

**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

Form C-101  
August 1, 2011

Permit 296974

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

**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 30-015-48541
4. Property Code 317788	5. Property Name REMUDA SOUTH 25 STATE	6. Well No. 707H

**7. Surface Location**

UL - Lot H	Section 25	Township 23S	Range 29E	Lot Idn H	Feet From 2385	N/S Line N	Feet From 690	E/W Line E	County Eddy
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**8. Proposed Bottom Hole Location**

UL - Lot P	Section 36	Township 23S	Range 29E	Lot Idn P	Feet From 200	N/S Line S	Feet From 490	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 3096
16. Multiple N	17. Proposed Depth 16503	18. Formation Bone Spring	19. Contractor	20. Spud Date 8/24/2021
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	319	320	0
Int1	12.25	9.625	40	3219	1440	0
Int2	8.75	7.625	29.7	7650	630	0
Prod	6.75	5	18	16503	810	7150

**Casing/Cement Program: Additional Comments**

The well will include a tapered string. See attached drilling program for additional casing /cement information associated with the well.
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**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	Cameron

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 <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.	<b>OIL CONSERVATION DIVISION</b>	
Signature:		
Printed Name: Electronically filed by Tiffany Yancey	Approved By: Kurt Simmons	
Title: Production Analyst	Title: Petroleum Specialist - A	
Email Address: tiffany.yancey@exxonmobil.com	Approved Date: 6/21/2021	Expiration Date: 6/21/2023
Date: 6/12/2021	Phone: 432-215-8939	Conditions of Approval Attached

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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

<sup>1</sup> API Number 30-015-	<sup>2</sup> Pool Code 96526	<sup>3</sup> Pool Name Forty-Niner Ridge; Bone Spring, West
<sup>4</sup> Property Code	<sup>5</sup> Property Name REMUDA SOUTH 25 STATE	<sup>6</sup> Well Number 707H
<sup>7</sup> OGRID No. 005380	<sup>8</sup> Operator Name XTO ENERGY, INC.	<sup>9</sup> Elevation 3,096'

<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	25	23 S	29 E		2,385	NORTH	690	EAST	EDDY

<sup>11</sup> 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
P	36	23 S	29 E		200	SOUTH	490	EAST	EDDY

<sup>12</sup> Dedicated Acres 240	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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.

<p><b>16</b></p>	<p><b>17 OPERATOR CERTIFICATION</b></p> <p>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.</p> <p><i>Cassie Evans</i> 06/05/21 Signature Date</p> <p>Cassie Evans Printed Name</p> <p>cassie.evans@exxonmobil.com E-mail Address</p> <p><b>18 SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>05-20-2021 Date of Survey</p> <p>Signature and Seal of Professional Surveyor:</p> <p>MARK DILLON HARP 23786 Certificate Number</p> <p>LM 2019010060</p>
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Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

## Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

## First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

Form APD Comments

Permit 296974

**PERMIT COMMENTS**

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707		API Number: 30-015-48541
		Well: REMUDA SOUTH 25 STATE #707H

Created By	Comment	Comment Date
kpickford	This APD has been rejected due to being an incomplete submission. The submission is missing the "Natural Gas Management Plan" which has replaced the "Gas Capture Plan". See OCD Notice "Waste Rule C129 NGMP Final Forms" dated May 21, 2021 for further details.	6/10/2021

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Form APD Conditions

Permit 296974

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-48541
	Well: REMUDA SOUTH 25 STATE #707H

OCD Reviewer	Condition
ksimmons	Notify OCD 24 hours prior to casing & cement
ksimmons	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ksimmons	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
kpickford	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud

**DRILLING PLAN: BLM COMPLIANCE**  
(Supplement to BLM 3160-3)

XTO Energy Inc.  
Remuda South 25 State 705H  
Projected TD: 16646' MD / 8971' TVD  
SHL: 2385' FNL & 750' FEL , Section 25, T23S, R29E  
BHL: 200' FSL & 1970' FEL , Section 36, 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	69'	Water
Salado	269'	Water
Top of Salt	550'	Water
Base of Salt	3119'	Water
Delaware	3336'	Water
Brushy Canyon	5778'	Water/Oil/Gas
Bone Spring	7048'	Water
1st Bone Spring Ss	8095'	Water/Oil/Gas
2nd Bone Spring Ss	8936'	Water/Oil/Gas
Target/Land Curve	8976'	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 @ 319' (50 below the top of the Salado) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3219' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 7700' and cemented to 200' inside the previous casing string. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 16646 MD/TD and 5.5 x 5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 7200 feet ) per Potash regulations.

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 319'	13.375	54.5	J-55	BTC	New	2.84	8.11	49.06
12.25	0' – 3219'	9.625	40	J-55	BTC	New	1.91	2.62	4.89
8.75	0' – 3319'	7.625	29.7	RY P-110	Flush Joint	New	3.51	3.30	2.44
8.75	3319' – 7700'	7.625	29.7	HC L-80	Flush Joint	New	2.55	2.75	3.12
6.75	0' – 7600'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.81	2.71
6.75	7600' - 8800'	5.5	23	RY P-110	Semi-Flush	New	1.21	3.18	7.16
6.75	8800' - 16646'	5	18	RY P-110	Semi-Premium	New	1.16	2.89	10.17

- XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 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.
- 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on 2M annular & 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" SOW 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 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

#### 4. Cement Program

##### **Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 319'**

Tail: 320 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.39 gal/sx water)  
 Top of Cement: Surface  
 Compressives: 12-hr = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

##### **1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3219'**

Lead: 1310 sxs Class C (mixed at 12.9 ppg, 1.39 ft<sup>3</sup>/sx, 10.13 gal/sx water)  
 Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.39 gal/sx water)  
 Top of Cement: Surface  
 Compressives: 12-hr = 900 psi 24 hr = 1500 psi

##### **2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 7700'**

###### 1st Stage

Optional Lead: 160 sxs Class C (mixed at 10.5 ppg, 2.77 ft<sup>3</sup>/sx, 15.59 gal/sx water)  
 TOC: 2719  
 Tail: 170 sxs Class C (mixed at 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.39 gal/sx water)  
 TOC: Brushy Canyon @ 5778  
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

###### 2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft<sup>3</sup>/sx, 9.61 gal/sx water)  
 Tail: 300 sxs Class C (mixed at 14.8 ppg, 1.33 ft<sup>3</sup>/sx, 6.39 gal/sx water)  
 Top of Cement: 0  
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5778') 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 inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

##### **Production Casing: 5, 18 New Semi-Premium, RY P-110 casing to be set at +/- 16646'**

Lead: 50 sxs Class C (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 7200 feet  
 Tail: 770 sxs Class C (mixed at 13.2 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 8584 feet  
 Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

XTO requests the option to offline cement and remediate (if needed) all 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 2693 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the 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 7.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM 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 BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production hole

on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

## 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 319'	17.5	FW/Native	8.4-8.9	35-40	NC
319' - 3219'	12.25	Brine	10-10.5	30-32	NC
3219' to 7700'	8.75	FW / Cut Brine	9.4-9.9	30-32	NC
7700' to 16646'	6.75	OBM	10-10.5	50-60	NC - 20

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

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8 ppg - 10.2 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.

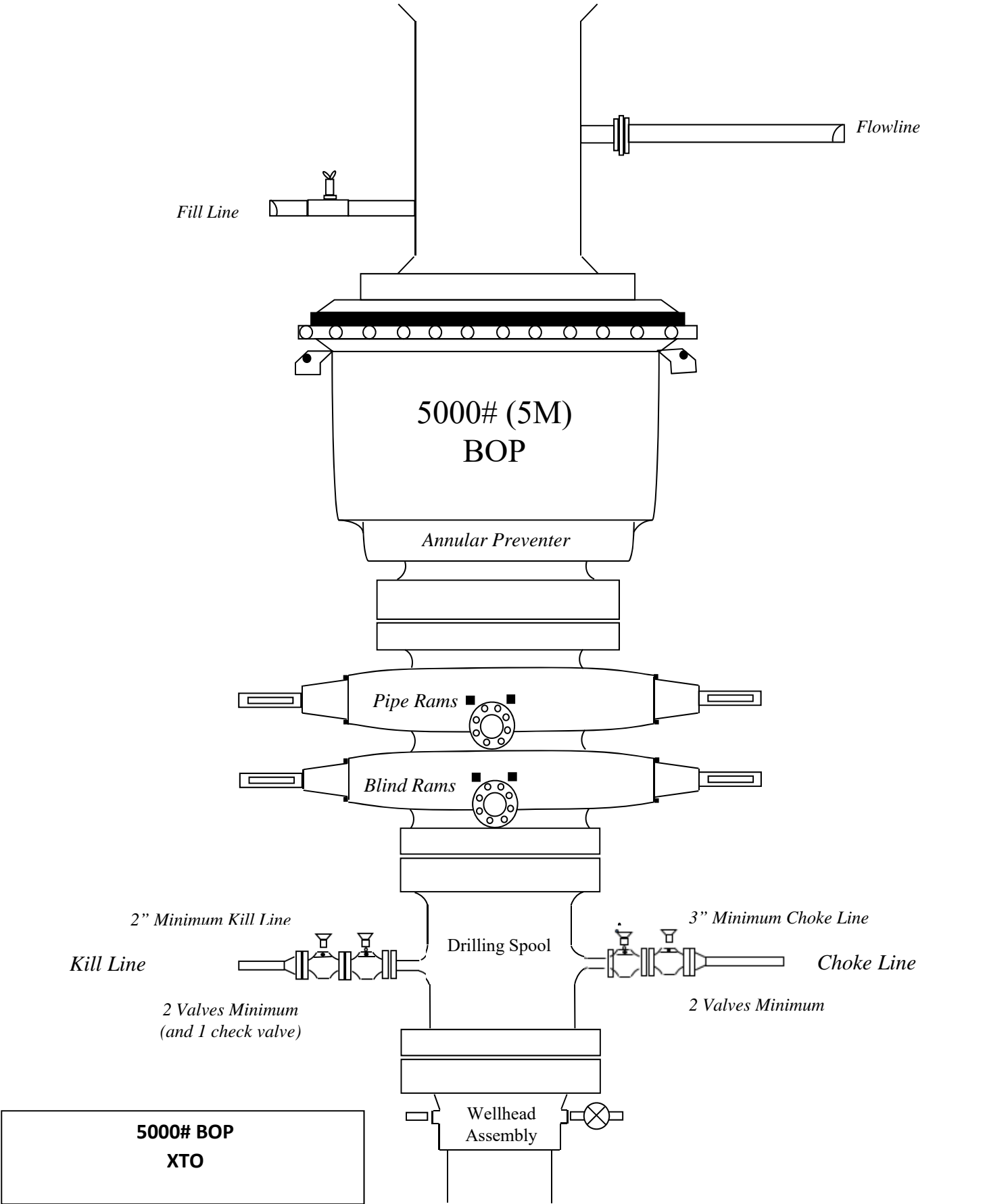
Open hole logging will not be done on this well.

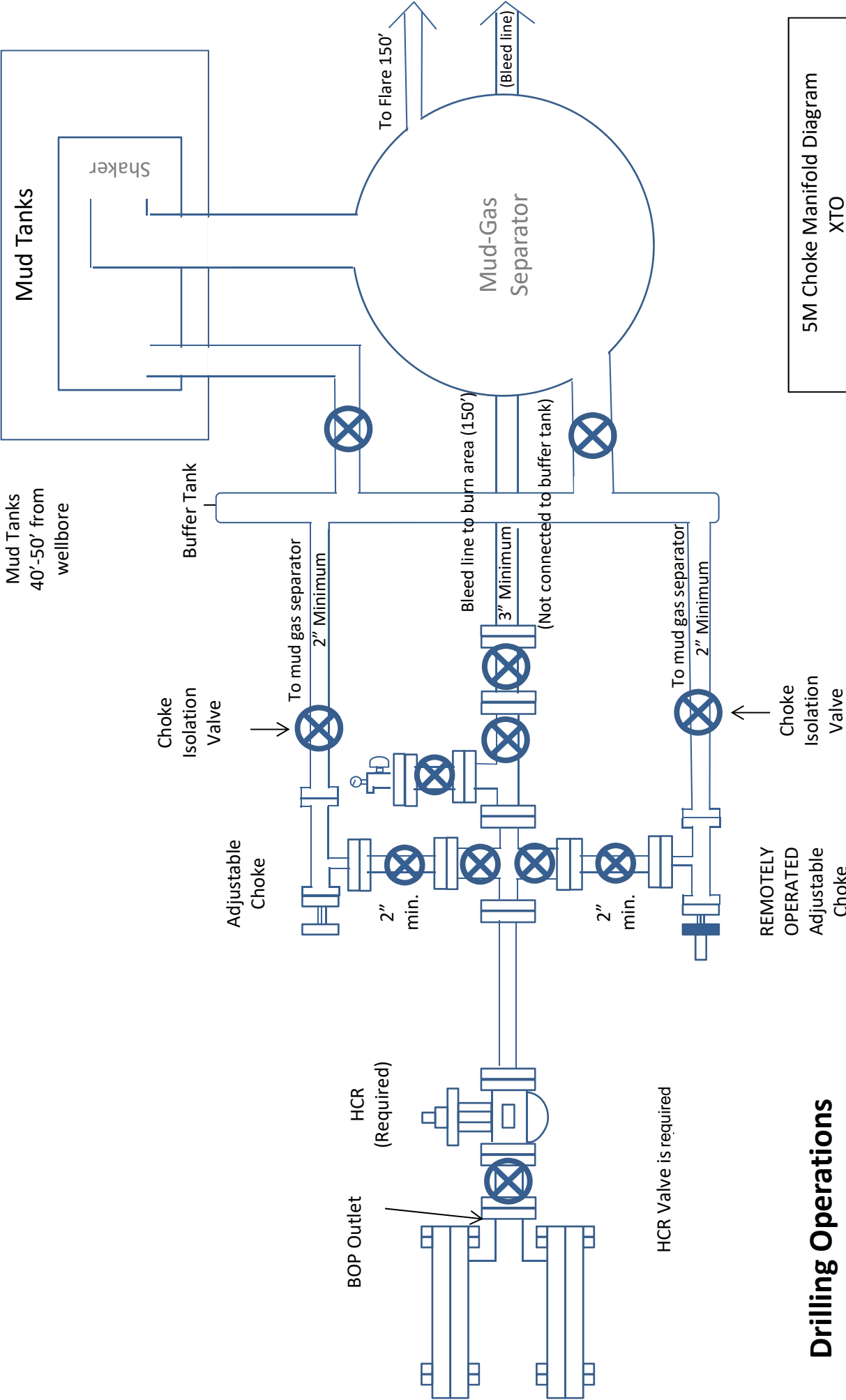
## 9. Abnormal Pressures and Temperatures / Potential Hazards

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 4668 psi.

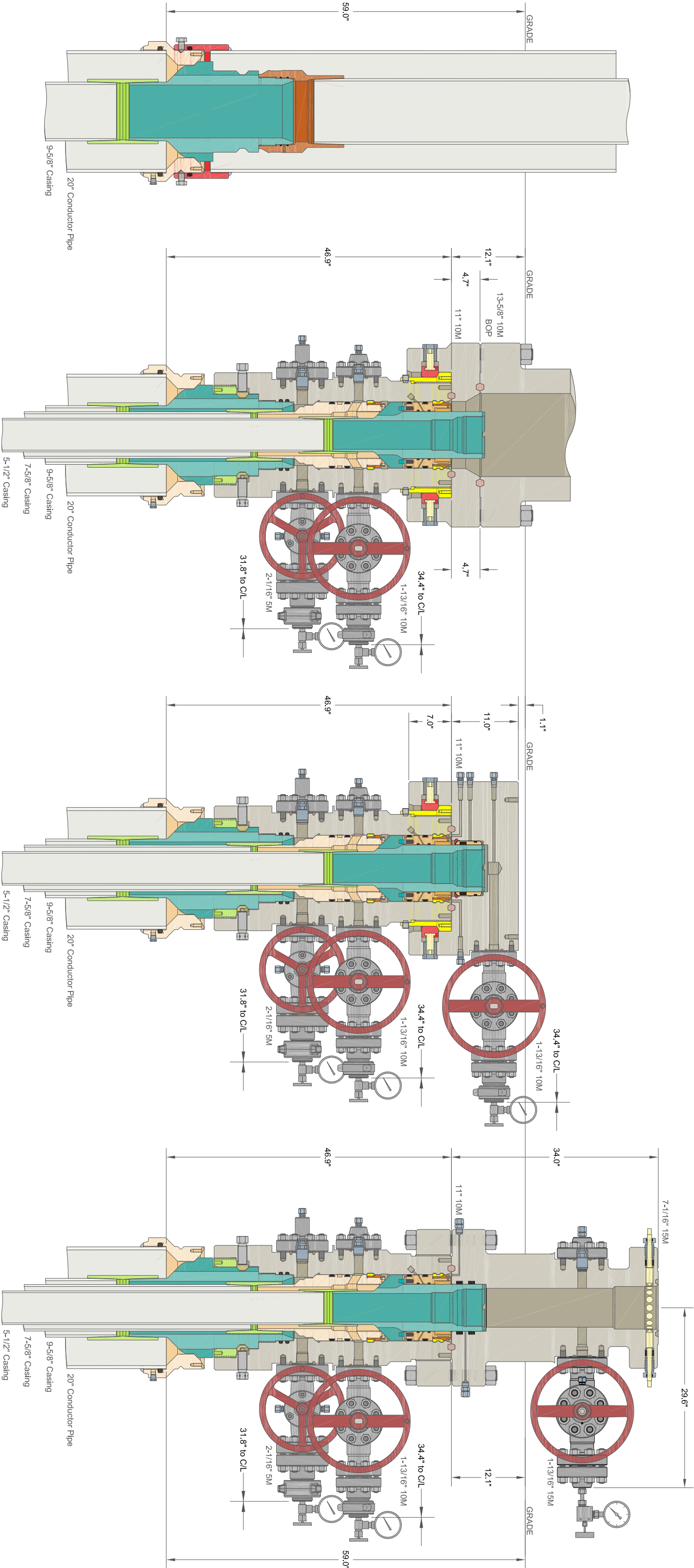
## 10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 20 days.





**Drilling Operations  
Choke Manifold  
5M Service**



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CACTUS WELLHEAD LLC			ALL DIMENSIONS APPROXIMATE		
20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers			XTO ENERGY INC		
			ICARUS PAD		
			DRAWN	DLE	18JAN21
			APPRV		
			DRAWING NO.	HBE0000479	

## Well Plan Report - Remuda 707H

Measured  
Depth: 16502.64 ft

TVD RKB: 8986.00 ft

## Location

Cartographi  
c Reference  
System: New Mexico East - NAD 27

Northing: 464534.30 ft

Easting: 624245.60 ft

RKB: 3126.00 ft

Ground  
Level: 3096.00 ft

North  
Reference: Grid

Convergen  
e Angle: 0.21 Deg

Site: Remuda S-25 State 705H-  
709H

Slot: Remuda 707H

Plan Sections									
Remuda 707H									
Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0	0	0	0	0	0	0	0	0	
3900	0	0	3900	0	0	0	0	0	
4300	8	135	4298.7	-19.71	19.71	2	0	2	
5000	8	135	4991.89	-88.6	88.6	0	0	0	
5264.82	13.02	125.49	5252.2	-118.97	125.95	1.9	-3.59	2	
6704.14	13.02	125.49	6654.51	-307.24	390.02	0	0	0	
7355.22	0	0	7300	-350	450	-2	0	2	
8455.22	0	0	8400	-350	450	0	0	0	
9355.22	90	195	8972.96	-903.43	301.71	10	0	10	
10105.22	90	180	8972.96	-1644.9	204.09	0	-2	2	
16502.64	89.77	179.44	8986	-8042.2	235.3	0	-0.01	0.01	BHL 3

Position Uncertainty														
Remuda 707H														
Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Lateral Bias (ft)	Lateral Error (ft)	Vertical Bias (ft)	Vertical Error (ft)	Magnitude Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0	0	0	0	0	0	0	0	2.297	0	0	0	0	0	MWD+IFR1+ MS
100	0	0	100	0.468	0	0.468	0	2.299	0	0	0.556	0.358	135	MWD+IFR1+ MS
200	0	0	200	0.983	0	0.983	0	2.307	0	0	1.191	0.717	135	MWD+IFR1+ MS
300	0	0	300	1.403	0	1.403	0	2.321	0	0	1.668	1.075	135	MWD+IFR1+ MS
400	0	0	400	1.797	0	1.797	0	2.34	0	0	2.099	1.434	135	MWD+IFR1+ MS
500	0	0	500	2.179	0	2.179	0	2.364	0	0	2.507	1.792	135	MWD+IFR1+ MS
600	0	0	600	2.554	0	2.554	0	2.394	0	0	2.902	2.151	135	MWD+IFR1+ MS
700	0	0	700	2.925	0	2.925	0	2.428	0	0	3.289	2.509	135	MWD+IFR1+ MS
800	0	0	800	3.293	0	3.293	0	2.467	0	0	3.669	2.868	135	MWD+IFR1+ MS
900	0	0	900	3.659	0	3.659	0	2.511	0	0	4.046	3.226	135	MWD+IFR1+ MS
1000	0	0	1000	4.024	0	4.024	0	2.56	0	0	4.42	3.585	135	MWD+IFR1+ MS

1100	0	0	1100	4.388	0	4.388	0	2.613	0	0	4.791	3.943	135	MWD+IFR1+ MS
1200	0	0	1200	4.751	0	4.751	0	2.67	0	0	5.161	4.302	135	MWD+IFR1+ MS
1300	0	0	1300	5.113	0	5.113	0	2.731	0	0	5.529	4.66	135	MWD+IFR1+ MS
1400	0	0	1400	5.475	0	5.475	0	2.797	0	0	5.896	5.019	135	MWD+IFR1+ MS
1500	0	0	1500	5.836	0	5.836	0	2.866	0	0	6.262	5.377	135	MWD+IFR1+ MS
1600	0	0	1600	6.197	0	6.197	0	2.939	0	0	6.627	5.736	135	MWD+IFR1+ MS
1700	0	0	1700	6.558	0	6.558	0	3.016	0	0	6.992	6.094	135	MWD+IFR1+ MS
1800	0	0	1800	6.919	0	6.919	0	3.096	0	0	7.356	6.452	135	MWD+IFR1+ MS
1900	0	0	1900	7.279	0	7.279	0	3.179	0	0	7.719	6.811	135	MWD+IFR1+ MS
2000	0	0	2000	7.639	0	7.639	0	3.266	0	0	8.082	7.169	135	MWD+IFR1+ MS
2100	0	0	2100	7.999	0	7.999	0	3.355	0	0	8.444	7.528	135	MWD+IFR1+ MS
2200	0	0	2200	8.359	0	8.359	0	3.448	0	0	8.807	7.886	135	MWD+IFR1+ MS
2300	0	0	2300	8.719	0	8.719	0	3.544	0	0	9.169	8.245	135	MWD+IFR1+ MS
2400	0	0	2400	9.079	0	9.079	0	3.643	0	0	9.53	8.603	135	MWD+IFR1+ MS
2500	0	0	2500	9.438	0	9.438	0	3.745	0	0	9.892	8.962	135	MWD+IFR1+ MS
2600	0	0	2600	9.798	0	9.798	0	3.849	0	0	10.253	9.32	135	MWD+IFR1+ MS
2700	0	0	2700	10.157	0	10.157	0	3.956	0	0	10.614	9.679	135	MWD+IFR1+ MS
2800	0	0	2800	10.516	0	10.516	0	4.066	0	0	10.975	10.037	135	MWD+IFR1+ MS
2900	0	0	2900	10.876	0	10.876	0	4.179	0	0	11.335	10.396	135	MWD+IFR1+ MS
3000	0	0	3000	11.235	0	11.235	0	4.295	0	0	11.696	10.754	135	MWD+IFR1+ MS
3100	0	0	3100	11.594	0	11.594	0	4.413	0	0	12.056	11.113	135	MWD+IFR1+ MS
3200	0	0	3200	11.953	0	11.953	0	4.534	0	0	12.417	11.471	135	MWD+IFR1+ MS
3300	0	0	3300	12.312	0	12.312	0	4.657	0	0	12.777	11.83	135	MWD+IFR1+ MS
3400	0	0	3400	12.671	0	12.671	0	4.783	0	0	13.137	12.188	135	MWD+IFR1+ MS
3500	0	0	3500	13.031	0	13.031	0	4.912	0	0	13.497	12.547	135	MWD+IFR1+ MS
3600	0	0	3600	13.39	0	13.39	0	5.043	0	0	13.857	12.905	135	MWD+IFR1+ MS
3700	0	0	3700	13.749	0	13.749	0	5.177	0	0	14.217	13.263	135	MWD+IFR1+ MS
3800	0	0	3800	14.107	0	14.107	0	5.313	0	0	14.577	13.622	135	MWD+IFR1+ MS
3900	0	0	3900	14.466	0	14.466	0	5.452	0	0	14.937	13.98	135	MWD+IFR1+ MS
4000	2	135	3999.98	14.363	0	15.258	0	5.594	0	0	15.258	14.37	-44.678	MWD+IFR1+ MS
4100	4	135	4099.838	14.851	0	15.578	0	5.738	0	0	15.58	14.878	131.661	MWD+IFR1+ MS
4200	6	135	4199.452	15.315	0	15.899	0	5.885	0	0	15.912	15.367	126.022	MWD+IFR1+ MS
4300	8	135	4298.702	15.756	0	16.221	0	6.037	0	0	16.26	15.83	117.278	MWD+IFR1+ MS
4400	8	135	4397.728	16.141	0	16.544	0	6.19	0	0	16.605	16.19	112.262	MWD+IFR1+ MS
4500	8	135	4496.755	16.472	0	16.868	0	6.344	0	0	16.935	16.512	111.42	MWD+IFR1+ MS
4600	8	135	4595.782	16.804	0	17.195	0	6.502	0	0	17.267	16.835	110.632	MWD+IFR1+ MS
4700	8	135	4694.809	17.138	0	17.523	0	6.662	0	0	17.601	17.161	109.894	MWD+IFR1+ MS
4800	8	135	4793.836	17.474	0	17.852	0	6.825	0	0	17.936	17.488	109.201	MWD+IFR1+ MS
4900	8	135	4892.862	17.811	0	18.183	0	6.99	0	0	18.272	17.816	108.548	MWD+IFR1+ MS
5000	8	135	4991.889	18.149	0	18.515	0	7.159	0	0	18.61	18.146	107.932	MWD+IFR1+ MS
5100	9.863	130.285	5090.674	18.436	0	18.877	0	7.331	0	0	18.965	18.501	104.409	MWD+IFR1+ MS
5200	11.77	127.07	5188.893	18.792	0	19.232	0	7.512	0	0	19.35	18.901	96.158	MWD+IFR1+ MS
5264.817	13.022	125.487	5252.199	18.969	0	19.456	0	7.627	0	0	19.578	19.133	93.794	MWD+IFR1+ MS
5300	13.022	125.487	5286.476	19.088	0	19.571	0	7.688	0	0	19.693	19.249	93.697	MWD+IFR1+ MS
5400	13.022	125.487	5383.905	19.425	0	19.902	0	7.867	0	0	20.025	19.579	93.713	MWD+IFR1+ MS
5500	13.022	125.487	5481.334	19.77	0	20.24	0	8.05	0	0	20.367	19.911	93.461	MWD+IFR1+ MS
5600	13.022	125.487	5578.762	20.116	0	20.579	0	8.237	0	0	20.71	20.245	93.213	MWD+IFR1+ MS
5700	13.022	125.487	5676.191	20.464	0	20.919	0	8.426	0	0	21.055	20.581	92.969	MWD+IFR1+ MS
5800	13.022	125.487	5773.619	20.814	0	21.261	0	8.619	0	0	21.401	20.918	92.729	MWD+IFR1+ MS



5900	13.022	125.487	5871.048	21.165	0	21.604	0	8.814	0	0	21.749	21.257	92.491	MWD+IFR1+ MS
6000	13.022	125.487	5968.476	21.518	0	21.948	0	9.012	0	0	22.097	21.597	92.255	MWD+IFR1+ MS
6100	13.022	125.487	6065.905	21.871	0	22.293	0	9.214	0	0	22.447	21.938	92.022	MWD+IFR1+ MS
6200	13.022	125.487	6163.333	22.227	0	22.64	0	9.418	0	0	22.798	22.281	91.789	MWD+IFR1+ MS
6300	13.022	125.487	6260.762	22.583	0	22.987	0	9.625	0	0	23.149	22.625	91.558	MWD+IFR1+ MS
6400	13.022	125.487	6358.19	22.941	0	23.336	0	9.835	0	0	23.502	22.971	91.328	MWD+IFR1+ MS
6500	13.022	125.487	6455.619	23.299	0	23.685	0	10.047	0	0	23.856	23.317	91.099	MWD+IFR1+ MS
6600	13.022	125.487	6553.047	23.659	0	24.036	0	10.263	0	0	24.21	23.665	90.87	MWD+IFR1+ MS
6704.144	13.022	125.487	6654.513	24.036	0	24.402	0	10.49	0	0	24.582	24.028	90.61	MWD+IFR1+ MS
6800	11.104	125.487	6748.248	24.502	0	24.739	0	10.706	0	0	24.941	24.374	88.663	MWD+IFR1+ MS
6900	9.104	125.487	6846.692	25.028	0	25.09	0	10.938	0	0	25.353	24.761	83.561	MWD+IFR1+ MS
7000	7.104	125.487	6945.689	25.526	0	25.441	0	11.169	0	0	25.775	25.139	78.888	MWD+IFR1+ MS
7100	5.104	125.487	7045.117	25.993	0	25.79	0	11.397	0	0	26.2	25.508	74.976	MWD+IFR1+ MS
7200	3.104	125.487	7144.855	26.428	0	26.137	0	11.625	0	0	26.627	25.869	71.788	MWD+IFR1+ MS
7300	1.104	125.487	7244.783	26.83	0	26.482	0	11.853	0	0	27.053	26.224	69.223	MWD+IFR1+ MS
7355.221	0	0	7300	27.133	0	26.521	0	11.978	0	0	27.237	26.415	69.068	MWD+IFR1+ MS
7400	0	0	7344.779	27.284	0	26.673	0	12.08	0	0	27.386	26.569	69.183	MWD+IFR1+ MS
7500	0	0	7444.779	27.619	0	27.016	0	12.311	0	0	27.717	26.916	69.424	MWD+IFR1+ MS
7600	0	0	7544.779	27.958	0	27.363	0	12.544	0	0	28.049	27.269	69.843	MWD+IFR1+ MS
7700	0	0	7644.779	28.297	0	27.71	0	12.779	0	0	28.383	27.622	70.272	MWD+IFR1+ MS
7800	0	0	7744.779	28.637	0	28.057	0	13.018	0	0	28.717	27.975	70.712	MWD+IFR1+ MS
7900	0	0	7844.779	28.977	0	28.404	0	13.26	0	0	29.052	28.328	71.163	MWD+IFR1+ MS
8000	0	0	7944.779	29.318	0	28.752	0	13.505	0	0	29.387	28.681	71.626	MWD+IFR1+ MS
8100	0	0	8044.779	29.659	0	29.099	0	13.753	0	0	29.723	29.034	72.1	MWD+IFR1+ MS
8200	0	0	8144.779	30	0	29.448	0	14.004	0	0	30.06	29.387	72.587	MWD+IFR1+ MS
8300	0	0	8244.779	30.342	0	29.796	0	14.258	0	0	30.398	29.74	73.085	MWD+IFR1+ MS
8400	0	0	8344.779	30.685	0	30.144	0	14.514	0	0	30.735	30.093	73.596	MWD+IFR1+ MS
8455.221	0	0	8400	30.872	0	30.335	0	14.657	0	0	30.921	30.284	73.717	MWD+IFR1+ MS
8500	4.478	195	8444.734	30.902	0	30.607	0	14.774	0	0	31.083	30.44	74.501	MWD+IFR1+ MS
8600	14.478	195	8543.243	31.796	0	30.937	0	15.122	0	0	32.348	30.903	96.166	MWD+IFR1+ MS
8700	24.478	195	8637.401	32.934	0	31.264	0	15.844	0	0	34.412	31.26	102.885	MWD+IFR1+ MS
8800	34.478	195	8724.345	33.337	0	31.577	0	17.047	0	0	36.115	31.577	104.632	MWD+IFR1+ MS
8900	44.478	195	8801.434	33.118	0	31.869	0	18.75	0	0	37.421	31.869	105.458	MWD+IFR1+ MS
9000	54.478	195	8866.326	32.432	0	32.135	0	20.871	0	0	38.34	32.133	105.982	MWD+IFR1+ MS
9100	64.478	195	8917.048	31.484	0	32.371	0	23.274	0	0	38.911	32.366	106.388	MWD+IFR1+ MS
9200	74.478	195	8952.061	30.526	0	32.572	0	25.809	0	0	39.201	32.565	106.745	MWD+IFR1+ MS
9300	84.478	195	8970.299	29.843	0	32.734	0	28.336	0	0	39.299	32.725	107.069	MWD+IFR1+ MS
9355.221	90	195	8972.958	28.835	0	32.804	0	28.835	0	0	39.311	32.794	107.214	MWD+IFR1+ MS
9400	90	194.104	8972.958	28.93	0	32.868	0	28.93	0	0	39.316	32.846	107.331	MWD+IFR1+ MS
9500	90	192.104	8972.958	29.072	0	33.078	0	29.072	0	0	39.328	33.013	107.64	MWD+IFR1+ MS
9600	90	190.104	8972.958	29.237	0	33.358	0	29.237	0	0	39.345	33.231	108.036	MWD+IFR1+ MS
9700	90	188.104	8972.958	29.423	0	33.667	0	29.423	0	0	39.366	33.458	108.516	MWD+IFR1+ MS
9800	90	186.104	8972.958	29.628	0	34.004	0	29.628	0	0	39.392	33.693	109.094	MWD+IFR1+ MS
9900	90	184.104	8972.958	29.853	0	34.366	0	29.853	0	0	39.424	33.936	109.786	MWD+IFR1+ MS
10000	90	182.104	8972.958	30.096	0	34.751	0	30.096	0	0	39.463	34.183	110.608	MWD+IFR1+ MS
10105.221	90	180	8972.958	30.372	0	35.187	0	30.372	0	0	39.513	34.455	111.665	MWD+IFR1+ MS
10200	89.997	179.992	8972.961	30.638	0	35.422	0	30.637	0	0	39.56	34.657	112.558	MWD+IFR1+ MS
10300	89.993	179.983	8972.97	30.935	0	35.655	0	30.934	0	0	39.611	34.854	113.509	MWD+IFR1+ MS
10400	89.989	179.974	8972.985	31.25	0	35.898	0	31.247	0	0	39.668	35.058	114.564	MWD+IFR1+ MS

10500	89.986	179.966	8973.007	31.581	0	36.153	0	31.578	0	0	39.73	35.267	115.735	MWD+IFR1+ MS
10600	89.982	179.957	8973.036	31.928	0	36.418	0	31.924	0	0	39.799	35.481	117.033	MWD+IFR1+ MS
10700	89.978	179.948	8973.071	32.29	0	36.693	0	32.285	0	0	39.876	35.699	118.47	MWD+IFR1+ MS
10800	89.975	179.939	8973.112	32.667	0	36.978	0	32.661	0	0	39.961	35.919	120.059	MWD+IFR1+ MS
10900	89.971	179.931	8973.159	33.058	0	37.273	0	33.052	0	0	40.055	36.139	121.809	MWD+IFR1+ MS
11000	89.967	179.922	8973.213	33.464	0	37.577	0	33.456	0	0	40.161	36.359	123.728	MWD+IFR1+ MS
11100	89.964	179.913	8973.273	33.882	0	37.891	0	33.874	0	0	40.279	36.577	125.818	MWD+IFR1+ MS
11200	89.96	179.904	8973.34	34.314	0	38.214	0	34.305	0	0	40.412	36.791	128.074	MWD+IFR1+ MS
11300	89.956	179.896	8973.413	34.758	0	38.546	0	34.748	0	0	40.56	36.998	130.481	MWD+IFR1+ MS
11400	89.953	179.887	8973.492	35.213	0	38.886	0	35.203	0	0	40.725	37.198	133.015	MWD+IFR1+ MS
11500	89.949	179.878	8973.578	35.68	0	39.235	0	35.67	0	0	40.909	37.388	-44.36	MWD+IFR1+ MS
11600	89.945	179.869	8973.67	36.159	0	39.592	0	36.147	0	0	41.113	37.568	-41.687	MWD+IFR1+ MS
11700	89.942	179.861	8973.768	36.647	0	39.957	0	36.635	0	0	41.336	37.736	-39.016	MWD+IFR1+ MS
11800	89.938	179.852	8973.873	37.146	0	40.33	0	37.133	0	0	41.58	37.893	-36.394	MWD+IFR1+ MS
11900	89.934	179.843	8973.984	37.655	0	40.71	0	37.642	0	0	41.844	38.038	-33.865	MWD+IFR1+ MS
12000	89.931	179.834	8974.102	38.173	0	41.097	0	38.159	0	0	42.127	38.172	-31.463	MWD+IFR1+ MS
12100	89.927	179.826	8974.226	38.7	0	41.492	0	38.685	0	0	42.429	38.296	-29.212	MWD+IFR1+ MS
12200	89.924	179.817	8974.356	39.236	0	41.894	0	39.221	0	0	42.747	38.41	-27.124	MWD+IFR1+ MS
12300	89.92	179.808	8974.493	39.78	0	42.302	0	39.764	0	0	43.082	38.515	-25.204	MWD+IFR1+ MS
12400	89.916	179.799	8974.636	40.332	0	42.717	0	40.315	0	0	43.432	38.613	-23.449	MWD+IFR1+ MS
12500	89.913	179.791	8974.785	40.891	0	43.138	0	40.874	0	0	43.795	38.705	-21.851	MWD+IFR1+ MS
12600	89.909	179.782	8974.941	41.458	0	43.565	0	41.441	0	0	44.171	38.791	-20.4	MWD+IFR1+ MS
12700	89.905	179.773	8975.103	42.032	0	43.999	0	42.014	0	0	44.558	38.872	-19.083	MWD+IFR1+ MS
12800	89.902	179.765	8975.272	42.612	0	44.438	0	42.594	0	0	44.956	38.949	-17.888	MWD+IFR1+ MS
12900	89.898	179.756	8975.447	43.199	0	44.883	0	43.181	0	0	45.364	39.022	-16.804	MWD+IFR1+ MS
13000	89.894	179.747	8975.628	43.793	0	45.333	0	43.774	0	0	45.782	39.093	-15.819	MWD+IFR1+ MS
13100	89.891	179.738	8975.816	44.392	0	45.789	0	44.372	0	0	46.207	39.161	-14.922	MWD+IFR1+ MS
13200	89.887	179.73	8976.01	44.997	0	46.249	0	44.977	0	0	46.641	39.227	-14.105	MWD+IFR1+ MS
13300	89.883	179.721	8976.21	45.607	0	46.715	0	45.587	0	0	47.082	39.291	-13.358	MWD+IFR1+ MS
13400	89.88	179.712	8976.417	46.223	0	47.185	0	46.202	0	0	47.531	39.354	-12.674	MWD+IFR1+ MS
13500	89.876	179.703	8976.63	46.844	0	47.661	0	46.822	0	0	47.986	39.415	-12.047	MWD+IFR1+ MS
13600	89.872	179.695	8976.85	47.469	0	48.141	0	47.448	0	0	48.447	39.476	-11.47	MWD+IFR1+ MS
13700	89.869	179.686	8977.076	48.1	0	48.625	0	48.078	0	0	48.914	39.536	-10.938	MWD+IFR1+ MS
13800	89.865	179.677	8977.308	48.734	0	49.113	0	48.712	0	0	49.387	39.595	-10.448	MWD+IFR1+ MS
13900	89.861	179.668	8977.547	49.373	0	49.606	0	49.351	0	0	49.865	39.654	-9.993	MWD+IFR1+ MS
14000	89.858	179.66	8977.792	50.017	0	50.103	0	49.994	0	0	50.348	39.712	-9.572	MWD+IFR1+ MS
14100	89.854	179.651	8978.043	50.664	0	50.604	0	50.64	0	0	50.837	39.771	-9.181	MWD+IFR1+ MS
14200	89.85	179.642	8978.301	51.315	0	51.108	0	51.291	0	0	51.33	39.829	-8.817	MWD+IFR1+ MS
14300	89.847	179.633	8978.565	51.97	0	51.616	0	51.946	0	0	51.827	39.887	-8.477	MWD+IFR1+ MS
14400	89.843	179.625	8978.836	52.628	0	52.128	0	52.604	0	0	52.329	39.945	-8.16	MWD+IFR1+ MS
14500	89.84	179.616	8979.113	53.29	0	52.644	0	53.265	0	0	52.835	40.003	-7.864	MWD+IFR1+ MS
14600	89.836	179.607	8979.396	53.955	0	53.162	0	53.93	0	0	53.345	40.061	-7.586	MWD+IFR1+ MS
14700	89.832	179.599	8979.686	54.623	0	53.684	0	54.598	0	0	53.859	40.12	-7.325	MWD+IFR1+ MS
14800	89.829	179.59	8979.982	55.295	0	54.209	0	55.269	0	0	54.376	40.178	-7.08	MWD+IFR1+ MS
14900	89.825	179.581	8980.284	55.969	0	54.738	0	55.943	0	0	54.897	40.237	-6.849	MWD+IFR1+ MS
15000	89.821	179.572	8980.593	56.646	0	55.269	0	56.62	0	0	55.422	40.296	-6.632	MWD+IFR1+ MS
15100	89.818	179.564	8980.908	57.326	0	55.803	0	57.299	0	0	55.95	40.356	-6.427	MWD+IFR1+ MS
15200	89.814	179.555	8981.229	58.009	0	56.34	0	57.982	0	0	56.481	40.416	-6.233	MWD+IFR1+ MS
15300	89.81	179.546	8981.557	58.694	0	56.88	0	58.667	0	0	57.015	40.476	-6.05	MWD+IFR1+ MS

15400	89.807	179.537	8981.892	59.381	0	57.423	0	59.354	0	0	57.552	40.537	-5.876	MWD+IFR1+ MS
15500	89.803	179.529	8982.232	60.071	0	57.968	0	60.044	0	0	58.092	40.598	-5.711	MWD+IFR1+ MS
15600	89.799	179.52	8982.579	60.763	0	58.515	0	60.736	0	0	58.635	40.659	-5.555	MWD+IFR1+ MS
15700	89.796	179.511	8982.933	61.458	0	59.066	0	61.43	0	0	59.18	40.721	-5.407	MWD+IFR1+ MS
15800	89.792	179.502	8983.292	62.155	0	59.618	0	62.126	0	0	59.728	40.784	-5.266	MWD+IFR1+ MS
15900	89.788	179.494	8983.659	62.853	0	60.173	0	62.825	0	0	60.279	40.847	-5.132	MWD+IFR1+ MS
16000	89.785	179.485	8984.031	63.554	0	60.73	0	63.525	0	0	60.832	40.91	-5.004	MWD+IFR1+ MS
16100	89.781	179.476	8984.41	64.257	0	61.289	0	64.228	0	0	61.388	40.974	-4.882	MWD+IFR1+ MS
16200	89.777	179.467	8984.795	64.962	0	61.851	0	64.932	0	0	61.946	41.039	-4.766	MWD+IFR1+ MS
16300	89.774	179.459	8985.187	65.668	0	62.414	0	65.638	0	0	62.506	41.104	-4.655	MWD+IFR1+ MS
16400	89.77	179.45	8985.585	66.376	0	62.98	0	66.346	0	0	63.068	41.169	-4.549	MWD+IFR1+ MS
16502.643	89.766	179.441	8986	67.105	0	63.563	0	67.075	0	0	63.648	41.237	-4.445	MWD+IFR1+ MS

Plan Targets Remuda 707H				
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL Target Shape (ft)
KOP 3	8863.13	464507.5	624447.8	5297 CIRCLE
FTP 3	9292.83	463934.5	624447.8	5870 CIRCLE
BHL 3	16502.64	456492.1	624480.9	5860 CIRCLE

## Well Plan Report - Remuda 707H

Measured  
Depth: 16502.64 ft

TVD RKB: 8986.00 ft

## Location

Cartographi  
c Reference  
System: New Mexico East - NAD 27

Northing: 464534.30 ft

Easting: 624245.60 ft

RKB: 3126.00 ft

Ground  
Level: 3096.00 ft

North  
Reference: Grid

Convergen  
e Angle: 0.21 Deg

Site: Remuda S-25 State 705H-  
709H

Slot: Remuda 707H

Plan Sections									
Remuda 707H									
Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0	0	0	0	0	0	0	0	0	
3900	0	0	3900	0	0	0	0	0	
4300	8	135	4298.7	-19.71	19.71	2	0	2	
5000	8	135	4991.89	-88.6	88.6	0	0	0	
5264.82	13.02	125.49	5252.2	-118.97	125.95	1.9	-3.59	2	
6704.14	13.02	125.49	6654.51	-307.24	390.02	0	0	0	
7355.22	0	0	7300	-350	450	-2	0	2	
8455.22	0	0	8400	-350	450	0	0	0	
9355.22	90	195	8972.96	-903.43	301.71	10	0	10	
10105.22	90	180	8972.96	-1644.9	204.09	0	-2	2	
16502.64	89.77	179.44	8986	-8042.2	235.3	0	-0.01	0.01	BHL 3

Position Uncertainty														
Remuda 707H														
Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Lateral Bias (ft)	Lateral Error (ft)	Vertical Bias (ft)	Vertical Error (ft)	Magnitude Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0	0	0	0	0	0	0	0	2.297	0	0	0	0	0	MWD+IFR1+ MS
100	0	0	100	0.468	0	0.468	0	2.299	0	0	0.556	0.358	135	MWD+IFR1+ MS
200	0	0	200	0.983	0	0.983	0	2.307	0	0	1.191	0.717	135	MWD+IFR1+ MS
300	0	0	300	1.403	0	1.403	0	2.321	0	0	1.668	1.075	135	MWD+IFR1+ MS
400	0	0	400	1.797	0	1.797	0	2.34	0	0	2.099	1.434	135	MWD+IFR1+ MS
500	0	0	500	2.179	0	2.179	0	2.364	0	0	2.507	1.792	135	MWD+IFR1+ MS
600	0	0	600	2.554	0	2.554	0	2.394	0	0	2.902	2.151	135	MWD+IFR1+ MS
700	0	0	700	2.925	0	2.925	0	2.428	0	0	3.289	2.509	135	MWD+IFR1+ MS
800	0	0	800	3.293	0	3.293	0	2.467	0	0	3.669	2.868	135	MWD+IFR1+ MS
900	0	0	900	3.659	0	3.659	0	2.511	0	0	4.046	3.226	135	MWD+IFR1+ MS
1000	0	0	1000	4.024	0	4.024	0	2.56	0	0	4.42	3.585	135	MWD+IFR1+ MS

1100	0	0	1100	4.388	0	4.388	0	2.613	0	0	4.791	3.943	135	MWD+IFR1+ MS
1200	0	0	1200	4.751	0	4.751	0	2.67	0	0	5.161	4.302	135	MWD+IFR1+ MS
1300	0	0	1300	5.113	0	5.113	0	2.731	0	0	5.529	4.66	135	MWD+IFR1+ MS
1400	0	0	1400	5.475	0	5.475	0	2.797	0	0	5.896	5.019	135	MWD+IFR1+ MS
1500	0	0	1500	5.836	0	5.836	0	2.866	0	0	6.262	5.377	135	MWD+IFR1+ MS
1600	0	0	1600	6.197	0	6.197	0	2.939	0	0	6.627	5.736	135	MWD+IFR1+ MS
1700	0	0	1700	6.558	0	6.558	0	3.016	0	0	6.992	6.094	135	MWD+IFR1+ MS
1800	0	0	1800	6.919	0	6.919	0	3.096	0	0	7.356	6.452	135	MWD+IFR1+ MS
1900	0	0	1900	7.279	0	7.279	0	3.179	0	0	7.719	6.811	135	MWD+IFR1+ MS
2000	0	0	2000	7.639	0	7.639	0	3.266	0	0	8.082	7.169	135	MWD+IFR1+ MS
2100	0	0	2100	7.999	0	7.999	0	3.355	0	0	8.444	7.528	135	MWD+IFR1+ MS
2200	0	0	2200	8.359	0	8.359	0	3.448	0	0	8.807	7.886	135	MWD+IFR1+ MS
2300	0	0	2300	8.719	0	8.719	0	3.544	0	0	9.169	8.245	135	MWD+IFR1+ MS
2400	0	0	2400	9.079	0	9.079	0	3.643	0	0	9.53	8.603	135	MWD+IFR1+ MS
2500	0	0	2500	9.438	0	9.438	0	3.745	0	0	9.892	8.962	135	MWD+IFR1+ MS
2600	0	0	2600	9.798	0	9.798	0	3.849	0	0	10.253	9.32	135	MWD+IFR1+ MS
2700	0	0	2700	10.157	0	10.157	0	3.956	0	0	10.614	9.679	135	MWD+IFR1+ MS
2800	0	0	2800	10.516	0	10.516	0	4.066	0	0	10.975	10.037	135	MWD+IFR1+ MS
2900	0	0	2900	10.876	0	10.876	0	4.179	0	0	11.335	10.396	135	MWD+IFR1+ MS
3000	0	0	3000	11.235	0	11.235	0	4.295	0	0	11.696	10.754	135	MWD+IFR1+ MS
3100	0	0	3100	11.594	0	11.594	0	4.413	0	0	12.056	11.113	135	MWD+IFR1+ MS
3200	0	0	3200	11.953	0	11.953	0	4.534	0	0	12.417	11.471	135	MWD+IFR1+ MS
3300	0	0	3300	12.312	0	12.312	0	4.657	0	0	12.777	11.83	135	MWD+IFR1+ MS
3400	0	0	3400	12.671	0	12.671	0	4.783	0	0	13.137	12.188	135	MWD+IFR1+ MS
3500	0	0	3500	13.031	0	13.031	0	4.912	0	0	13.497	12.547	135	MWD+IFR1+ MS
3600	0	0	3600	13.39	0	13.39	0	5.043	0	0	13.857	12.905	135	MWD+IFR1+ MS
3700	0	0	3700	13.749	0	13.749	0	5.177	0	0	14.217	13.263	135	MWD+IFR1+ MS
3800	0	0	3800	14.107	0	14.107	0	5.313	0	0	14.577	13.622	135	MWD+IFR1+ MS
3900	0	0	3900	14.466	0	14.466	0	5.452	0	0	14.937	13.98	135	MWD+IFR1+ MS
4000	2	135	3999.98	14.363	0	15.258	0	5.594	0	0	15.258	14.37	-44.678	MWD+IFR1+ MS
4100	4	135	4099.838	14.851	0	15.578	0	5.738	0	0	15.58	14.878	131.661	MWD+IFR1+ MS
4200	6	135	4199.452	15.315	0	15.899	0	5.885	0	0	15.912	15.367	126.022	MWD+IFR1+ MS
4300	8	135	4298.702	15.756	0	16.221	0	6.037	0	0	16.26	15.83	117.278	MWD+IFR1+ MS
4400	8	135	4397.728	16.141	0	16.544	0	6.19	0	0	16.605	16.19	112.262	MWD+IFR1+ MS
4500	8	135	4496.755	16.472	0	16.868	0	6.344	0	0	16.935	16.512	111.42	MWD+IFR1+ MS
4600	8	135	4595.782	16.804	0	17.195	0	6.502	0	0	17.267	16.835	110.632	MWD+IFR1+ MS
4700	8	135	4694.809	17.138	0	17.523	0	6.662	0	0	17.601	17.161	109.894	MWD+IFR1+ MS
4800	8	135	4793.836	17.474	0	17.852	0	6.825	0	0	17.936	17.488	109.201	MWD+IFR1+ MS
4900	8	135	4892.862	17.811	0	18.183	0	6.99	0	0	18.272	17.816	108.548	MWD+IFR1+ MS
5000	8	135	4991.889	18.149	0	18.515	0	7.159	0	0	18.61	18.146	107.932	MWD+IFR1+ MS
5100	9.863	130.285	5090.674	18.436	0	18.877	0	7.331	0	0	18.965	18.501	104.409	MWD+IFR1+ MS
5200	11.77	127.07	5188.893	18.792	0	19.232	0	7.512	0	0	19.35	18.901	96.158	MWD+IFR1+ MS
5264.817	13.022	125.487	5252.199	18.969	0	19.456	0	7.627	0	0	19.578	19.133	93.794	MWD+IFR1+ MS
5300	13.022	125.487	5286.476	19.088	0	19.571	0	7.688	0	0	19.693	19.249	93.697	MWD+IFR1+ MS
5400	13.022	125.487	5383.905	19.425	0	19.902	0	7.867	0	0	20.025	19.579	93.713	MWD+IFR1+ MS
5500	13.022	125.487	5481.334	19.77	0	20.24	0	8.05	0	0	20.367	19.911	93.461	MWD+IFR1+ MS
5600	13.022	125.487	5578.762	20.116	0	20.579	0	8.237	0	0	20.71	20.245	93.213	MWD+IFR1+ MS
5700	13.022	125.487	5676.191	20.464	0	20.919	0	8.426	0	0	21.055	20.581	92.969	MWD+IFR1+ MS
5800	13.022	125.487	5773.619	20.814	0	21.261	0	8.619	0	0	21.401	20.918	92.729	MWD+IFR1+ MS

5900	13.022	125.487	5871.048	21.165	0	21.604	0	8.814	0	0	21.749	21.257	92.491	MWD+IFR1+ MS
6000	13.022	125.487	5968.476	21.518	0	21.948	0	9.012	0	0	22.097	21.597	92.255	MWD+IFR1+ MS
6100	13.022	125.487	6065.905	21.871	0	22.293	0	9.214	0	0	22.447	21.938	92.022	MWD+IFR1+ MS
6200	13.022	125.487	6163.333	22.227	0	22.64	0	9.418	0	0	22.798	22.281	91.789	MWD+IFR1+ MS
6300	13.022	125.487	6260.762	22.583	0	22.987	0	9.625	0	0	23.149	22.625	91.558	MWD+IFR1+ MS
6400	13.022	125.487	6358.19	22.941	0	23.336	0	9.835	0	0	23.502	22.971	91.328	MWD+IFR1+ MS
6500	13.022	125.487	6455.619	23.299	0	23.685	0	10.047	0	0	23.856	23.317	91.099	MWD+IFR1+ MS
6600	13.022	125.487	6553.047	23.659	0	24.036	0	10.263	0	0	24.21	23.665	90.87	MWD+IFR1+ MS
6704.144	13.022	125.487	6654.513	24.036	0	24.402	0	10.49	0	0	24.582	24.028	90.61	MWD+IFR1+ MS
6800	11.104	125.487	6748.248	24.502	0	24.739	0	10.706	0	0	24.941	24.374	88.663	MWD+IFR1+ MS
6900	9.104	125.487	6846.692	25.028	0	25.09	0	10.938	0	0	25.353	24.761	83.561	MWD+IFR1+ MS
7000	7.104	125.487	6945.689	25.526	0	25.441	0	11.169	0	0	25.775	25.139	78.888	MWD+IFR1+ MS
7100	5.104	125.487	7045.117	25.993	0	25.79	0	11.397	0	0	26.2	25.508	74.976	MWD+IFR1+ MS
7200	3.104	125.487	7144.855	26.428	0	26.137	0	11.625	0	0	26.627	25.869	71.788	MWD+IFR1+ MS
7300	1.104	125.487	7244.783	26.83	0	26.482	0	11.853	0	0	27.053	26.224	69.223	MWD+IFR1+ MS
7355.221	0	0	7300	27.133	0	26.521	0	11.978	0	0	27.237	26.415	69.068	MWD+IFR1+ MS
7400	0	0	7344.779	27.284	0	26.673	0	12.08	0	0	27.386	26.569	69.183	MWD+IFR1+ MS
7500	0	0	7444.779	27.619	0	27.016	0	12.311	0	0	27.717	26.916	69.424	MWD+IFR1+ MS
7600	0	0	7544.779	27.958	0	27.363	0	12.544	0	0	28.049	27.269	69.843	MWD+IFR1+ MS
7700	0	0	7644.779	28.297	0	27.71	0	12.779	0	0	28.383	27.622	70.272	MWD+IFR1+ MS
7800	0	0	7744.779	28.637	0	28.057	0	13.018	0	0	28.717	27.975	70.712	MWD+IFR1+ MS
7900	0	0	7844.779	28.977	0	28.404	0	13.26	0	0	29.052	28.328	71.163	MWD+IFR1+ MS
8000	0	0	7944.779	29.318	0	28.752	0	13.505	0	0	29.387	28.681	71.626	MWD+IFR1+ MS
8100	0	0	8044.779	29.659	0	29.099	0	13.753	0	0	29.723	29.034	72.1	MWD+IFR1+ MS
8200	0	0	8144.779	30	0	29.448	0	14.004	0	0	30.06	29.387	72.587	MWD+IFR1+ MS
8300	0	0	8244.779	30.342	0	29.796	0	14.258	0	0	30.398	29.74	73.085	MWD+IFR1+ MS
8400	0	0	8344.779	30.685	0	30.144	0	14.514	0	0	30.735	30.093	73.596	MWD+IFR1+ MS
8455.221	0	0	8400	30.872	0	30.335	0	14.657	0	0	30.921	30.284	73.717	MWD+IFR1+ MS
8500	4.478	195	8444.734	30.902	0	30.607	0	14.774	0	0	31.083	30.44	74.501	MWD+IFR1+ MS
8600	14.478	195	8543.243	31.796	0	30.937	0	15.122	0	0	32.348	30.903	96.166	MWD+IFR1+ MS
8700	24.478	195	8637.401	32.934	0	31.264	0	15.844	0	0	34.412	31.26	102.885	MWD+IFR1+ MS
8800	34.478	195	8724.345	33.337	0	31.577	0	17.047	0	0	36.115	31.577	104.632	MWD+IFR1+ MS
8900	44.478	195	8801.434	33.118	0	31.869	0	18.75	0	0	37.421	31.869	105.458	MWD+IFR1+ MS
9000	54.478	195	8866.326	32.432	0	32.135	0	20.871	0	0	38.34	32.133	105.982	MWD+IFR1+ MS
9100	64.478	195	8917.048	31.484	0	32.371	0	23.274	0	0	38.911	32.366	106.388	MWD+IFR1+ MS
9200	74.478	195	8952.061	30.526	0	32.572	0	25.809	0	0	39.201	32.565	106.745	MWD+IFR1+ MS
9300	84.478	195	8970.299	29.843	0	32.734	0	28.336	0	0	39.299	32.725	107.069	MWD+IFR1+ MS
9355.221	90	195	8972.958	28.835	0	32.804	0	28.835	0	0	39.311	32.794	107.214	MWD+IFR1+ MS
9400	90	194.104	8972.958	28.93	0	32.868	0	28.93	0	0	39.316	32.846	107.331	MWD+IFR1+ MS
9500	90	192.104	8972.958	29.072	0	33.078	0	29.072	0	0	39.328	33.013	107.64	MWD+IFR1+ MS
9600	90	190.104	8972.958	29.237	0	33.358	0	29.237	0	0	39.345	33.231	108.036	MWD+IFR1+ MS
9700	90	188.104	8972.958	29.423	0	33.667	0	29.423	0	0	39.366	33.458	108.516	MWD+IFR1+ MS
9800	90	186.104	8972.958	29.628	0	34.004	0	29.628	0	0	39.392	33.693	109.094	MWD+IFR1+ MS
9900	90	184.104	8972.958	29.853	0	34.366	0	29.853	0	0	39.424	33.936	109.786	MWD+IFR1+ MS
10000	90	182.104	8972.958	30.096	0	34.751	0	30.096	0	0	39.463	34.183	110.608	MWD+IFR1+ MS
10105.221	90	180	8972.958	30.372	0	35.187	0	30.372	0	0	39.513	34.455	111.665	MWD+IFR1+ MS
10200	89.997	179.992	8972.961	30.638	0	35.422	0	30.637	0	0	39.56	34.657	112.558	MWD+IFR1+ MS
10300	89.993	179.983	8972.97	30.935	0	35.655	0	30.934	0	0	39.611	34.854	113.509	MWD+IFR1+ MS
10400	89.989	179.974	8972.985	31.25	0	35.898	0	31.247	0	0	39.668	35.058	114.564	MWD+IFR1+ MS

10500	89.986	179.966	8973.007	31.581	0	36.153	0	31.578	0	0	39.73	35.267	115.735	MWD+IFR1+ MS
10600	89.982	179.957	8973.036	31.928	0	36.418	0	31.924	0	0	39.799	35.481	117.033	MWD+IFR1+ MS
10700	89.978	179.948	8973.071	32.29	0	36.693	0	32.285	0	0	39.876	35.699	118.47	MWD+IFR1+ MS
10800	89.975	179.939	8973.112	32.667	0	36.978	0	32.661	0	0	39.961	35.919	120.059	MWD+IFR1+ MS
10900	89.971	179.931	8973.159	33.058	0	37.273	0	33.052	0	0	40.055	36.139	121.809	MWD+IFR1+ MS
11000	89.967	179.922	8973.213	33.464	0	37.577	0	33.456	0	0	40.161	36.359	123.728	MWD+IFR1+ MS
11100	89.964	179.913	8973.273	33.882	0	37.891	0	33.874	0	0	40.279	36.577	125.818	MWD+IFR1+ MS
11200	89.96	179.904	8973.34	34.314	0	38.214	0	34.305	0	0	40.412	36.791	128.074	MWD+IFR1+ MS
11300	89.956	179.896	8973.413	34.758	0	38.546	0	34.748	0	0	40.56	36.998	130.481	MWD+IFR1+ MS
11400	89.953	179.887	8973.492	35.213	0	38.886	0	35.203	0	0	40.725	37.198	133.015	MWD+IFR1+ MS
11500	89.949	179.878	8973.578	35.68	0	39.235	0	35.67	0	0	40.909	37.388	-44.36	MWD+IFR1+ MS
11600	89.945	179.869	8973.67	36.159	0	39.592	0	36.147	0	0	41.113	37.568	-41.687	MWD+IFR1+ MS
11700	89.942	179.861	8973.768	36.647	0	39.957	0	36.635	0	0	41.336	37.736	-39.016	MWD+IFR1+ MS
11800	89.938	179.852	8973.873	37.146	0	40.33	0	37.133	0	0	41.58	37.893	-36.394	MWD+IFR1+ MS
11900	89.934	179.843	8973.984	37.655	0	40.71	0	37.642	0	0	41.844	38.038	-33.865	MWD+IFR1+ MS
12000	89.931	179.834	8974.102	38.173	0	41.097	0	38.159	0	0	42.127	38.172	-31.463	MWD+IFR1+ MS
12100	89.927	179.826	8974.226	38.7	0	41.492	0	38.685	0	0	42.429	38.296	-29.212	MWD+IFR1+ MS
12200	89.924	179.817	8974.356	39.236	0	41.894	0	39.221	0	0	42.747	38.41	-27.124	MWD+IFR1+ MS
12300	89.92	179.808	8974.493	39.78	0	42.302	0	39.764	0	0	43.082	38.515	-25.204	MWD+IFR1+ MS
12400	89.916	179.799	8974.636	40.332	0	42.717	0	40.315	0	0	43.432	38.613	-23.449	MWD+IFR1+ MS
12500	89.913	179.791	8974.785	40.891	0	43.138	0	40.874	0	0	43.795	38.705	-21.851	MWD+IFR1+ MS
12600	89.909	179.782	8974.941	41.458	0	43.565	0	41.441	0	0	44.171	38.791	-20.4	MWD+IFR1+ MS
12700	89.905	179.773	8975.103	42.032	0	43.999	0	42.014	0	0	44.558	38.872	-19.083	MWD+IFR1+ MS
12800	89.902	179.765	8975.272	42.612	0	44.438	0	42.594	0	0	44.956	38.949	-17.888	MWD+IFR1+ MS
12900	89.898	179.756	8975.447	43.199	0	44.883	0	43.181	0	0	45.364	39.022	-16.804	MWD+IFR1+ MS
13000	89.894	179.747	8975.628	43.793	0	45.333	0	43.774	0	0	45.782	39.093	-15.819	MWD+IFR1+ MS
13100	89.891	179.738	8975.816	44.392	0	45.789	0	44.372	0	0	46.207	39.161	-14.922	MWD+IFR1+ MS
13200	89.887	179.73	8976.01	44.997	0	46.249	0	44.977	0	0	46.641	39.227	-14.105	MWD+IFR1+ MS
13300	89.883	179.721	8976.21	45.607	0	46.715	0	45.587	0	0	47.082	39.291	-13.358	MWD+IFR1+ MS
13400	89.88	179.712	8976.417	46.223	0	47.185	0	46.202	0	0	47.531	39.354	-12.674	MWD+IFR1+ MS
13500	89.876	179.703	8976.63	46.844	0	47.661	0	46.822	0	0	47.986	39.415	-12.047	MWD+IFR1+ MS
13600	89.872	179.695	8976.85	47.469	0	48.141	0	47.448	0	0	48.447	39.476	-11.47	MWD+IFR1+ MS
13700	89.869	179.686	8977.076	48.1	0	48.625	0	48.078	0	0	48.914	39.536	-10.938	MWD+IFR1+ MS
13800	89.865	179.677	8977.308	48.734	0	49.113	0	48.712	0	0	49.387	39.595	-10.448	MWD+IFR1+ MS
13900	89.861	179.668	8977.547	49.373	0	49.606	0	49.351	0	0	49.865	39.654	-9.993	MWD+IFR1+ MS
14000	89.858	179.66	8977.792	50.017	0	50.103	0	49.994	0	0	50.348	39.712	-9.572	MWD+IFR1+ MS
14100	89.854	179.651	8978.043	50.664	0	50.604	0	50.64	0	0	50.837	39.771	-9.181	MWD+IFR1+ MS
14200	89.85	179.642	8978.301	51.315	0	51.108	0	51.291	0	0	51.33	39.829	-8.817	MWD+IFR1+ MS
14300	89.847	179.633	8978.565	51.97	0	51.616	0	51.946	0	0	51.827	39.887	-8.477	MWD+IFR1+ MS
14400	89.843	179.625	8978.836	52.628	0	52.128	0	52.604	0	0	52.329	39.945	-8.16	MWD+IFR1+ MS
14500	89.84	179.616	8979.113	53.29	0	52.644	0	53.265	0	0	52.835	40.003	-7.864	MWD+IFR1+ MS
14600	89.836	179.607	8979.396	53.955	0	53.162	0	53.93	0	0	53.345	40.061	-7.586	MWD+IFR1+ MS
14700	89.832	179.599	8979.686	54.623	0	53.684	0	54.598	0	0	53.859	40.12	-7.325	MWD+IFR1+ MS
14800	89.829	179.59	8979.982	55.295	0	54.209	0	55.269	0	0	54.376	40.178	-7.08	MWD+IFR1+ MS
14900	89.825	179.581	8980.284	55.969	0	54.738	0	55.943	0	0	54.897	40.237	-6.849	MWD+IFR1+ MS
15000	89.821	179.572	8980.593	56.646	0	55.269	0	56.62	0	0	55.422	40.296	-6.632	MWD+IFR1+ MS
15100	89.818	179.564	8980.908	57.326	0	55.803	0	57.299	0	0	55.95	40.356	-6.427	MWD+IFR1+ MS
15200	89.814	179.555	8981.229	58.009	0	56.34	0	57.982	0	0	56.481	40.416	-6.233	MWD+IFR1+ MS
15300	89.81	179.546	8981.557	58.694	0	56.88	0	58.667	0	0	57.015	40.476	-6.05	MWD+IFR1+ MS

15400	89.807	179.537	8981.892	59.381	0	57.423	0	59.354	0	0	57.552	40.537	-5.876	MWD+IFR1+ MS
15500	89.803	179.529	8982.232	60.071	0	57.968	0	60.044	0	0	58.092	40.598	-5.711	MWD+IFR1+ MS
15600	89.799	179.52	8982.579	60.763	0	58.515	0	60.736	0	0	58.635	40.659	-5.555	MWD+IFR1+ MS
15700	89.796	179.511	8982.933	61.458	0	59.066	0	61.43	0	0	59.18	40.721	-5.407	MWD+IFR1+ MS
15800	89.792	179.502	8983.292	62.155	0	59.618	0	62.126	0	0	59.728	40.784	-5.266	MWD+IFR1+ MS
15900	89.788	179.494	8983.659	62.853	0	60.173	0	62.825	0	0	60.279	40.847	-5.132	MWD+IFR1+ MS
16000	89.785	179.485	8984.031	63.554	0	60.73	0	63.525	0	0	60.832	40.91	-5.004	MWD+IFR1+ MS
16100	89.781	179.476	8984.41	64.257	0	61.289	0	64.228	0	0	61.388	40.974	-4.882	MWD+IFR1+ MS
16200	89.777	179.467	8984.795	64.962	0	61.851	0	64.932	0	0	61.946	41.039	-4.766	MWD+IFR1+ MS
16300	89.774	179.459	8985.187	65.668	0	62.414	0	65.638	0	0	62.506	41.104	-4.655	MWD+IFR1+ MS
16400	89.77	179.45	8985.585	66.376	0	62.98	0	66.346	0	0	63.068	41.169	-4.549	MWD+IFR1+ MS
16502.643	89.766	179.441	8986	67.105	0	63.563	0	67.075	0	0	63.648	41.237	-4.445	MWD+IFR1+ MS

Plan Targets					Remuda 707H				
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape				
KOP 3	8863.13	464507.5	624447.8	5297	CIRCLE				
FTP 3	9292.83	463934.5	624447.8	5870	CIRCLE				
BHL 3	16502.64	456492.1	624480.9	5860	CIRCLE				





## 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

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

Submit Electronically  
Via E-permitting

## 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:** 005380 **Date:** 06 / 04 / 2021

**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 705H		H-25-23S-29E	2385' FNL & 750' FEL	1500	2600	1000
Remuda South 25 State 706H		H-25-23S-29E	2385' FNL & 720' FEL	1500	2600	1000
Remuda South 25 State 707H		H-25-23S-29E	2385' FNL & 690' FEL	1500	2600	1000
Remuda South 25 State 708H		H-25-23S-29E	2385' FNL & 660' FEL	1500	2600	1000
Remuda South 25 State 709H		H-25-23S-29E	2385' FNL & 630' FEL	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 705H		08/09/2021	08/24/2021	Not Yet Scheduled	Not Yet Scheduled	Not Yet Scheduled
Remuda South 25 State 706H		08/24/2021	09/08/2021	Not Yet Scheduled	Not Yet Scheduled	Not Yet Scheduled
Remuda South 25 State 707H		09/08/2021	09/23/2021	Not Yet Scheduled	Not Yet Scheduled	Not Yet Scheduled
Remuda South 25 State 708H		09/23/2021	10/08/2021	Not Yet Scheduled	Not Yet Scheduled	Not Yet Scheduled
Remuda South 25 State 709H		10/08/2021	10/23/2021	Not Yet Scheduled	Not Yet Scheduled	Not Yet Scheduled

**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: 06/04/2021
Phone: 432.218.3671
<b>OIL CONSERVATION DIVISION</b> <b>(Only applicable when submitted as a standalone form)</b>
Approved By:
Title:
Approval Date:
Conditions of Approval:

**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.