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 308279

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

1. Operator Name and Address		2. OGRID Number
XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707		5380
		3. API Number 30-015-49292
4. Property Code 317790	5. Property Name REMUDA NORTH 25 STATE	6. Well No. 708H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
E	30	23S	30E		2370	N	690	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	19	23S	30E	D	200	N	1201	W	Eddy

9. Pool Information

FORTY NINER RIDGE BONE SPRING,WEST	96526

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	OIL		State	3112
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	19617	Bone Spring		4/9/2022
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	19617	2930	2718

Casing/Cement Program: Additional Comments

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. · XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry

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. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:	**OIL CONSERVATION DIVISION**
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 Expiration Date: 2/21/2024
Date: 2/15/2022 Phone: 432-215-8939	Conditions of Approval Attached

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

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-015- 49292	96526	Forty-Niner Ridge; Bone Spring West

[4] Property Code	[5] Property Name	[6] Well Number
317790	REMUDA NORTH 25 STATE	708H

[7] OGRID No.	[8] Operator Name	[9] Elevation
005380	XTO ENERGY, INC.	3,112'

[10] Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	30	23 S	30 E		2,370	NORTH	690	WEST	EDDY

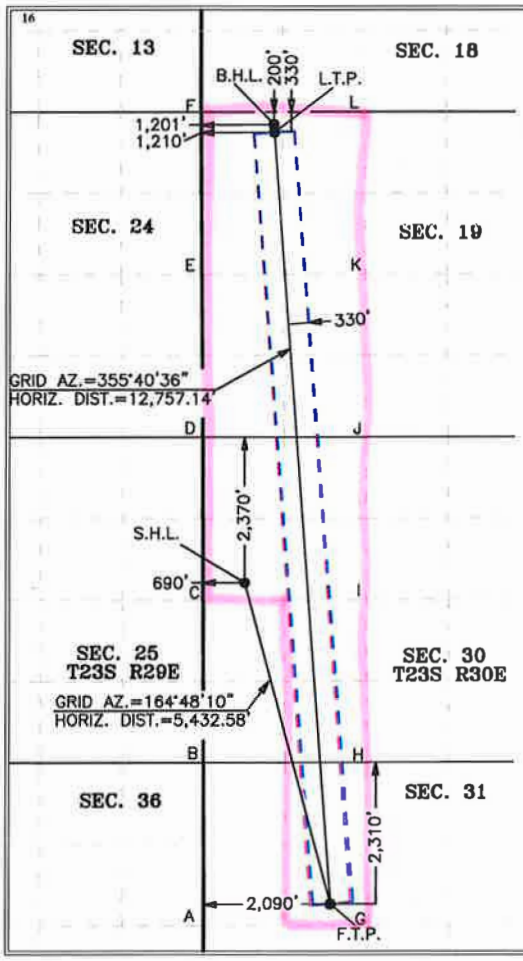
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	19	23 S	30 E		200	NORTH	1,201	WEST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

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

[16]



SHL (NAD83 NME)		LTP (NAD83 NME)	
Y =	464,610.1	Y =	471,958.4
X =	666,808.2	X =	667,280.5
LAT. =	32.276635 °N	LAT. =	32.296829 °N
LONG. =	103.927351 °W	LONG. =	103.925733 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**	
Y =	459,367.5	Y =	472,088.3
X =	668,232.3	X =	667,270.7
LAT. =	32.262209 °N	LAT. =	32.297186 °N
LONG. =	103.922808 °W	LONG. =	103.925763 °W

CORNER COORDINATES (NAD83 NME)

A - Y =	459,009.7 N ,	X =	666,144.1 E
B - Y =	461,669.9 N ,	X =	666,130.8 E
C - Y =	464,317.7 N ,	X =	666,119.3 E
D - Y =	466,978.9 N ,	X =	666,109.3 E
E - Y =	469,627.6 N ,	X =	666,087.4 E
F - Y =	472,285.7 N ,	X =	666,068.1 E
G - Y =	459,023.1 N ,	X =	668,841.1 E
H - Y =	461,679.6 N ,	X =	668,822.1 E
I - Y =	464,329.2 N ,	X =	668,806.9 E
J - Y =	466,985.3 N ,	X =	668,791.7 E
K - Y =	469,636.5 N ,	X =	668,772.6 E
L - Y =	472,291.5 N ,	X =	668,753.5 E

SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	464,550.2	Y =	471,898.3
X =	625,625.4	X =	626,097.9
LAT. =	32.276511 °N	LAT. =	32.296705 °N
LONG. =	103.926860 °W	LONG. =	103.925241 °W
FTP (NAD27 NME)		**BHL (NAD27 NME)**	
Y =	459,307.7	Y =	472,028.2
X =	627,049.3	X =	626,088.1
LAT. =	32.262085 °N	LAT. =	32.297063 °N
LONG. =	103.922318 °W	LONG. =	103.925271 °W

CORNER COORDINATES (NAD27 NME)

A - Y =	458,949.9 N ,	X =	624,961.1 E
B - Y =	461,610.1 N ,	X =	624,947.9 E
C - Y =	464,257.8 N ,	X =	624,936.5 E
D - Y =	466,918.9 N ,	X =	624,926.6 E
E - Y =	469,567.6 N ,	X =	624,904.7 E
F - Y =	472,225.6 N ,	X =	624,885.5 E
G - Y =	458,963.3 N ,	X =	627,658.1 E
H - Y =	461,619.8 N ,	X =	627,639.2 E
I - Y =	464,269.2 N ,	X =	627,624.1 E
J - Y =	466,925.3 N ,	X =	627,609.0 E
K - Y =	469,576.5 N ,	X =	627,590.0 E
L - Y =	472,231.4 N ,	X =	627,570.9 E

[17] OPERATOR CERTIFICATION

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

Cassie Evans — 02/07/2022
Signature — Date

Cassie Evans
Printed Name

cassie.evans@exxonmobil.com
E-mail Address

[18] SURVEYOR CERTIFICATION

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

01-31-2022
Date of Survey

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number — AW — 2019010069

Intent [X] As Drilled [ ]

API #		
Operator Name: XTO ENERGY INC	Property Name: REMUDA NORTH 25 STATE	Well Number 708H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
E	30	23S	30E		2370	North	690	WEST	EDDY
Latitude				Longitude				NAD	
32.276635				-103.927351				NAD83	

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
F	31	23S	30E		2310	North	2090	West	EDDY
Latitude				Longitude				NAD	
32.276885				-103.928516				NAD83	

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
D	19	23S	30E		330	North	1201	West	EDDY
Latitude				Longitude				NAD	
32.296829				-103.925733				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

KZ 06/29/2018

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 APD Comments

Permit 308279

PERMIT COMMENTS

Operator Name and Address:	API Number:
XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	30-015-49292
	Well: REMUDA NORTH 25 STATE #708H

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

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 APD Conditions

Permit 308279

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	30-015-49292
	Well: REMUDA NORTH 25 STATE #708H

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

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

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

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

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

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

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

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

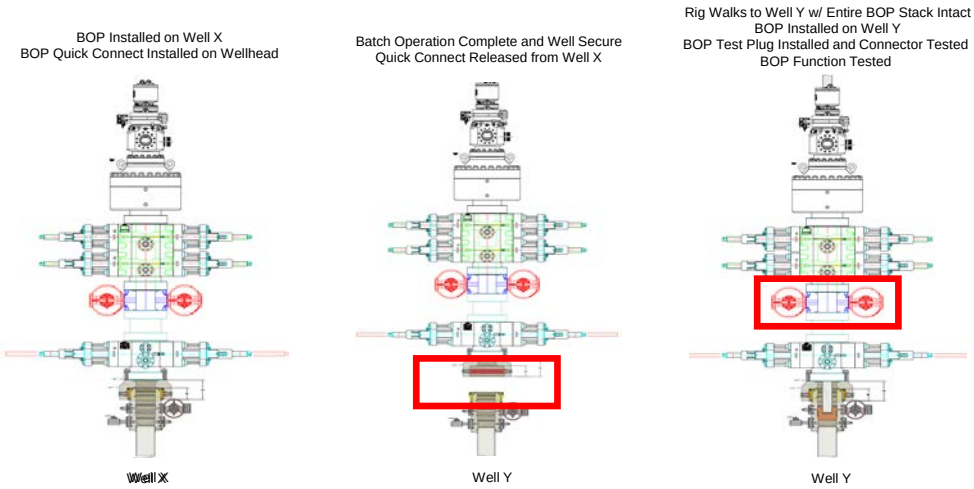
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that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

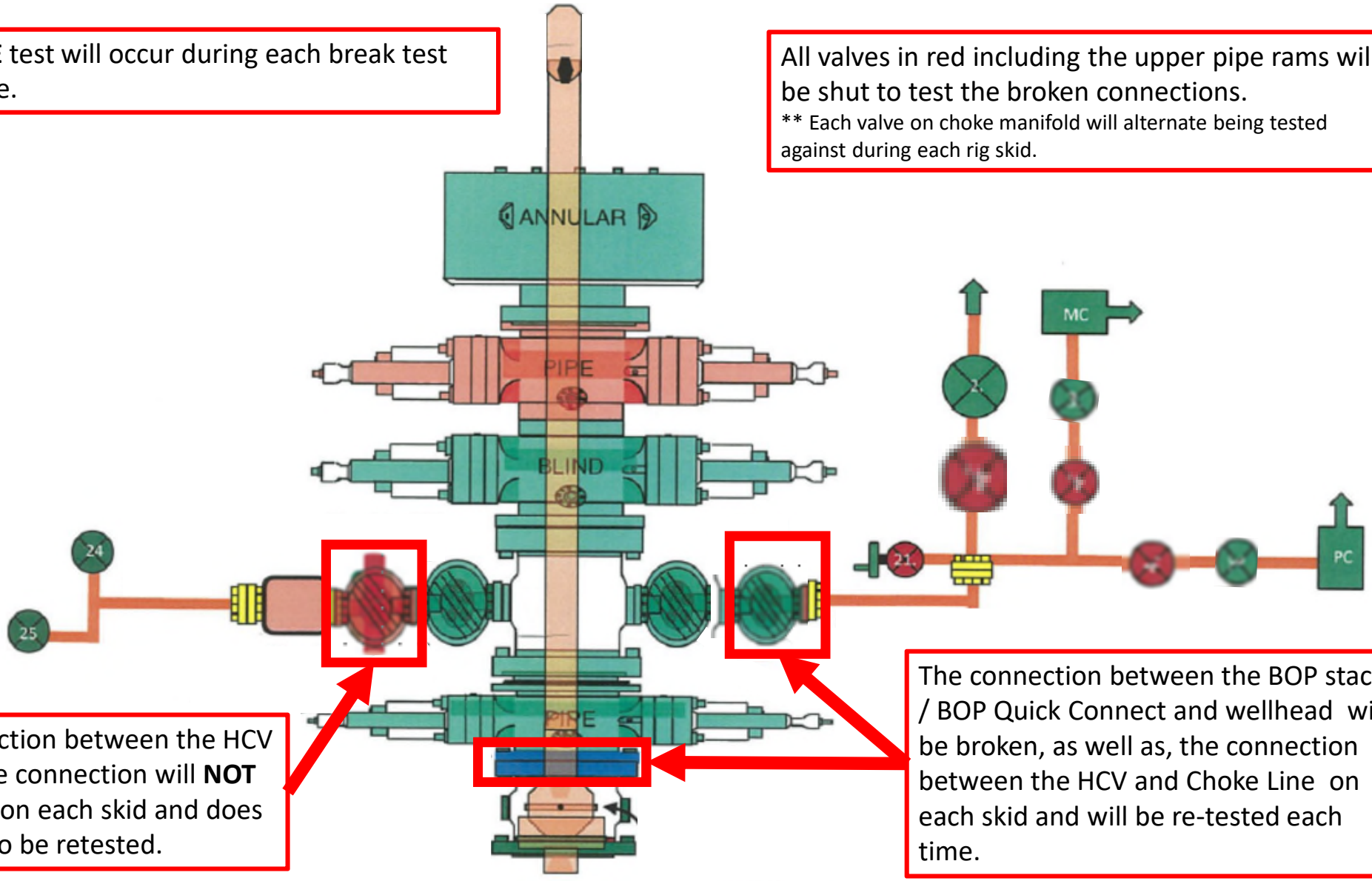
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

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
FAX: 361-887-0812
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

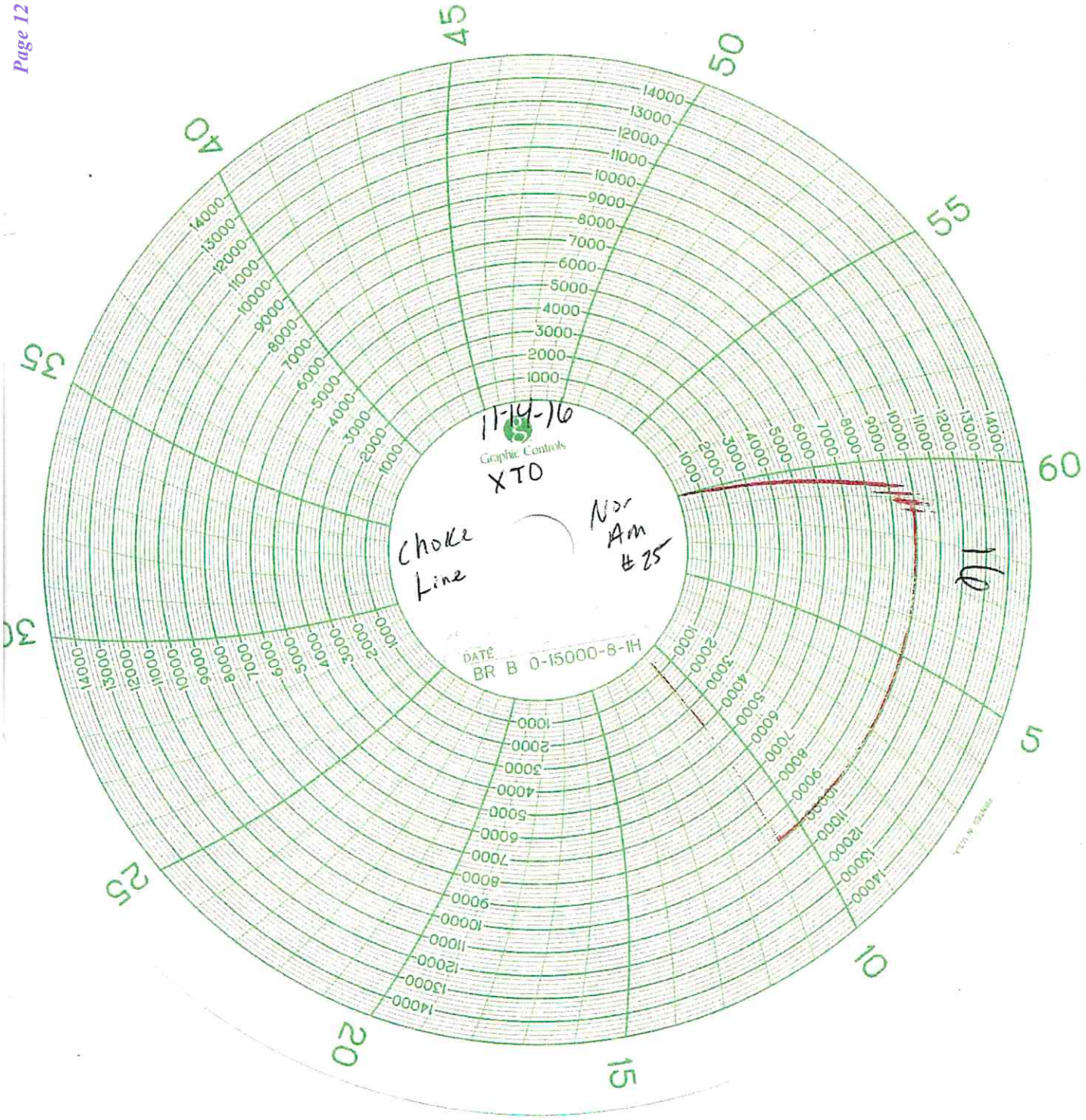
Product Description:	FD3.042.0R41/16.5KFLGE/E LE

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 :		Signature :	

Form PTC - 01 Rev.0 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

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
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 708H

Measured Depth:	19617.00 ft
TVD RKB:	9000.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	464587.94 ft
Easting:	625635.56 ft
RKB:	3095.00 ft
Ground Level:	3065.00 ft
North Reference:	Grid
Convergence Angle:	0.22 Deg
Site:	North Pad 5
Slot:	5

Plan Sections — Remuda North 25 State 708H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)
0	0	0	0	0	0	0	0
1000	0	0	1000	0	0	0	0
1350	7	140	1349.13	-16.36	13.73	2	0
2509.51	7	140	2500	-124.61	104.56	0	0
3661.21	30	145	3584.91	-418.19	317.69	2	0.43
4161.21	30	145	4017.92	-622.98	461.09	0	0
4527.61	28.56	159.72	4337.93	-780.38	544.09	-0.39	4.02
8674.88	28.56	159.72	7980.61	-2640.15	1231.09	0	0

10132.92	90	0	9000	-2000	1423.34	4.21	-10.95
10846.08	90	0	9000	-1286.84	1423.34	0	0
11162.29	90	353.68	9000	-971.26	1405.91	0	-2
19617.17	90	353.68	9000	7432.16	474.54	0	0

Position Uncertainty

Remuda North 25
State 708H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Highside Bias (ft)	Lateral Error (ft)	Lateral Bias (ft)
0	0	0	0	0	0	0	0
100	0	0	100	0.468	0	0.468	0
200	0	0	200	0.983	0	0.983	0
300	0	0	300	1.403	0	1.403	0
400	0	0	400	1.797	0	1.797	0
500	0	0	500	2.179	0	2.179	0
600	0	0	600	2.554	0	2.554	0
700	0	0	700	2.925	0	2.925	0
800	0	0	800	3.292	0	3.292	0
900	0	0	900	3.659	0	3.659	0
1000	0	0	1000	4.024	0	4.024	0
1100	1.999	140	1099.98	4.091	0	4.698	0
1200	4	140	1199.838	4.982	0	5.014	0
1300	6	140	1299.452	5.754	0	5.336	0
1350	7	140	1349.13	5.946	0	5.485	0
1400	7	140	1398.757	6.093	0	5.635	0
1500	7	140	1498.012	6.388	0	5.954	0
1600	7	140	1597.267	6.703	0	6.29	0
1700	7	140	1696.521	7.022	0	6.628	0
1800	7	140	1795.776	7.347	0	6.97	0

1900	7	140	1895.03	7.675	0	7.313	0
2000	7	140	1994.285	8.007	0	7.659	0
2100	7	140	2093.54	8.341	0	8.006	0
2200	7	140	2192.794	8.679	0	8.354	0
2300	7	140	2292.049	9.019	0	8.704	0
2400	7	140	2391.303	9.362	0	9.055	0
2509.5	7	140	2500	9.743	0	9.445	0
2600	8.8	141.3	2589.626	10.115	0	9.745	0
2700	10.79	142.2	2688.162	10.658	0	10.086	0
2800	12.78	142.9	2786.047	11.198	0	10.431	0
2900	14.78	143.3	2883.16	11.71	0	10.785	0
3000	16.78	143.7	2979.384	12.2	0	11.14	0
3100	18.78	144	3074.601	12.669	0	11.5	0
3200	20.78	144.2	3168.696	13.117	0	11.863	0
3300	22.77	144.4	3261.552	13.547	0	12.227	0
3400	24.77	144.6	3353.059	13.962	0	12.597	0
3500	26.77	144.8	3443.103	14.362	0	12.969	0
3600	28.77	144.9	3531.576	14.744	0	13.347	0
3661.2	30	145	3584.909	14.906	0	13.575	0
3700	30	145	3618.501	15.045	0	13.721	0
3800	30	145	3705.104	15.403	0	14.102	0
3900	30	145	3791.706	15.776	0	14.495	0
4000	30	145	3878.309	16.156	0	14.892	0
4100	30	145	3964.911	16.544	0	15.294	0
4161.2	30	145	4017.921	16.78	0	15.536	0
4200	29.77	146.4	4051.553	16.971	0	15.657	0
4300	29.26	150.4	4138.58	17.459	0	16.048	0
4400	28.87	154.4	4225.991	17.93	0	16.532	0
4500	28.6	158.5	4313.678	18.376	0	17.023	0

4527.6	28.55	159.7	4337.925	18.492	0	17.121	0
4600	28.55	159.7	4401.506	18.778	0	17.408	0
4700	28.55	159.7	4489.339	19.181	0	17.81	0
4800	28.55	159.7	4577.172	19.591	0	18.218	0
4900	28.55	159.7	4665.006	20.005	0	18.625	0
5000	28.55	159.7	4752.839	20.423	0	19.035	0
5100	28.55	159.7	4840.672	20.842	0	19.445	0
5200	28.55	159.7	4928.506	21.267	0	19.858	0
5300	28.55	159.7	5016.339	21.693	0	20.274	0
5400	28.55	159.7	5104.172	22.123	0	20.69	0
5500	28.55	159.7	5192.005	22.554	0	21.106	0
5600	28.55	159.7	5279.839	22.989	0	21.524	0
5700	28.55	159.7	5367.672	23.426	0	21.944	0
5800	28.55	159.7	5455.505	23.864	0	22.364	0
5900	28.55	159.7	5543.338	24.305	0	22.785	0
6000	28.55	159.7	5631.172	24.749	0	23.207	0
6100	28.55	159.7	5719.005	25.193	0	23.629	0
6200	28.55	159.7	5806.838	25.64	0	24.053	0
6300	28.55	159.7	5894.671	26.088	0	24.478	0
6400	28.55	159.7	5982.505	26.538	0	24.903	0
6500	28.55	159.7	6070.338	26.99	0	25.33	0
6600	28.55	159.7	6158.171	27.442	0	25.757	0
6700	28.55	159.7	6246.005	27.897	0	26.183	0
6800	28.55	159.7	6333.838	28.352	0	26.612	0
6900	28.55	159.7	6421.671	28.81	0	27.041	0
7000	28.55	159.7	6509.504	29.267	0	27.469	0
7100	28.55	159.7	6597.338	29.725	0	27.899	0
7200	28.55	159.7	6685.171	30.185	0	28.33	0
7300	28.55	159.7	6773.004	30.646	0	28.76	0

7400	28.55	159.7	6860.837	31.109	0	29.192	0
7500	28.55	159.7	6948.671	31.572	0	29.623	0
7600	28.55	159.7	7036.504	32.036	0	30.055	0
7700	28.55	159.7	7124.337	32.501	0	30.489	0
7800	28.55	159.7	7212.17	32.966	0	30.921	0
7900	28.55	159.7	7300.004	33.425	0	31.353	0
8000	28.55	159.7	7387.837	33.891	0	31.786	0
8100	28.55	159.7	7475.67	34.365	0	32.221	0
8200	28.55	159.7	7563.504	34.834	0	32.644	0
8300	28.55	159.7	7651.337	35.301	0	33.089	0
8400	28.55	159.7	7739.17	35.773	0	33.516	0
8500	28.55	159.7	7827.003	36.243	0	33.95	0
8600	28.55	159.7	7914.837	36.709	0	34.392	0
8674.8	28.55	159.7	7980.608	37.059	0	34.713	0
8700	26.71	157.9	8002.859	37.271	0	34.84	0
8800	19.68	148.1	8094.749	37.983	0	35.475	0
8900	13.7	129.3	8190.559	38.078	0	36.649	0
9000	10.69	93.41	8288.426	36.543	0	38.597	0
9100	12.94	55.1	8386.445	35.592	0	39.35	0
9200	18.63	33.99	8482.707	34.677	0	39.547	0
9300	25.56	23.21	8575.339	33.235	0	39.829	0
9400	32.95	16.91	8662.538	31.471	0	40.077	0
9500	40.56	12.72	8742.607	29.642	0	40.27	0
9600	48.27	9.682	8813.988	28.046	0	40.405	0
9700	56.04	7.294	8875.29	26.984	0	40.496	0
9800	63.86	5.309	8925.322	26.71	0	40.527	0
9900	71.7	3.575	8963.108	27.382	0	40.527	0
10000	79.55	1.992	8987.914	28.977	0	40.474	0
10100	87.41	0.488	8999.257	31.312	0	40.399	0

10132	90	0	9000	31.843	0	40.348	0
10200	90	0	9000	32.109	0	40.224	0
10300	90	0	9000	32.512	0	40.062	0
10400	90	0	9000	32.909	0	39.9	0
10500	90	0	9000	33.332	0	39.762	0
10600	90	0	9000	33.779	0	39.623	0
10700	90	0	9000	34.22	0	39.497	0
10800	90	0	9000	34.684	0	39.383	0
10846	90	0	9000	34.9	0	39.332	0
10900	90	358.9	9000	35.143	0	39.288	0
11000	90	356.9	9000	35.623	0	39.246	0
11100	90	354.9	9000	36.125	0	39.227	0
11162	90	353.6	9000	36.428	0	39.203	0
11200	90	353.6	9000	36.62	0	39.172	0
11300	90	353.6	9000	37.135	0	39.094	0
11400	90	353.6	9000	37.656	0	39.041	0
11500	90	353.6	9000	38.184	0	38.989	0
11600	90	353.6	9000	38.717	0	38.949	0
11700	90	353.6	9000	39.268	0	38.935	0
11800	90	353.6	9000	39.825	0	38.908	0
11900	90	353.6	9000	40.386	0	38.908	0
12000	90	353.6	9000	40.963	0	38.92	0
12100	90	353.6	9000	41.533	0	38.945	0
12200	90	353.6	9000	42.119	0	38.97	0
12300	90	353.6	9000	42.708	0	39.021	0
12400	90	353.6	9000	43.313	0	39.072	0
12500	90	353.6	9000	43.909	0	39.136	0
12600	90	353.6	9000	44.52	0	39.213	0
12700	90	353.6	9000	45.133	0	39.302	0

12800	90	353.6	9000	45.76	0	39.404	0
12900	90	353.6	9000	46.379	0	39.519	0
13000	90	353.6	9000	47.011	0	39.633	0
13100	90	353.6	9000	47.645	0	39.772	0
13200	90	353.6	9000	48.28	0	39.911	0
13300	90	353.6	9000	48.918	0	40.075	0
13400	90	353.6	9000	49.568	0	40.238	0
13500	90	353.6	9000	50.22	0	40.413	0
13600	90	353.6	9000	50.872	0	40.599	0
13700	90	353.6	9000	51.536	0	40.797	0
13800	90	353.6	9000	52.192	0	40.995	0
13900	90	353.6	9000	52.858	0	41.215	0
14000	90	353.6	9000	53.526	0	41.435	0
14100	90	353.6	9000	54.194	0	41.677	0
14200	90	353.6	9000	54.873	0	41.918	0
14300	90	353.6	9000	55.552	0	42.17	0
14400	90	353.6	9000	56.232	0	42.433	0
14500	90	353.6	9000	56.912	0	42.705	0
14600	90	353.6	9000	57.593	0	42.987	0
14700	90	353.6	9000	58.284	0	43.28	0
14800	90	353.6	9000	58.975	0	43.57	0
14900	90	353.6	9000	59.666	0	43.882	0
15000	90	353.6	9000	60.366	0	44.191	0
15100	90	353.6	9000	61.057	0	44.51	0
15200	90	353.6	9000	61.758	0	44.838	0
15300	90	353.6	9000	62.458	0	45.174	0
15400	90	353.6	9000	63.159	0	45.519	0
15500	90	353.6	9000	63.867	0	45.872	0
15600	90	353.6	9000	64.576	0	46.234	0

15700	90	353.6	9000	65.284	0	46.593	0
15800	90	353.6	9000	65.992	0	46.971	0
15900	90	353.6	9000	66.708	0	47.345	0
16000	90	353.6	9000	67.417	0	47.728	0
16100	90	353.6	9000	68.132	0	48.118	0
16200	90	353.6	9000	68.848	0	48.515	0
16300	90	353.6	9000	69.57	0	48.919	0
16400	90	353.6	9000	70.285	0	49.33	0
16500	90	353.6	9000	71.007	0	49.738	0
16600	90	353.6	9000	71.729	0	50.162	0
16700	90	353.6	9000	72.457	0	50.584	0
16800	90	353.6	9000	73.178	0	51.021	0
16900	90	353.6	9000	73.905	0	51.454	0
17000	90	353.6	9000	74.632	0	51.894	0
17100	90	353.6	9000	75.359	0	52.34	0
17200	90	353.6	9000	76.092	0	52.792	0
17300	90	353.6	9000	76.824	0	53.239	0
17400	90	353.6	9000	77.556	0	53.702	0
17500	90	353.6	9000	78.288	0	54.161	0
17600	90	353.6	9000	79.019	0	54.634	0
17700	90	353.6	9000	79.756	0	55.104	0
17800	90	353.6	9000	80.492	0	55.579	0
17900	90	353.6	9000	81.228	0	56.058	0
18000	90	353.6	9000	81.963	0	56.543	0
18100	90	353.6	9000	82.704	0	57.032	0
18200	90	353.6	9000	83.439	0	57.526	0
18300	90	353.6	9000	84.184	0	58.016	0
18400	90	353.6	9000	84.923	0	58.519	0
18500	90	353.6	9000	85.662	0	59.017	0

18600	90	353.6	9000	86.406	0	59.52	0
18700	90	353.6	9000	87.149	0	60.035	0
18800	90	353.6	9000	87.892	0	60.547	0
18900	90	353.6	9000	88.64	0	61.054	0
19000	90	353.6	9000	89.381	0	61.573	0
19100	90	353.6	9000	90.128	0	62.096	0
19200	90	353.6	9000	90.874	0	62.622	0
19300	90	353.6	9000	91.624	0	63.144	0
19400	90	353.6	9000	92.369	0	63.67	0
19500	90	353.6	9000	93.118	0	64.208	0
19600	90	353.6	9000	93.867	0	64.74	0
19617	90	353.6	9000	93.995	0	64.833	0

Plan Targets	Remuda North 25 State 708H				
Target Name	**Measured Depth (ft)**	**Grid Northing (ft)**	**Grid Easting (ft)**	**TVD MSL (ft)**	**Target Shape**
709H FTP	10846.08	463301.1	627058.9	5905	CIRCLE
709H BHL	19617.17	472020.1	626110.1	5905	CIRCLE

Dogleg Rate (Deg/100ft)	Target
0	
0	
2	
0	
2	
0	
2	
0	

8	
0	709H FTP
2	709H BHL
0	709H BHL

Vertical Error (ft)	Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
2.297	0	0	0	0	0	MWD+IFR1+MS
2.299	0	0	0.556	0.358	135	MWD+IFR1+MS
2.307	0	0	1.191	0.717	135	MWD+IFR1+MS
2.321	0	0	1.668	1.075	135	MWD+IFR1+MS
2.34	0	0	2.099	1.434	135	MWD+IFR1+MS
2.364	0	0	2.507	1.792	135	MWD+IFR1+MS
2.393	0	0	2.902	2.151	135	MWD+IFR1+MS
2.428	0	0	3.288	2.509	135	MWD+IFR1+MS
2.467	0	0	3.669	2.867	135	MWD+IFR1+MS
2.511	0	0	4.046	3.226	135	MWD+IFR1+MS
2.559	0	0	4.42	3.584	135	MWD+IFR1+MS
2.612	0	0	4.702	4.088	-44.681	MWD+IFR1+MS
2.67	0	0	5.182	4.813	96.95	MWD+IFR1+MS
2.734	0	0	5.907	5.181	76.692	MWD+IFR1+MS
2.764	0	0	6.104	5.334	75.545	MWD+IFR1+MS
2.796	0	0	6.25	5.486	75.488	MWD+IFR1+MS
2.867	0	0	6.549	5.799	76.291	MWD+IFR1+MS
2.943	0	0	6.876	6.119	77.601	MWD+IFR1+MS
3.023	0	0	7.207	6.444	78.752	MWD+IFR1+MS
3.106	0	0	7.542	6.772	79.765	MWD+IFR1+MS

3.192	0	0	7.881	7.103	80.675	MWD+IFR1+MS
3.283	0	0	8.221	7.437	81.481	MWD+IFR1+MS
3.378	0	0	8.564	7.773	82.2	MWD+IFR1+MS
3.476	0	0	8.91	8.112	82.851	MWD+IFR1+MS
3.576	0	0	9.257	8.452	83.43	MWD+IFR1+MS
3.68	0	0	9.605	8.795	83.957	MWD+IFR1+MS
3.797	0	0	9.997	9.171	84.587	MWD+IFR1+MS
3.899	0	0	10.369	9.486	83.509	MWD+IFR1+MS
4.024	0	0	10.909	9.85	79.717	MWD+IFR1+MS
4.162	0	0	11.464	10.207	77.263	MWD+IFR1+MS
4.313	0	0	12.004	10.565	75.677	MWD+IFR1+MS
4.477	0	0	12.532	10.921	74.673	MWD+IFR1+MS
4.655	0	0	13.045	11.28	73.98	MWD+IFR1+MS
4.848	0	0	13.548	11.638	73.548	MWD+IFR1+MS
5.057	0	0	14.036	11.999	73.23	MWD+IFR1+MS
5.282	0	0	14.516	12.365	73.048	MWD+IFR1+MS
5.524	0	0	14.985	12.733	72.959	MWD+IFR1+MS
5.785	0	0	15.442	13.105	72.926	MWD+IFR1+MS
5.91	0	0	15.668	13.335	73	MWD+IFR1+MS
5.979	0	0	15.79	13.482	73.056	MWD+IFR1+MS
6.172	0	0	16.106	13.864	73.377	MWD+IFR1+MS
6.376	0	0	16.434	14.252	73.836	MWD+IFR1+MS
6.586	0	0	16.769	14.646	74.282	MWD+IFR1+MS
6.803	0	0	17.111	15.044	74.769	MWD+IFR1+MS
6.936	0	0	17.316	15.286	74.971	MWD+IFR1+MS
7.021	0	0	17.446	15.438	75.114	MWD+IFR1+MS
7.246	0	0	17.798	15.897	76.322	MWD+IFR1+MS
7.477	0	0	18.173	16.421	78.643	MWD+IFR1+MS
7.708	0	0	18.544	16.945	81.031	MWD+IFR1+MS

7.772	0	0	18.639	17.055	81.193	MWD+IFR1+MS
7.938	0	0	18.891	17.342	81.4	MWD+IFR1+MS
8.173	0	0	19.244	17.742	81.771	MWD+IFR1+MS
8.413	0	0	19.606	18.146	82.235	MWD+IFR1+MS
8.656	0	0	19.972	18.551	82.724	MWD+IFR1+MS
8.903	0	0	20.341	18.956	83.221	MWD+IFR1+MS
9.152	0	0	20.711	19.364	83.718	MWD+IFR1+MS
9.404	0	0	21.087	19.773	84.234	MWD+IFR1+MS
9.66	0	0	21.465	20.185	84.751	MWD+IFR1+MS
9.917	0	0	21.844	20.597	85.276	MWD+IFR1+MS
10.173	0	0	22.228	21.01	85.82	MWD+IFR1+MS
10.436	0	0	22.612	21.424	86.364	MWD+IFR1+MS
10.7	0	0	23.001	21.839	86.924	MWD+IFR1+MS
10.968	0	0	23.39	22.255	87.485	MWD+IFR1+MS
11.238	0	0	23.781	22.672	88.054	MWD+IFR1+MS
11.511	0	0	24.177	23.09	88.634	MWD+IFR1+MS
11.781	0	0	24.573	23.507	89.217	MWD+IFR1+MS
12.058	0	0	24.972	23.927	89.805	MWD+IFR1+MS
12.337	0	0	25.371	24.347	90.397	MWD+IFR1+MS
12.613	0	0	25.772	24.769	90.994	MWD+IFR1+MS
12.896	0	0	26.177	25.19	91.592	MWD+IFR1+MS
13.18	0	0	26.581	25.613	92.195	MWD+IFR1+MS
13.465	0	0	26.989	26.034	92.791	MWD+IFR1+MS
13.748	0	0	27.397	26.458	93.398	MWD+IFR1+MS
14.039	0	0	27.807	26.882	93.997	MWD+IFR1+MS
14.328	0	0	28.217	27.305	94.594	MWD+IFR1+MS
14.618	0	0	28.631	27.731	95.189	MWD+IFR1+MS
14.913	0	0	29.043	28.156	95.792	MWD+IFR1+MS
15.205	0	0	29.459	28.581	96.367	MWD+IFR1+MS

15.502	0	0	29.876	29.008	96.95	MWD+IFR1+MS
15.802	0	0	30.293	29.433	97.513	MWD+IFR1+MS
16.1	0	0	30.712	29.861	98.082	MWD+IFR1+MS
16.401	0	0	31.131	30.289	98.645	MWD+IFR1+MS
16.706	0	0	31.552	30.716	99.183	MWD+IFR1+MS
17.009	0	0	31.961	31.145	99.879	MWD+IFR1+MS
17.315	0	0	32.384	31.572	100.404	MWD+IFR1+MS
17.624	0	0	32.815	32.002	100.818	MWD+IFR1+MS
17.933	0	0	33.242	32.419	101.108	MWD+IFR1+MS
18.243	0	0	33.664	32.86	101.806	MWD+IFR1+MS
18.555	0	0	34.094	33.281	102.066	MWD+IFR1+MS
18.868	0	0	34.519	33.711	102.521	MWD+IFR1+MS
19.183	0	0	34.941	34.149	103.208	MWD+IFR1+MS
19.422	0	0	35.256	34.468	103.45	MWD+IFR1+MS
19.501	0	0	35.369	34.569	103.283	MWD+IFR1+MS
19.882	0	0	36.145	35.008	97.719	MWD+IFR1+MS
20.261	0	0	37.457	35.44	89.653	MWD+IFR1+MS
20.516	0	0	38.667	35.831	84.231	MWD+IFR1+MS
20.729	0	0	39.766	36.355	75.948	MWD+IFR1+MS
20.964	0	0	40.357	37.34	65.699	MWD+IFR1+MS
21.342	0	0	40.512	38.624	60.507	MWD+IFR1+MS
21.932	0	0	40.608	39.661	65.574	MWD+IFR1+MS
22.766	0	0	40.866	40.248	92.004	MWD+IFR1+MS
23.847	0	0	41.325	40.376	109.647	MWD+IFR1+MS
25.156	0	0	41.693	40.382	114.354	MWD+IFR1+MS
26.65	0	0	41.907	40.334	115.619	MWD+IFR1+MS
28.272	0	0	41.989	40.273	115.981	MWD+IFR1+MS
29.963	0	0	41.974	40.19	115.312	MWD+IFR1+MS
31.654	0	0	41.913	40.117	113.625	MWD+IFR1+MS

31.843	0	0	41.878	40.077	112.599	MWD+IFR1+MS
32.109	0	0	41.823	39.998	110.415	MWD+IFR1+MS
32.512	0	0	41.757	39.891	107.441	MWD+IFR1+MS
32.909	0	0	41.701	39.774	104.612	MWD+IFR1+MS
33.332	0	0	41.654	39.672	102.112	MWD+IFR1+MS
33.779	0	0	41.615	39.563	99.754	MWD+IFR1+MS
34.22	0	0	41.581	39.459	97.603	MWD+IFR1+MS
34.684	0	0	41.554	39.361	95.626	MWD+IFR1+MS
34.9	0	0	41.548	39.316	94.749	MWD+IFR1+MS
35.143	0	0	41.531	39.271	93.777	MWD+IFR1+MS
35.623	0	0	41.512	39.227	92.071	MWD+IFR1+MS
36.125	0	0	41.497	39.204	90.465	MWD+IFR1+MS
36.428	0	0	41.473	39.179	89.427	MWD+IFR1+MS
36.62	0	0	41.474	39.153	88.804	MWD+IFR1+MS
37.135	0	0	41.454	39.084	87.25	MWD+IFR1+MS
37.656	0	0	41.437	39.038	85.751	MWD+IFR1+MS
38.184	0	0	41.436	38.988	84.342	MWD+IFR1+MS
38.717	0	0	41.425	38.949	82.947	MWD+IFR1+MS
39.268	0	0	41.417	38.932	81.524	MWD+IFR1+MS
39.825	0	0	41.423	38.9	80.236	MWD+IFR1+MS
40.386	0	0	41.431	38.89	78.904	MWD+IFR1+MS
40.963	0	0	41.431	38.89	77.501	MWD+IFR1+MS
41.533	0	0	41.446	38.9	76.124	MWD+IFR1+MS
42.119	0	0	41.463	38.908	74.779	MWD+IFR1+MS
42.708	0	0	41.484	38.937	73.313	MWD+IFR1+MS
43.313	0	0	41.507	38.964	71.864	MWD+IFR1+MS
43.909	0	0	41.534	38.999	70.35	MWD+IFR1+MS
44.52	0	0	41.566	39.042	68.755	MWD+IFR1+MS
45.133	0	0	41.602	39.093	67.072	MWD+IFR1+MS

45.76	0	0	41.654	39.153	65.395	MWD+IFR1+MS
46.379	0	0	41.701	39.217	63.506	MWD+IFR1+MS
47.011	0	0	41.753	39.277	61.62	MWD+IFR1+MS
47.645	0	0	41.824	39.354	59.626	MWD+IFR1+MS
48.28	0	0	41.9	39.426	57.648	MWD+IFR1+MS
48.918	0	0	41.98	39.505	55.308	MWD+IFR1+MS
49.568	0	0	42.074	39.582	53.133	MWD+IFR1+MS
50.22	0	0	42.178	39.662	50.884	MWD+IFR1+MS
50.872	0	0	42.294	39.739	48.563	MWD+IFR1+MS
51.536	0	0	42.422	39.817	46.204	MWD+IFR1+MS
52.192	0	0	42.556	39.888	43.958	MWD+IFR1+MS
52.858	0	0	42.71	39.961	41.588	MWD+IFR1+MS
53.526	0	0	42.869	40.028	39.369	MWD+IFR1+MS
54.194	0	0	43.051	40.095	37.088	MWD+IFR1+MS
54.873	0	0	43.238	40.155	34.993	MWD+IFR1+MS
55.552	0	0	43.443	40.221	33.077	MWD+IFR1+MS
56.232	0	0	43.656	40.275	31.14	MWD+IFR1+MS
56.912	0	0	43.887	40.335	29.393	MWD+IFR1+MS
57.593	0	0	44.128	40.382	27.673	MWD+IFR1+MS
58.284	0	0	44.383	40.437	26.117	MWD+IFR1+MS
58.975	0	0	44.641	40.487	24.713	MWD+IFR1+MS
59.666	0	0	44.919	40.537	23.333	MWD+IFR1+MS
60.366	0	0	45.2	40.582	22.101	MWD+IFR1+MS
61.057	0	0	45.491	40.627	20.933	MWD+IFR1+MS
61.758	0	0	45.794	40.669	19.845	MWD+IFR1+MS
62.458	0	0	46.106	40.709	18.824	MWD+IFR1+MS
63.159	0	0	46.428	40.749	17.856	MWD+IFR1+MS
63.867	0	0	46.76	40.786	16.957	MWD+IFR1+MS
64.576	0	0	47.101	40.822	16.114	MWD+IFR1+MS

65.284	0	0	47.443	40.868	15.372	MWD+IFR1+MS
65.992	0	0	47.802	40.902	14.623	MWD+IFR1+MS
66.708	0	0	48.161	40.946	13.968	MWD+IFR1+MS
67.417	0	0	48.528	40.989	13.339	MWD+IFR1+MS
68.132	0	0	48.902	41.02	12.726	MWD+IFR1+MS
68.848	0	0	49.285	41.061	12.168	MWD+IFR1+MS
69.57	0	0	49.675	41.102	11.632	MWD+IFR1+MS
70.285	0	0	50.073	41.142	11.129	MWD+IFR1+MS
71.007	0	0	50.469	41.181	10.663	MWD+IFR1+MS
71.729	0	0	50.881	41.22	10.201	MWD+IFR1+MS
72.457	0	0	51.291	41.258	9.778	MWD+IFR1+MS
73.178	0	0	51.717	41.296	9.363	MWD+IFR1+MS
73.905	0	0	52.14	41.333	8.977	MWD+IFR1+MS
74.632	0	0	52.57	41.381	8.621	MWD+IFR1+MS
75.359	0	0	53.006	41.417	8.267	MWD+IFR1+MS
76.092	0	0	53.448	41.465	7.935	MWD+IFR1+MS
76.824	0	0	53.887	41.5	7.62	MWD+IFR1+MS
77.556	0	0	54.34	41.547	7.314	MWD+IFR1+MS
78.288	0	0	54.791	41.593	7.029	MWD+IFR1+MS
79.019	0	0	55.256	41.627	6.744	MWD+IFR1+MS
79.756	0	0	55.717	41.672	6.477	MWD+IFR1+MS
80.492	0	0	56.184	41.718	6.222	MWD+IFR1+MS
81.228	0	0	56.656	41.763	5.977	MWD+IFR1+MS
81.963	0	0	57.133	41.807	5.74	MWD+IFR1+MS
82.704	0	0	57.615	41.851	5.512	MWD+IFR1+MS
83.439	0	0	58.102	41.907	5.298	MWD+IFR1+MS
84.184	0	0	58.585	41.951	5.087	MWD+IFR1+MS
84.923	0	0	59.08	41.994	4.881	MWD+IFR1+MS
85.662	0	0	59.573	42.049	4.689	MWD+IFR1+MS

86.406	0	0	60.069	42.092	4.498	MWD+IFR1+MS
87.149	0	0	60.578	42.146	4.316	MWD+IFR1+MS
87.892	0	0	61.083	42.2	4.142	MWD+IFR1+MS
88.64	0	0	61.584	42.242	3.973	MWD+IFR1+MS
89.381	0	0	62.098	42.295	3.806	MWD+IFR1+MS
90.128	0	0	62.615	42.349	3.646	MWD+IFR1+MS
90.874	0	0	63.136	42.401	3.494	MWD+IFR1+MS
91.624	0	0	63.653	42.454	3.345	MWD+IFR1+MS
92.369	0	0	64.173	42.506	3.199	MWD+IFR1+MS
93.118	0	0	64.705	42.559	3.057	MWD+IFR1+MS
93.867	0	0	65.233	42.611	2.922	MWD+IFR1+MS
93.995	0	0	65.324	42.623	2.899	MWD+IFR1+MS

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

XTO Energy Inc.
Remuda North 25 State 708H
Projected TD: 19617' MD / 9000' TVD
SHL: 2370' FNL & 690' FWL , Section 30, T23S, R30E
BHL: 200' FNL & 1201' FWL , Section 24, T23S, R30E
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	9000'	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 19617 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	2.38
8.5	3118' - 19617'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.76	2.38

· 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 ft3/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 ft3/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 +/- 19617'

1st Stage
Optional Lead: 190 sxs Class C (mixed at 10.5 ppg, 2 ft3/sx, 15.59 gal/sx water)
Top of Cement: Brushy Canyon @ 6332
Tail: 2260 sxs Class C (mixed at 14.8 ppg, 1.39 ft3/sx, 6.39 gal/sx water)
Top of Cement: 7,675
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Lead: 0 sxs Class C (mixed at 12.9 ppg, 2 ft3/sx, 9.61 gal/sx water)
Tail: 480 sxs Class C (mixed at 14.8 ppg, 2 ft3/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 nippling up on the 13.375, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling 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' - 19617'	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.

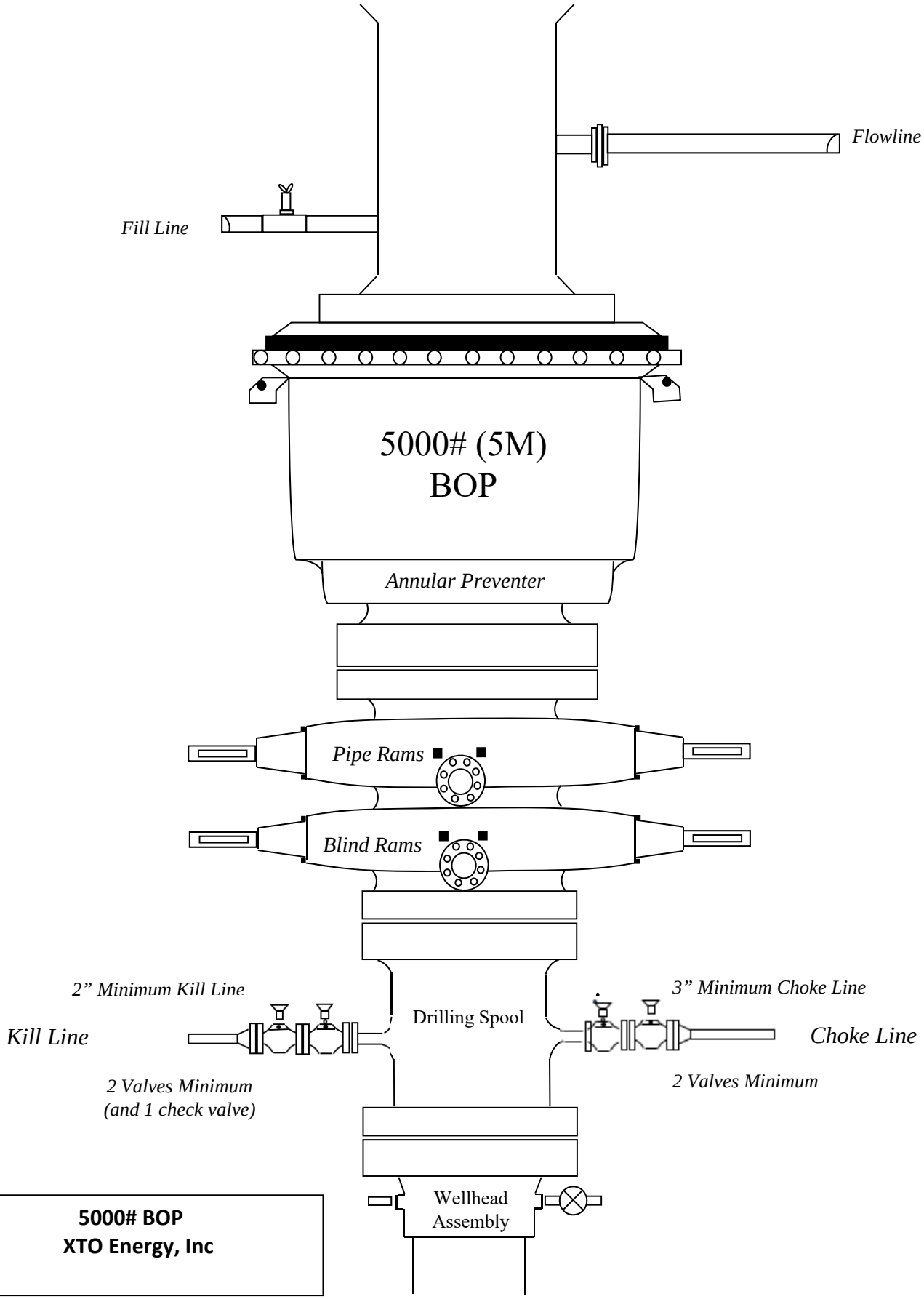
Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

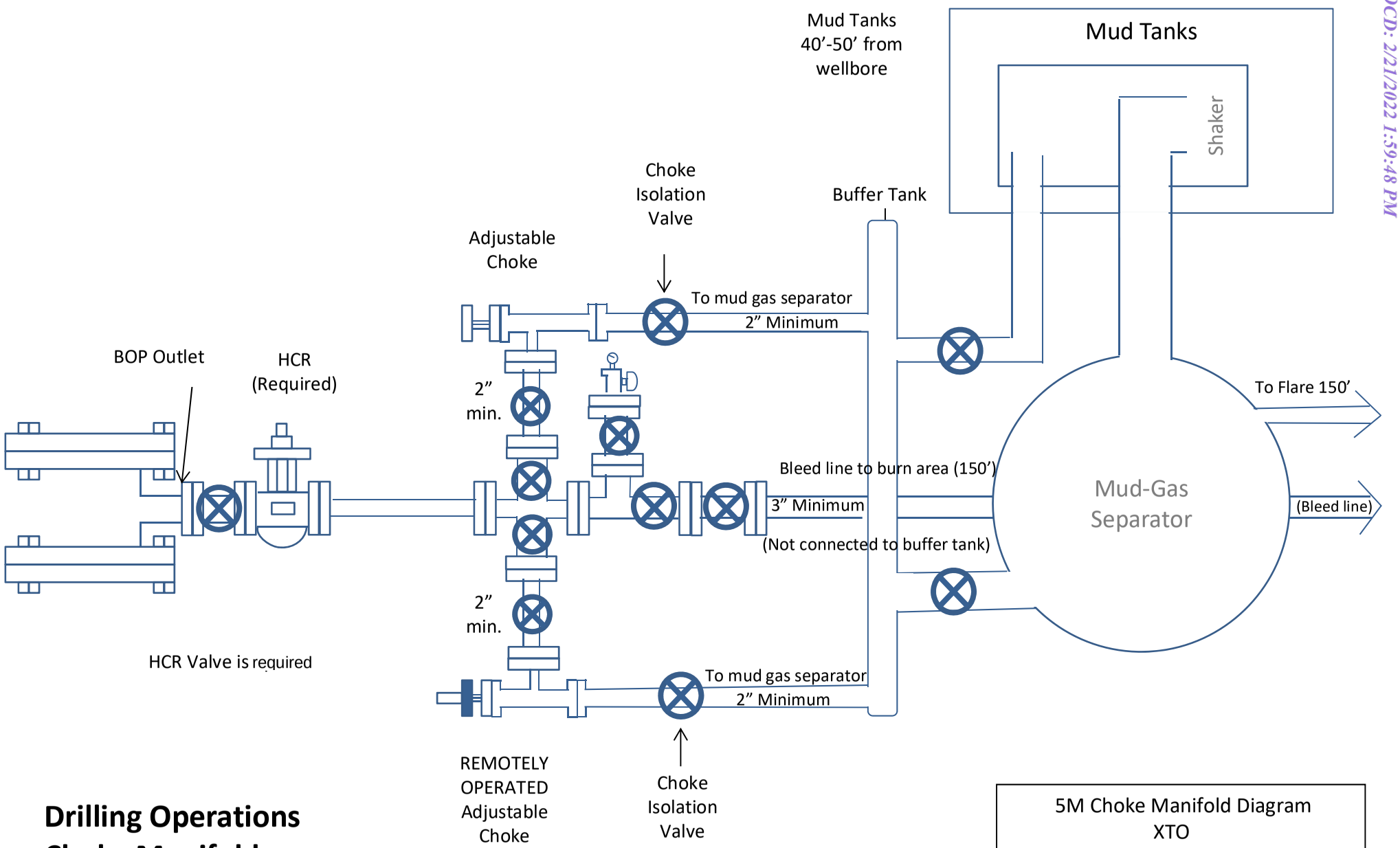
None Anticipated. BHT of 155 to 175 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. 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.



5000# BOP
XTO Energy, Inc



Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
XTO

HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, 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_2S 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
    - Detection of H_2S, and
    - Measures for protection against the gas,
    - 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_2). 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_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = I	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 nippled 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.