

**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 296983

**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 30-015-48542
4. Property Code 317788	5. Property Name REMUDA SOUTH 25 STATE	6. Well No. 706H

**7. Surface Location**

UL - Lot H	Section 25	Township 23S	Range 29E	Lot Idn H	Feet From 2385	N/S Line N	Feet From 720	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 1230	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 17070	18. Formation Bone Spring	19. Contractor	20. Spud Date 8/9/2021
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	17070	860	7150

**Casing/Cement Program: Additional Comments**

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

Type Double Ram	Working Pressure 3000	Test Pressure 3000	Manufacturer Cameron
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23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. <b>I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> if applicable.</b>	<b>OIL CONSERVATION DIVISION</b>
Signature:	
Printed Name: Electronically filed by Tiffany Yancey	Approved By: Kurt Simmons
Title: Production Analyst	Title: Petroleum Specialist - A
Email Address: tiffany.yancey@exxonmobil.com	Approved Date: 6/21/2021
Date: 6/15/2021	Phone: 432-215-8939
Conditions of Approval Attached	
Expiration Date: 6/21/2023	

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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 706H
<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	720	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	1,230	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.

<b>SHL (NAD83 NME)</b> Y = 464,594.3 X = 665,398.4 LAT. = 32.276606 °N LONG. = 103.931913 °W	<b>LTP (NAD83 NME)</b> Y = 456,680.2 X = 664,923.4 LAT. = 32.254857 °N LONG. = 103.933545 °W
<b>FTP (NAD83 NME)</b> Y = 463,993.7 X = 664,890.7 LAT. = 32.274960 °N LONG. = 103.933563 °W	<b>BHL (NAD83 NME)</b> Y = 456,550.2 X = 664,924.0 LAT. = 32.254499 °N LONG. = 103.933545 °W
<b>CORNER COORDINATES (NAD83 NME)</b>	
A - Y = 464,317.7 N , X = 666,119.3 E	X = 666,119.3 E
B - Y = 461,669.9 N , X = 666,130.8 E	X = 666,130.8 E
C - Y = 459,009.7 N , X = 666,144.1 E	X = 666,144.1 E
D - Y = 456,352.9 N , X = 666,154.8 E	X = 666,154.8 E
E - Y = 464,318.4 N , X = 664,794.2 E	X = 664,794.2 E
F - Y = 461,668.6 N , X = 664,802.5 E	X = 664,802.5 E
G - Y = 459,007.8 N , X = 664,815.8 E	X = 664,815.8 E
H - Y = 456,350.0 N , X = 664,827.9 E	X = 664,827.9 E
<b>SHL (NAD27 NME)</b> Y = 464,534.4 X = 624,215.6 LAT. = 32.276482 °N LONG. = 103.931422 °W	<b>LTP (NAD27 NME)</b> Y = 456,620.5 X = 623,740.4 LAT. = 32.254733 °N LONG. = 103.933055 °W
<b>FTP (NAD27 NME)</b> Y = 463,933.8 X = 623,707.8 LAT. = 32.274836 °N LONG. = 103.933072 °W	<b>BHL (NAD27 NME)</b> Y = 456,490.5 X = 623,740.9 LAT. = 32.254375 °N LONG. = 103.933055 °W
<b>CORNER COORDINATES (NAD27 NME)</b>	
A - Y = 464,257.8 N , X = 624,936.5 E	X = 624,936.5 E
B - Y = 461,610.1 N , X = 624,947.9 E	X = 624,947.9 E
C - Y = 458,949.9 N , X = 624,961.1 E	X = 624,961.1 E
D - Y = 456,293.2 N , X = 624,971.7 E	X = 624,971.7 E
E - Y = 464,258.5 N , X = 623,611.4 E	X = 623,611.4 E
F - Y = 461,608.8 N , X = 623,619.6 E	X = 623,619.6 E
G - Y = 458,948.0 N , X = 623,632.8 E	X = 623,632.8 E
H - Y = 456,290.3 N , X = 623,644.8 E	X = 623,644.8 E

**<sup>17</sup> 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* 06/05/2021  
Signature Date

Cassie Evans  
Printed Name

cassie.evans@exxonmobil.com  
E-mail Address

**<sup>18</sup> 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.

05-20-2021  
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP 23786  
Certificate Number LM 2020040782

Intent  As Drilled

API #
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Operator Name:	Property Name:	Well Number
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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 #
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Operator Name:	Property Name:	Well Number
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Form APD Comments

Permit 296983

**PERMIT COMMENTS**

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-48542
	Well: REMUDA SOUTH 25 STATE #706H

Created By	Comment	Comment Date
cevans	The well will include a tapered string. See attached drilling program for additional casing/cmt information associated with the well.	6/7/2021
kpickford	This APD has been rejected due to being an incomplete submission. The submission is missing the attachments required for 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
ahvermersch	Fee Cancellation - System timed out; Operator needs to resubmit	6/15/2021

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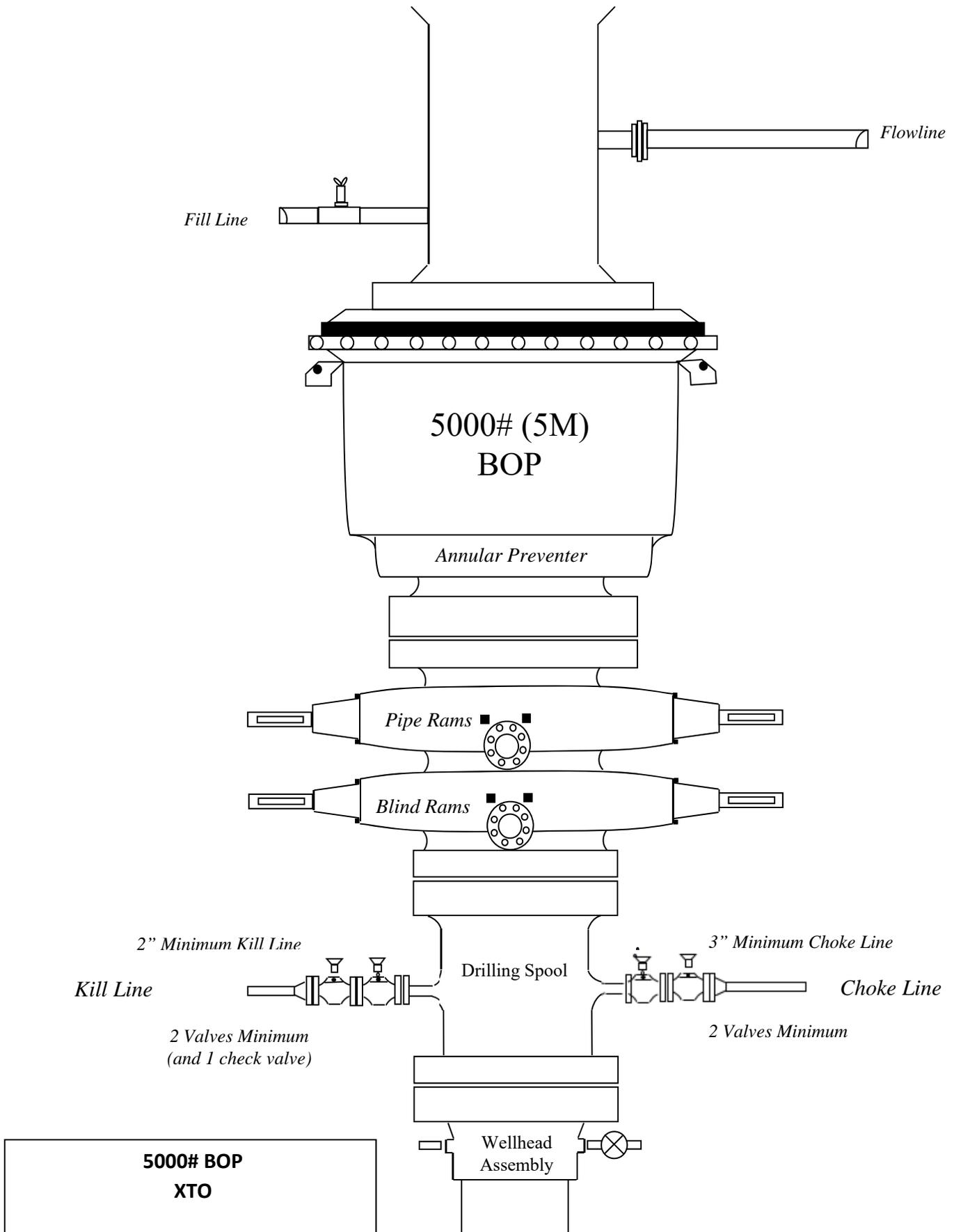
Form APD Conditions

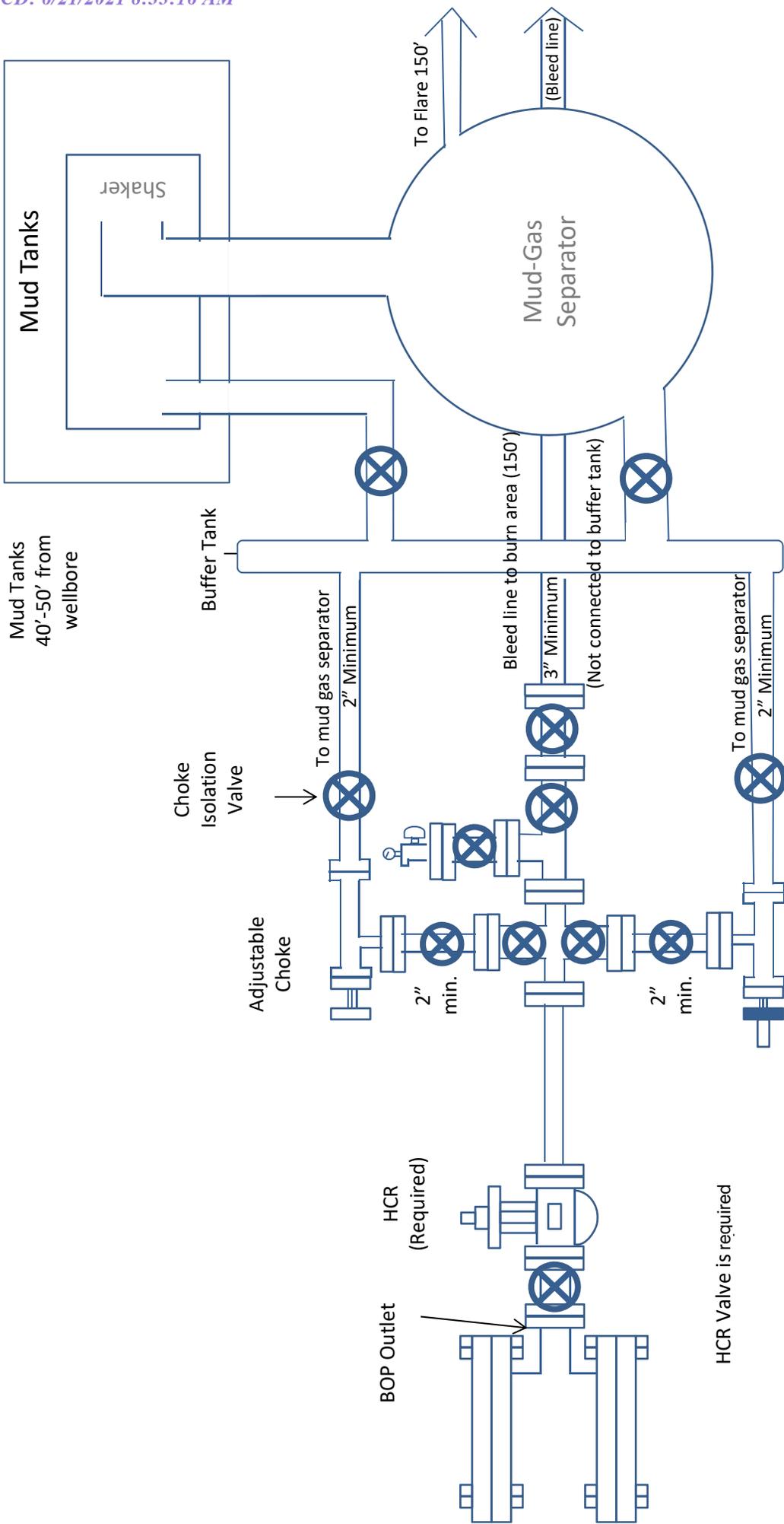
Permit 296983

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-48542
	Well: REMUDA SOUTH 25 STATE #706H

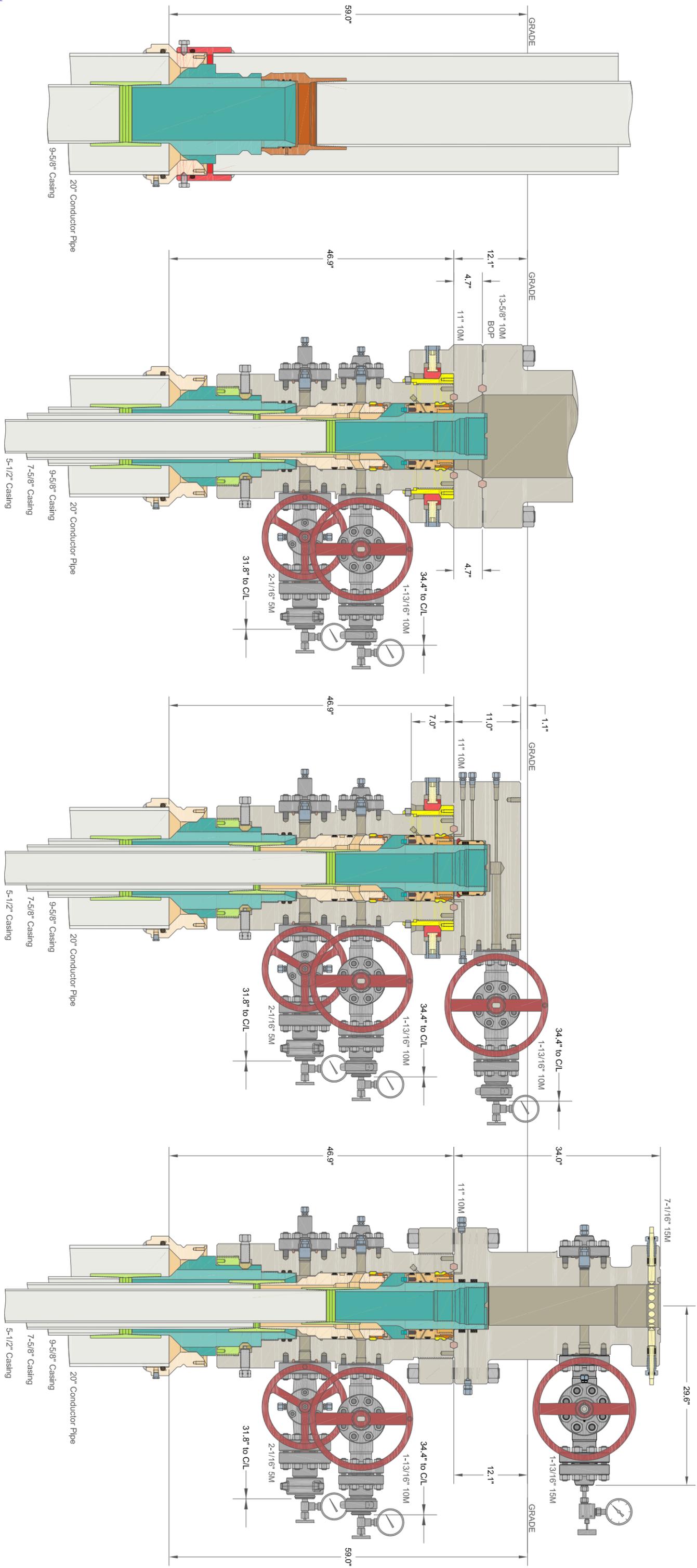
OCD Reviewer	Condition
ksimmons	Notify OCD 24 hours prior to casing & cement
ksimmons	Will require a File As Drilled C-102 and a Directional Survey with the C-104
ksimmons	The Operator is to notify NMOCD by sundry (Form C-103) within ten (10) days of the well being spud
kpickford	Once the well is spud,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





5M Choke Manifold Diagram  
XTO

**Drilling Operations  
Choke Manifold  
5M Service**



# CACTUS WELLHEAD LLC

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead  
 With 1 1/4" 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

ALL DIMENSIONS APPROXIMATE

XTO ENERGY INC  
 ICARUS PAD

DRAWN	DLE	18JAN21
APPRV		
DRAWING NO.	HBE0000479	

ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.



## 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:**

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

**HOSPITALS:**

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

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

XTO Energy Inc.  
Remuda South 25 State 706H  
Projected TD: 17070' MD / 9186' TVD  
SHL: 2385' FNL & 720' FEL , Section 25, T23S, R29E  
BHL: 200' FSL & 1230' 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	9196'	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 top of 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 7650' and cemented to 200' inside the previous casing string. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 17070 MD/TD and 5.5 x 5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 7150 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	1.92	2.62	4.89
8.75	0' – 3319'	7.625	29.7	RY P-110	Flush Joint	New	3.43	3.30	2.46
8.75	3319' – 7650'	7.625	29.7	HC L-80	Flush Joint	New	2.49	2.77	3.16
6.75	0' – 7550'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.83	2.65
6.75	7550' - 9000'	5.5	23	RY P-110	Semi-Flush	New	1.21	3.11	6.67
6.75	9000' - 17070'	5	18	RY P-110	Semi-Premium	New	1.16	2.82	10.08

- 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 +/- 7650'**

###### 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 +/- 17070'**

Lead: 60 sxs Class C (mixed at 11.5 ppg, 2.69 ft<sup>3</sup>/sx, 15.00 gal/sx water) Top of Cement: 7150 feet  
 Tail: 800 sxs Class C (mixed at 13.2 ppg, 1.51 ft<sup>3</sup>/sx, 8.38 gal/sx water) Top of Cement: 8672 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 2759 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 7650'	8.75	FW / Cut Brine	9.4-9.9	30-32	NC
7650' to 17070'	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 160 to 180 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 4782 psi.

## 10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after DI 1A drilling is completed and BLM approval. Move in operations and drilling is expected to take 40 days.

**Well Plan Report - Remuda 706H**

Measured Depth: 17069.97 ft

TVD RKB: 9186.00 ft

**Location**

Cartographic Reference System: New Mexico East - NAD 27

Northing: 464534.40 ft

Easting: 624215.60 ft

RKB: 3126.00 ft

Ground Level: 3096.00 ft

North Reference: Grid

Convergence Angle: 0.21 Deg

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

Slot: Remuda 706H

Plan Sections									
Remuda 706H									
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	
3700	0	0	3700	0	0	0	0	0	
4298.26	11.97	273.04	4293.92	3.3	-62.15	2	0	2	
6150.67	11.97	273.04	6106.08	23.7	-445.65	0	0	0	
6748.92	0	0	6700	27	-507.8	-2	0	2	
8671.92	0	0	8623	27	-507.8	0	0	0	KOP 2
9571.92	90	180	9195.96	-545.96	-507.8	10	0	10	FTP 2
17069.97	90.15	179.49	9186	-8043.9	-474.7	0	-0.01	0.01	BHL 2

Position Uncertainty													
Remuda 706H													
Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Lateral Bias (ft)	Lateral Error (ft)	Vertical Bias (ft)	Vertical Error (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	0.556	0.358	135	MWD+IFR1+MS
200	0	0	200	0.983	0	0.983	0	2.307	0	1.191	0.717	135	MWD+IFR1+MS
300	0	0	300	1.403	0	1.403	0	2.321	0	1.668	1.075	135	MWD+IFR1+MS
400	0	0	400	1.797	0	1.797	0	2.34	0	2.099	1.434	135	MWD+IFR1+MS
500	0	0	500	2.179	0	2.179	0	2.364	0	2.507	1.792	135	MWD+IFR1+MS
600	0	0	600	2.554	0	2.554	0	2.394	0	2.902	2.151	135	MWD+IFR1+MS
700	0	0	700	2.925	0	2.925	0	2.428	0	3.289	2.509	135	MWD+IFR1+MS
800	0	0	800	3.293	0	3.293	0	2.467	0	3.669	2.868	135	MWD+IFR1+MS
900	0	0	900	3.659	0	3.659	0	2.511	0	4.046	3.226	135	MWD+IFR1+MS
1000	0	0	1000	4.024	0	4.024	0	2.56	0	4.42	3.585	135	MWD+IFR1+MS
1100	0	0	1100	4.388	0	4.388	0	2.613	0	4.791	3.943	135	MWD+IFR1+MS
1200	0	0	1200	4.751	0	4.751	0	2.67	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	2	273.044	3799.98	14.057	0	14.149	0	5.313	0	0	14.544	13.655	-44.675	MWD+IFR1+MS
3900	4	273.044	3899.838	14.553	0	14.489	0	5.452	0	0	14.915	14.146	-38.481	MWD+IFR1+MS
4000	6	273.044	3999.452	15.025	0	14.83	0	5.595	0	0	15.305	14.607	-31.052	MWD+IFR1+MS
4100	8	273.044	4098.702	15.472	0	15.17	0	5.742	0	0	15.716	15.035	-23.194	MWD+IFR1+MS
4200	10	273.044	4197.465	15.895	0	15.51	0	5.894	0	0	16.145	15.433	-16.001	MWD+IFR1+MS
4298.258	11.965	273.044	4293.919	16.284	0	15.843	0	6.05	0	0	16.572	15.801	-10.388	MWD+IFR1+MS
4300	11.965	273.044	4295.623	16.289	0	15.849	0	6.05	0	0	16.579	15.807	-10.37	MWD+IFR1+MS
4400	11.965	273.044	4393.451	16.609	0	16.181	0	6.201	0	0	16.892	16.14	-10.287	MWD+IFR1+MS
4500	11.965	273.044	4491.278	16.941	0	16.523	0	6.356	0	0	17.212	16.488	-9.661	MWD+IFR1+MS
4600	11.965	273.044	4589.105	17.274	0	16.867	0	6.515	0	0	17.534	16.836	-9.014	MWD+IFR1+MS
4700	11.965	273.044	4686.933	17.61	0	17.212	0	6.676	0	0	17.859	17.185	-8.348	MWD+IFR1+MS
4800	11.965	273.044	4784.76	17.948	0	17.559	0	6.841	0	0	18.187	17.536	-7.662	MWD+IFR1+MS
4900	11.965	273.044	4882.588	18.287	0	17.907	0	7.009	0	0	18.516	17.887	-6.958	MWD+IFR1+MS
5000	11.965	273.044	4980.415	18.629	0	18.256	0	7.18	0	0	18.848	18.239	-6.234	MWD+IFR1+MS
5100	11.965	273.044	5078.242	18.972	0	18.606	0	7.353	0	0	19.182	18.592	-5.493	MWD+IFR1+MS
5200	11.965	273.044	5176.07	19.317	0	18.957	0	7.53	0	0	19.518	18.946	-4.734	MWD+IFR1+MS
5300	11.965	273.044	5273.897	19.664	0	19.309	0	7.71	0	0	19.856	19.301	-3.96	MWD+IFR1+MS
5400	11.965	273.044	5371.724	20.012	0	19.662	0	7.892	0	0	20.195	19.656	-3.17	MWD+IFR1+MS
5500	11.965	273.044	5469.552	20.362	0	20.016	0	8.078	0	0	20.536	20.012	-2.367	MWD+IFR1+MS
5600	11.965	273.044	5567.379	20.713	0	20.371	0	8.266	0	0	20.879	20.368	-1.551	MWD+IFR1+MS
5700	11.965	273.044	5665.207	21.065	0	20.727	0	8.457	0	0	21.223	20.725	-0.726	MWD+IFR1+MS
5800	11.965	273.044	5763.034	21.418	0	21.083	0	8.651	0	0	21.569	21.082	0.108	MWD+IFR1+MS
5900	11.965	273.044	5860.861	21.773	0	21.441	0	8.848	0	0	21.916	21.44	0.949	MWD+IFR1+MS
6000	11.965	273.044	5958.689	22.129	0	21.799	0	9.047	0	0	22.265	21.798	1.794	MWD+IFR1+MS

6100	11.965	273.044	6056.516	22.485	0	22.157	0	9.25	0	0	22.614	22.157	2.641	MWD+IFR1+ MS
6150.665	11.965	273.044	6106.081	22.664	0	22.336	0	9.353	0	0	22.789	22.336	2.712	MWD+IFR1+ MS
6200	10.978	273.044	6154.429	22.881	0	22.51	0	9.455	0	0	22.961	22.51	2.79	MWD+IFR1+ MS
6300	8.978	273.044	6252.911	23.361	0	22.865	0	9.668	0	0	23.368	22.865	4.603	MWD+IFR1+ MS
6400	6.978	273.044	6351.938	23.864	0	23.224	0	9.883	0	0	23.825	23.221	7.041	MWD+IFR1+ MS
6500	4.978	273.044	6451.389	24.336	0	23.58	0	10.096	0	0	24.281	23.573	8.728	MWD+IFR1+ MS
6600	2.978	273.044	6551.143	24.777	0	23.935	0	10.307	0	0	24.732	23.923	9.959	MWD+IFR1+ MS
6700	0.978	273.044	6651.079	25.186	0	24.287	0	10.519	0	0	25.178	24.27	10.899	MWD+IFR1+ MS
6748.924	0	0	6700	24.475	0	25.312	0	10.622	0	0	25.345	24.441	11.154	MWD+IFR1+ MS
6800	0	0	6751.076	24.653	0	25.482	0	10.73	0	0	25.514	24.62	11.118	MWD+IFR1+ MS
6900	0	0	6851.076	25.001	0	25.817	0	10.943	0	0	25.848	24.97	10.88	MWD+IFR1+ MS
7000	0	0	6951.076	25.353	0	26.156	0	11.16	0	0	26.184	25.324	10.452	MWD+IFR1+ MS
7100	0	0	7051.076	25.704	0	26.495	0	11.379	0	0	26.52	25.678	10.018	MWD+IFR1+ MS
7200	0	0	7151.076	26.056	0	26.835	0	11.602	0	0	26.858	26.032	9.577	MWD+IFR1+ MS
7300	0	0	7251.076	26.407	0	27.175	0	11.827	0	0	27.195	26.387	9.13	MWD+IFR1+ MS
7400	0	0	7351.076	26.759	0	27.516	0	12.055	0	0	27.534	26.741	8.676	MWD+IFR1+ MS
7500	0	0	7451.076	27.112	0	27.857	0	12.286	0	0	27.873	27.095	8.216	MWD+IFR1+ MS
7600	0	0	7551.076	27.464	0	28.199	0	12.52	0	0	28.213	27.45	7.751	MWD+IFR1+ MS
7700	0	0	7651.076	27.816	0	28.541	0	12.757	0	0	28.553	27.804	7.279	MWD+IFR1+ MS
7800	0	0	7751.076	28.169	0	28.884	0	12.997	0	0	28.894	28.159	6.801	MWD+IFR1+ MS
7900	0	0	7851.076	28.522	0	29.227	0	13.24	0	0	29.235	28.513	6.318	MWD+IFR1+ MS
8000	0	0	7951.076	28.875	0	29.57	0	13.486	0	0	29.577	28.867	5.83	MWD+IFR1+ MS
8100	0	0	8051.076	29.228	0	29.913	0	13.735	0	0	29.919	29.222	5.336	MWD+IFR1+ MS
8200	0	0	8151.076	29.581	0	30.257	0	13.986	0	0	30.262	29.576	4.837	MWD+IFR1+ MS
8300	0	0	8251.076	29.934	0	30.602	0	14.241	0	0	30.606	29.93	4.333	MWD+IFR1+ MS
8400	0	0	8351.076	30.288	0	30.946	0	14.499	0	0	30.949	30.285	3.825	MWD+IFR1+ MS
8500	0	0	8451.076	30.641	0	31.291	0	14.759	0	0	31.293	30.639	3.312	MWD+IFR1+ MS
8600	0	0	8551.076	30.995	0	31.636	0	15.023	0	0	31.638	30.993	2.795	MWD+IFR1+ MS
8671.924	0	0	8623	31.247	0	31.883	0	15.214	0	0	31.884	31.246	2.594	MWD+IFR1+ MS
8700	2.808	180	8651.065	31.304	0	31.975	0	15.289	0	0	31.976	31.343	2.61	MWD+IFR1+ MS
8800	12.808	180	8750.012	31.899	0	32.29	0	15.612	0	0	32.499	32.288	95.001	MWD+IFR1+ MS
8900	22.808	180	8845.1	32.991	0	32.599	0	16.25	0	0	34.613	32.591	93.475	MWD+IFR1+ MS
9000	32.808	180	8933.44	33.366	0	32.891	0	17.337	0	0	36.35	32.877	93.554	MWD+IFR1+ MS
9100	42.808	180	9012.347	33.139	0	33.16	0	18.916	0	0	37.691	33.139	93.711	MWD+IFR1+ MS
9200	52.808	180	9079.424	32.467	0	33.401	0	20.927	0	0	38.645	33.375	93.899	MWD+IFR1+ MS
9300	62.808	180	9132.633	31.56	0	33.61	0	23.246	0	0	39.248	33.579	94.087	MWD+IFR1+ MS
9400	72.808	180	9170.357	30.669	0	33.783	0	25.728	0	0	39.561	33.749	94.238	MWD+IFR1+ MS
9500	82.808	180	9191.449	30.074	0	33.919	0	28.231	0	0	39.672	33.883	94.29	MWD+IFR1+ MS
9571.924	90	180	9195.958	29.209	0	33.988	0	29.209	0	0	39.684	33.955	94.199	MWD+IFR1+ MS
9600	90	180	9195.958	29.267	0	34.011	0	29.267	0	0	39.685	33.979	94.145	MWD+IFR1+ MS
9700	90.003	179.991	9195.955	29.4	0	34.104	0	29.401	0	0	39.689	34.075	93.957	MWD+IFR1+ MS
9800	90.005	179.985	9195.949	29.557	0	34.212	0	29.558	0	0	39.693	34.186	93.773	MWD+IFR1+ MS
9900	90.007	179.978	9195.939	29.734	0	34.333	0	29.736	0	0	39.699	34.31	93.589	MWD+IFR1+ MS
10000	90.009	179.971	9195.925	29.931	0	34.467	0	29.933	0	0	39.705	34.446	93.406	MWD+IFR1+ MS
10100	90.011	179.964	9195.908	30.147	0	34.613	0	30.149	0	0	39.713	34.595	93.221	MWD+IFR1+ MS
10200	90.013	179.958	9195.888	30.381	0	34.771	0	30.384	0	0	39.721	34.755	93.033	MWD+IFR1+ MS
10300	90.015	179.951	9195.864	30.634	0	34.941	0	30.637	0	0	39.73	34.928	92.842	MWD+IFR1+ MS
10400	90.017	179.944	9195.836	30.905	0	35.123	0	30.908	0	0	39.74	35.112	92.644	MWD+IFR1+ MS
10500	90.019	179.937	9195.805	31.193	0	35.316	0	31.197	0	0	39.752	35.307	92.438	MWD+IFR1+ MS

10600	90.021	179.931	9195.771	31.498	0	35.521	0	31.502	0	0	39.764	35.514	92.222	MWD+IFR1+ MS
10700	90.023	179.924	9195.732	31.819	0	35.738	0	31.824	0	0	39.777	35.732	91.992	MWD+IFR1+ MS
10800	90.025	179.917	9195.691	32.157	0	35.965	0	32.162	0	0	39.791	35.961	91.745	MWD+IFR1+ MS
10900	90.027	179.91	9195.645	32.509	0	36.203	0	32.515	0	0	39.805	36.2	91.475	MWD+IFR1+ MS
11000	90.029	179.904	9195.597	32.877	0	36.452	0	32.883	0	0	39.821	36.45	91.175	MWD+IFR1+ MS
11100	90.031	179.897	9195.544	33.259	0	36.711	0	33.265	0	0	39.838	36.711	90.837	MWD+IFR1+ MS
11200	90.033	179.89	9195.488	33.656	0	36.981	0	33.662	0	0	39.856	36.981	90.447	MWD+IFR1+ MS
11300	90.035	179.883	9195.429	34.065	0	37.261	0	34.072	0	0	39.875	37.261	89.987	MWD+IFR1+ MS
11400	90.037	179.877	9195.366	34.488	0	37.55	0	34.495	0	0	39.895	37.55	89.428	MWD+IFR1+ MS
11500	90.039	179.87	9195.299	34.923	0	37.849	0	34.93	0	0	39.917	37.848	88.726	MWD+IFR1+ MS
11600	90.041	179.863	9195.229	35.37	0	38.157	0	35.378	0	0	39.94	38.155	87.804	MWD+IFR1+ MS
11700	90.043	179.856	9195.156	35.829	0	38.474	0	35.837	0	0	39.965	38.469	86.529	MWD+IFR1+ MS
11800	90.045	179.85	9195.079	36.299	0	38.8	0	36.307	0	0	39.993	38.79	84.617	MWD+IFR1+ MS
11900	90.047	179.843	9194.998	36.78	0	39.135	0	36.788	0	0	40.026	39.116	81.447	MWD+IFR1+ MS
12000	90.049	179.836	9194.914	37.271	0	39.479	0	37.279	0	0	40.072	39.438	75.31	MWD+IFR1+ MS
12100	90.051	179.829	9194.826	37.772	0	39.83	0	37.781	0	0	40.153	39.734	61.293	MWD+IFR1+ MS
12200	90.053	179.823	9194.734	38.283	0	40.19	0	38.291	0	0	40.341	39.932	37.349	MWD+IFR1+ MS
12300	90.055	179.816	9194.64	38.802	0	40.557	0	38.811	0	0	40.646	40.021	22.084	MWD+IFR1+ MS
12400	90.057	179.809	9194.541	39.331	0	40.932	0	39.34	0	0	40.998	40.071	15.448	MWD+IFR1+ MS
12500	90.059	179.802	9194.439	39.868	0	41.314	0	39.877	0	0	41.37	40.11	12.089	MWD+IFR1+ MS
12600	90.061	179.796	9194.334	40.413	0	41.703	0	40.422	0	0	41.754	40.145	10.1	MWD+IFR1+ MS
12700	90.063	179.789	9194.225	40.966	0	42.099	0	40.975	0	0	42.147	40.178	8.788	MWD+IFR1+ MS
12800	90.066	179.782	9194.112	41.526	0	42.503	0	41.535	0	0	42.547	40.211	7.856	MWD+IFR1+ MS
12900	90.068	179.775	9193.996	42.094	0	42.912	0	42.103	0	0	42.956	40.244	7.157	MWD+IFR1+ MS
13000	90.07	179.769	9193.876	42.668	0	43.328	0	42.678	0	0	43.371	40.278	6.611	MWD+IFR1+ MS
13100	90.072	179.762	9193.753	43.249	0	43.751	0	43.259	0	0	43.792	40.311	6.171	MWD+IFR1+ MS
13200	90.074	179.755	9193.626	43.836	0	44.179	0	43.846	0	0	44.22	40.346	5.806	MWD+IFR1+ MS
13300	90.076	179.748	9193.496	44.43	0	44.613	0	44.44	0	0	44.654	40.381	5.499	MWD+IFR1+ MS
13400	90.078	179.742	9193.362	45.029	0	45.053	0	45.039	0	0	45.094	40.416	5.235	MWD+IFR1+ MS
13500	90.08	179.735	9193.225	45.634	0	45.499	0	45.644	0	0	45.539	40.452	5.006	MWD+IFR1+ MS
13600	90.082	179.728	9193.084	46.244	0	45.949	0	46.254	0	0	45.99	40.489	4.803	MWD+IFR1+ MS
13700	90.084	179.721	9192.939	46.86	0	46.405	0	46.87	0	0	46.446	40.527	4.622	MWD+IFR1+ MS
13800	90.086	179.715	9192.791	47.48	0	46.866	0	47.491	0	0	46.907	40.565	4.46	MWD+IFR1+ MS
13900	90.088	179.708	9192.64	48.105	0	47.332	0	48.116	0	0	47.373	40.604	4.313	MWD+IFR1+ MS
14000	90.09	179.701	9192.485	48.735	0	47.803	0	48.746	0	0	47.844	40.644	4.179	MWD+IFR1+ MS
14100	90.092	179.695	9192.326	49.37	0	48.278	0	49.38	0	0	48.319	40.684	4.056	MWD+IFR1+ MS
14200	90.094	179.688	9192.164	50.008	0	48.758	0	50.019	0	0	48.799	40.725	3.942	MWD+IFR1+ MS
14300	90.096	179.681	9191.998	50.651	0	49.242	0	50.662	0	0	49.283	40.767	3.836	MWD+IFR1+ MS
14400	90.098	179.674	9191.829	51.298	0	49.731	0	51.308	0	0	49.772	40.81	3.738	MWD+IFR1+ MS
14500	90.1	179.668	9191.656	51.948	0	50.223	0	51.959	0	0	50.265	40.853	3.646	MWD+IFR1+ MS
14600	90.102	179.661	9191.48	52.602	0	50.72	0	52.613	0	0	50.761	40.898	3.559	MWD+IFR1+ MS
14700	90.104	179.654	9191.3	53.26	0	51.22	0	53.271	0	0	51.262	40.942	3.478	MWD+IFR1+ MS
14800	90.106	179.647	9191.117	53.921	0	51.725	0	53.932	0	0	51.766	40.988	3.401	MWD+IFR1+ MS
14900	90.108	179.641	9190.93	54.585	0	52.232	0	54.596	0	0	52.274	41.034	3.328	MWD+IFR1+ MS
15000	90.11	179.634	9190.739	55.253	0	52.744	0	55.264	0	0	52.785	41.081	3.258	MWD+IFR1+ MS
15100	90.112	179.627	9190.545	55.924	0	53.259	0	55.934	0	0	53.3	41.129	3.192	MWD+IFR1+ MS
15200	90.114	179.62	9190.347	56.597	0	53.777	0	56.608	0	0	53.819	41.178	3.129	MWD+IFR1+ MS
15300	90.116	179.614	9190.146	57.273	0	54.298	0	57.284	0	0	54.34	41.227	3.069	MWD+IFR1+ MS
15400	90.118	179.607	9189.942	57.952	0	54.823	0	57.963	0	0	54.865	41.277	3.012	MWD+IFR1+ MS

15500	90.12	179.6	9189.733	58.634	0	55.35	0	58.645	0	0	55.393	41.327	2.956	MWD+IFR1+ MS
15600	90.122	179.593	9189.522	59.318	0	55.881	0	59.329	0	0	55.923	41.379	2.903	MWD+IFR1+ MS
15700	90.124	179.587	9189.306	60.005	0	56.415	0	60.016	0	0	56.457	41.431	2.852	MWD+IFR1+ MS
15800	90.126	179.58	9189.087	60.694	0	56.951	0	60.705	0	0	56.993	41.483	2.803	MWD+IFR1+ MS
15900	90.128	179.573	9188.865	61.386	0	57.49	0	61.397	0	0	57.532	41.537	2.755	MWD+IFR1+ MS
16000	90.13	179.566	9188.639	62.079	0	58.032	0	62.09	0	0	58.074	41.591	2.709	MWD+IFR1+ MS
16100	90.132	179.56	9188.41	62.775	0	58.576	0	62.786	0	0	58.619	41.646	2.665	MWD+IFR1+ MS
16200	90.135	179.553	9188.177	63.473	0	59.123	0	63.484	0	0	59.166	41.701	2.622	MWD+IFR1+ MS
16300	90.137	179.546	9187.94	64.173	0	59.672	0	64.184	0	0	59.715	41.758	2.58	MWD+IFR1+ MS
16400	90.139	179.539	9187.7	64.874	0	60.224	0	64.885	0	0	60.267	41.814	2.54	MWD+IFR1+ MS
16500	90.141	179.533	9187.456	65.578	0	60.778	0	65.589	0	0	60.821	41.872	2.501	MWD+IFR1+ MS
16600	90.143	179.526	9187.209	66.284	0	61.334	0	66.295	0	0	61.377	41.93	2.463	MWD+IFR1+ MS
16700	90.145	179.519	9186.958	66.991	0	61.892	0	67.002	0	0	61.935	41.989	2.426	MWD+IFR1+ MS
16800	90.147	179.512	9186.704	67.7	0	62.453	0	67.711	0	0	62.496	42.049	2.39	MWD+IFR1+ MS
16900	90.149	179.506	9186.446	68.41	0	63.016	0	68.421	0	0	63.059	42.109	2.355	MWD+IFR1+ MS
17000	90.151	179.499	9186.185	69.123	0	63.58	0	69.134	0	0	63.623	42.17	2.321	MWD+IFR1+ MS
17069.972	90.152	179.494	9186	69.621	0	63.975	0	69.632	0	0	64.019	42.213	2.297	MWD+IFR1+ MS

Plan Targets Remuda 706H				
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL Target Shape (ft)
KOP 2	8726.52	464506.8	623707.8	5497 CIRCLE
FTP 2	9626.57	463933.8	623707.8	6070 CIRCLE
BHL 2	17069.97	456490.5	623740.9	6060 CIRCLE

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:** 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 (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.