13.624	0	0	29.173	28.225	-1.827	MWD+IFR1+ MS
0	13.885	0	0	29.561	28.623	-1.637	MWD+IFR1+ MS
0	14.149	0	0	29.949	29.02	-1.455	MWD+IFR1+ MS
0	14.415	0	0	30.339	29.419	-1.282	MWD+IFR1+ MS
0	14.683	0	0	30.728	29.817	-1.117	MWD+IFR1+ MS

0	14.95	0	0	31.119	30.216	-0.961	MWD+IFR1+ MS
0	15.225	0	0	31.51	30.615	-0.815	MWD+IFR1+ MS
0	15.498	0	0	31.891	31.014	-0.687	MWD+IFR1+ MS
0	15.773	0	0	32.296	31.415	-0.55	MWD+IFR1+ MS
0	16.053	0	0	32.68	31.812	-0.434	MWD+IFR1+ MS
0	16.227	0	0	32.924	32.062	-0.469	MWD+IFR1+ MS
0	16.334	0	0	33.076	32.218	-0.257	MWD+IFR1+ MS
0	16.61	0	0	33.452	33.181	-1.384	MWD+IFR1+ MS
0	16.9	0	0	34.916	33.792	104.903	MWD+IFR1+ MS
0	17.286	0	0	36.542	34.128	104.92	MWD+IFR1+ MS
0	17.863	0	0	37.945	34.44	105.385	MWD+IFR1+ MS
0	18.682	0	0	39.096	34.706	105.967	MWD+IFR1+ MS
0	19.743	0	0	40.01	34.946	106.816	MWD+IFR1+ MS
0	21.036	0	0	40.727	35.133	107.8	MWD+IFR1+ MS
0	22.508	0	0	41.258	35.281	108.948	MWD+IFR1+ MS
0	24.108	0	0	41.634	35.392	110.214	MWD+IFR1+ MS
0	25.78	0	0	41.878	35.472	111.535	MWD+IFR1+ MS
0	27.461	0	0	42.033	35.528	112.797	MWD+IFR1+ MS
0	28.167	0	0	42.103	35.529	113.429	MWD+IFR1+ MS
0	28.263	0	0	42.125	35.517	113.645	MWD+IFR1+ MS
0	28.555	0	0	42.197	35.46	114.298	MWD+IFR1+ MS
0	28.867	0	0	42.272	35.413	114.966	MWD+IFR1+ MS
0	29.198	0	0	42.361	35.378	115.611	MWD+IFR1+ MS
0	29.547	0	0	42.443	35.349	116.314	MWD+IFR1+ MS
0	29.912	0	0	42.54	35.332	116.994	MWD+IFR1+ MS
0	30.292	0	0	42.632	35.32	117.74	MWD+IFR1+ MS
0	30.687	0	0	42.737	35.321	118.457	MWD+IFR1+ MS
0	31.098	0	0	42.835	35.316	119.194	MWD+IFR1+ MS
0	31.521	0	0	42.95	35.332	119.955	MWD+IFR1+ MS

0	31.953	0	0	43.066	35.346	120.689	MWD+IFR1+ MS
0	32.404	0	0	43.189	35.366	121.446	MWD+IFR1+ MS
0	32.863	0	0	43.32	35.404	122.264	MWD+IFR1+ MS
0	33.347	0	0	43.452	35.439	123.056	MWD+IFR1+ MS
0	33.838	0	0	43.588	35.47	123.827	MWD+IFR1+ MS
0	34.337	0	0	43.733	35.516	124.658	MWD+IFR1+ MS
0	34.843	0	0	43.885	35.569	125.506	MWD+IFR1+ MS
0	35.355	0	0	44.049	35.632	126.326	MWD+IFR1+ MS
0	35.889	0	0	44.21	35.685	127.164	MWD+IFR1+ MS
0	36.428	0	0	44.378	35.743	128.016	MWD+IFR1+ MS
0	36.973	0	0	44.564	35.819	128.881	MWD+IFR1+ MS
0	37.523	0	0	44.748	35.884	129.76	MWD+IFR1+ MS
0	38.092	0	0	44.944	35.959	130.608	MWD+IFR1+ MS
0	38.665	0	0	45.141	36.031	131.505	MWD+IFR1+ MS
0	39.243	0	0	45.353	36.113	132.37	MWD+IFR1+ MS
0	39.825	0	0	45.568	36.188	133.206	MWD+IFR1+ MS
0	40.423	0	0	45.795	36.274	134.083	MWD+IFR1+ MS
0	41.024	0	0	46.03	36.362	134.964	MWD+IFR1+ MS
0	41.629	0	0	46.269	36.444	-44.189	MWD+IFR1+ MS
0	42.237	0	0	46.516	36.528	-43.341	MWD+IFR1+ MS
0	42.849	0	0	46.771	36.613	-42.494	MWD+IFR1+ MS
0	43.474	0	0	47.035	36.698	-41.649	MWD+IFR1+ MS
0	44.102	0	0	47.306	36.785	-40.808	MWD+IFR1+ MS
0	44.733	0	0	47.586	36.872	-39.972	MWD+IFR1+ MS
0	45.365	0	0	47.879	36.967	-39.174	MWD+IFR1+ MS
0	46.011	0	0	48.177	37.054	-38.353	MWD+IFR1+ MS
0	46.658	0	0	48.476	37.136	-37.57	MWD+IFR1+ MS
0	47.308	0	0	48.787	37.226	-36.823	MWD+IFR1+ MS
0	47.958	0	0	49.113	37.321	-36.058	MWD+IFR1+ MS

0	48.621	0	0	49.437	37.403	-35.304	MWD+IFR1+ MS
0	49.285	0	0	49.773	37.493	-34.587	MWD+IFR1+ MS
0	49.95	0	0	50.116	37.582	-33.881	MWD+IFR1+ MS
0	50.616	0	0	50.464	37.662	-33.163	MWD+IFR1+ MS
0	51.284	0	0	50.823	37.749	-32.483	MWD+IFR1+ MS
0	51.962	0	0	51.182	37.833	-31.836	MWD+IFR1+ MS
0	52.64	0	0	51.556	37.921	-31.18	MWD+IFR1+ MS
0	53.32	0	0	51.931	38.003	-30.559	MWD+IFR1+ MS
0	54.009	0	0	52.314	38.095	-29.968	MWD+IFR1+ MS
0	54.69	0	0	52.71	38.179	-29.354	MWD+IFR1+ MS
0	55.381	0	0	53.105	38.26	-28.769	MWD+IFR1+ MS
0	56.071	0	0	53.508	38.339	-28.199	MWD+IFR1+ MS
0	56.771	0	0	53.912	38.425	-27.676	MWD+IFR1+ MS
0	57.463	0	0	54.328	38.503	-27.131	MWD+IFR1+ MS
0	58.164	0	0	54.751	38.592	-26.613	MWD+IFR1+ MS
0	58.864	0	0	55.172	38.666	-26.109	MWD+IFR1+ MS
0	59.565	0	0	55.609	38.752	-25.616	MWD+IFR1+ MS
0	60.274	0	0	56.044	38.835	-25.149	MWD+IFR1+ MS
0	60.975	0	0	56.483	38.906	-24.679	MWD+IFR1+ MS
0	61.685	0	0	56.929	38.988	-24.234	MWD+IFR1+ MS
0	62.402	0	0	57.382	39.068	-23.801	MWD+IFR1+ MS
0	63.111	0	0	57.839	39.149	-23.376	MWD+IFR1+ MS
0	63.828	0	0	58.302	39.229	-22.962	MWD+IFR1+ MS
0	64.537	0	0	58.77	39.308	-22.557	MWD+IFR1+ MS
0	65.261	0	0	59.236	39.384	-22.175	MWD+IFR1+ MS
0	65.977	0	0	59.715	39.473	-21.8	MWD+IFR1+ MS
0	66.701	0	0	60.191	39.548	-21.435	MWD+IFR1+ MS
0	67.417	0	0	60.671	39.623	-21.077	MWD+IFR1+ MS
0	68.14	0	0	61.158	39.708	-20.739	MWD+IFR1+ MS

0	68.869	0	0	61.647	39.782	-20.397	MWD+IFR1+ MS
0	69.592	0	0	62.143	39.866	-20.074	MWD+IFR1+ MS
0	70.321	0	0	62.641	39.938	-19.751	MWD+IFR1+ MS
0	71.049	0	0	63.138	40.02	-19.45	MWD+IFR1+ MS
0	71.777	0	0	63.645	40.092	-19.139	MWD+IFR1+ MS
0	72.505	0	0	64.15	40.172	-18.852	MWD+IFR1+ MS
0	72.931	0	0	64.446	40.221	-18.688	MWD+IFR1+ MS

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

XTO Energy Inc.  
Remuda North 25 State 705H  
Projected TD: 17158' MD / 9000' TVD  
SHL: 2370' FNL & 600' FWL , Section 30, T23S, R30E  
BHL: 200' FNL & 1430' FEL , Section 24, T23S, R29E  
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	115'	Water
Top of Salt	404'	Water
Base of Salt	3118'	Water
Delaware	3331'	Water
Brushy Canyon	5832'	Water/Oil/Gas
Bone Spring	7073'	Water
1st Bone Spring Ss	8133'	Water/Oil/Gas
2nd Bone Spring Ss	8955'	Water/Oil/Gas
Target/Land Curve	9000'	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 13.375 inch casing @ 379' (25' 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 9.625 inch casing at 3218' and cementing to surface. An 8.5 inch curve and 8.5 inch lateral hole will be drilled to 17158 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to the Brushy Canyon (estimated TOC 6332 feet) with a secondary bradenhead squeeze after frac operations are complete to 500' inside the intermediate casing shoe (estimated TOC 2718) feet.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 379'	13.375	54.5	J-55	BTC	New	2.84	6.75	41.30
12.25	0' – 3218'	9.625	53.5	HC P-110	BTC	New	5.33	5.49	9.98
8.5	0' – 3118'	5.5	20	RY P-110	Semi-Premium	New	1.05	7.96	2.59
8.5	3118' - 17158'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.76	2.59

- 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
- 9.625 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: 13-5/8" 10M top flange x 13-3/8" bottom
- B. Tubing Head: 13-5/8" 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 9-5/8" casing per NMOCD Onshore Order 2
  - Wellhead Manufacturer representative will not be present for BOP test plug installation

#### 4. Cement Program

**Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 379'**

Tail: 490 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement: Surface

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

**Intermediate Casing: 9.625, 53.5 New BTC, HC P-110 casing to be set at +/- 3218'**

Lead: 1030 sxs Class C (mixed at 12.9 ppg, 1.65 ft<sup>3</sup>/sx, 10.13 gal/sx water)

Top of Cement: Surface

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

**Production Casing: 5.5, 20 New Semi-Premium, RY P-110 casing to be set at +/- 17158'**

1st Stage

Optional Lead: 170 sxs Class C (mixed at 10.5 ppg, 2 ft<sup>3</sup>/sx, 15.59 gal/sx water)

Top of Cement: Brushy Canyon @ 6332

Tail: 1810 sxs Class C (mixed at 14.8 ppg, 1.39 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement:           7,562

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

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2 ft<sup>3</sup>/sx, 9.61 gal/sx water)

Tail: 480 sxs Class C (mixed at 14.8 ppg, 2 ft<sup>3</sup>/sx, 6.39 gal/sx water)

Top of Cement:   2718

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

XTO requests to pump a two stage cement job on the 5-1/2" production casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (6332') and the second stage performed after frac operations are complete as a bradenhead squeeze with planned cement from the Brushy Canyon to 500' inside the previous casing shoe (2718').

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

XTO requests the option to conduct the bradenhead squeeze offline as per standard approval 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.

XTO requests the option to offline cement and remediate (if needed) surface, intermediate, and production 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 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2045 psi. In any instance where 10M BOP is required by NMOCD, 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 working pressure. When nipping up on the 13.375, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nipping up on the 9.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per NMOCD regulations. The 3M 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 NMOCD 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 NMOCD 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' - 379'	17.5	FW/Native	8.5-9	35-40	NC
379' - 3218'	12.25	Brine	10-10.5	30-32	NC
3218' - 17158'	8.5	OBM	8.6-9.6	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 13-3/8" surface casing with brine solution. A 10.0 ppg - 10.5 ppg 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 13.375 casing.

## 8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

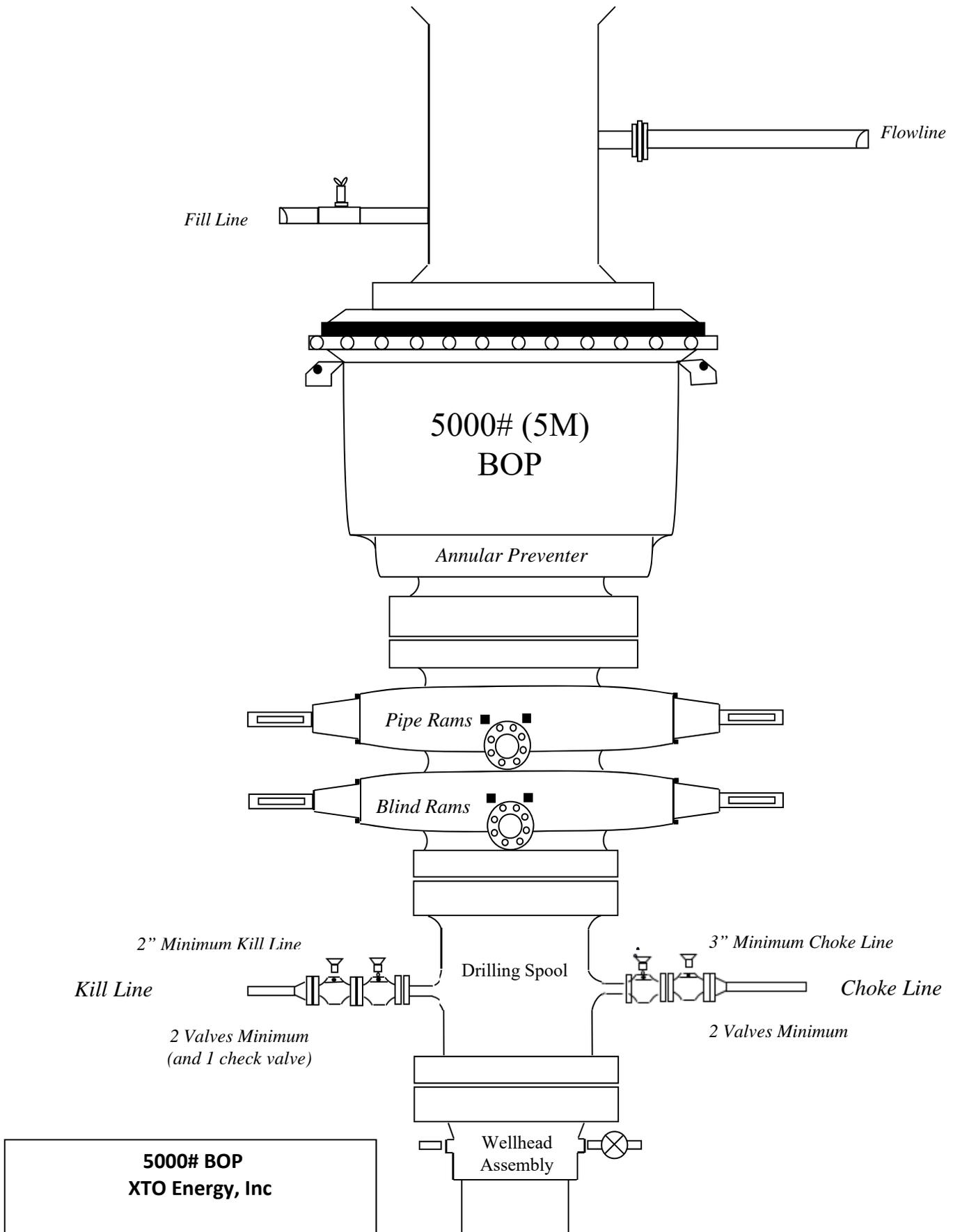
Open hole logging will not be done on this well.

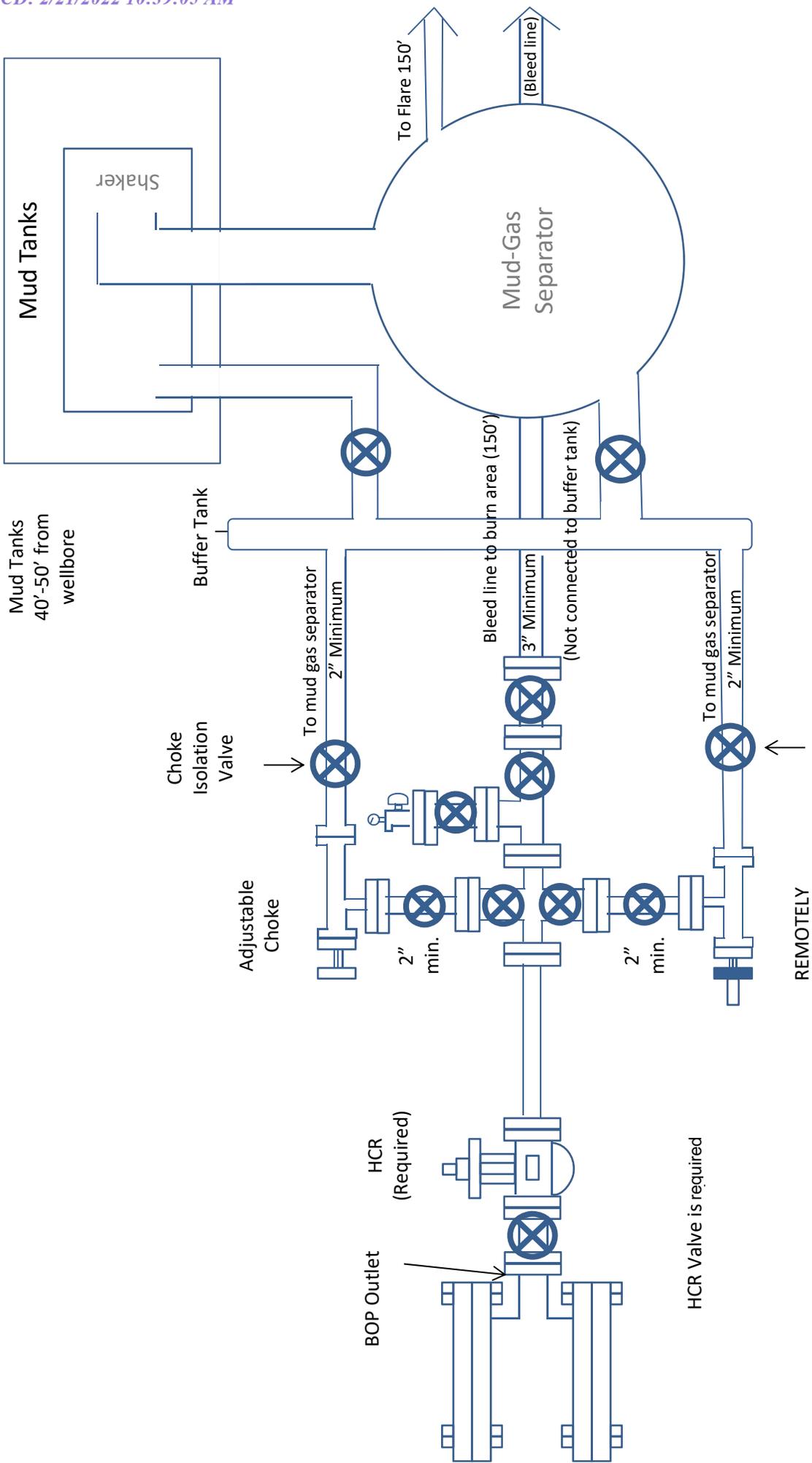
## 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 155 to 175 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 4025 psi.

## 10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after NMOCD approval. Move in operations and drilling is expected to take 40 days.





5M Choke Manifold Diagram XTO

# Drilling Operations Choke Manifold 5M Service



## HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

### Assumed 100 ppm ROE = 3000'

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

#### Emergency Procedures

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H<sub>2</sub>S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - o Detection of H<sub>2</sub>S, and
  - o Measures for protection against the gas,
  - o Equipment used for protection and emergency response.

#### Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

#### Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

#### Contacting Authorities

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

**CARLSBAD OFFICE – EDDY & LEA COUNTIES**

3104 E. Greene St., Carlsbad, NM 88220  
Carlsbad, NM

575-887-7329

**XTO PERSONNEL:**

Kendall Decker, Drilling Manager	903-521-6477
Milton Turman, Drilling Superintendent	817-524-5107
Jeff Raines, Construction Foreman	432-557-3159
Toady Sanders, EH & S Manager	903-520-1601
Wes McSpadden, Production Foreman	575-441-1147

**SHERIFF DEPARTMENTS:**

Eddy County	575-887-7551
Lea County	575-396-3611

**NEW MEXICO STATE POLICE:**

575-392-5588

**FIRE DEPARTMENTS:**

	911
Carlsbad	575-885-2111
Eunice	575-394-2111
Hobbs	575-397-9308
Jal	575-395-2221
Lovington	575-396-2359

**HOSPITALS:**

	911
Carlsbad Medical Emergency	575-885-2111
Eunice Medical Emergency	575-394-2112
Hobbs Medical Emergency	575-397-9308
Jal Medical Emergency	575-395-2221
Lovington Medical Emergency	575-396-2359

**AGENT NOTIFICATIONS:**

**For Lea County:**

Bureau of Land Management – Hobbs	575-393-3612
New Mexico Oil Conservation Division – Hobbs	575-393-6161

**For Eddy County:**

Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283

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

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
  - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
  - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
  - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped up and tested on the wellhead before drilling operations resume on each well.
  - a. The larger rig will move back onto the location within 180 days from the point at which the wells are secured and the spudder rig is moved off location.
  - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.