

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 296986

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 30-015-48540
4. Property Code 317788	5. Property Name REMUDA SOUTH 25 STATE	6. Well No. 709H

7. Surface Location

UL - Lot H	Section 25	Township 23S	Range 29E	Lot Idn H	Feet From 2385	N/S Line N	Feet From 630	E/W Line E	County Eddy
---------------	---------------	-----------------	--------------	--------------	-------------------	---------------	------------------	---------------	----------------

8. Proposed Bottom Hole Location

UL - Lot M	Section 31	Township 23S	Range 30E	Lot Idn 4	Feet From 200	N/S Line S	Feet From 990	E/W Line W	County Eddy
---------------	---------------	-----------------	--------------	--------------	------------------	---------------	------------------	---------------	----------------

9. Pool Information

FORTY NINER RIDGE BONE SPRING, WEST	96526
-------------------------------------	-------

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 16838	18. Formation Bone Spring	19. Contractor	20. Spud Date 10/8/2021
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	640	0
Prod	6.75	5	18	16838	820	7250

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.

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.	OIL CONSERVATION DIVISION	
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: 6/7/2021	Phone: 432-215-8939	Conditions of Approval Attached

District I

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

District II

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

District III

1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102

Revised August 1, 2011

Submit one copy to appropriate

District Office

☐ AMENDED REPORT**WELL LOCATION AND ACREAGE DEDICATION PLAT**

¹ API Number 30-015-	² Pool Code 96526	³ Pool Name Forty-Niner Ridge; Bone Spring, West
⁴ Property Code	⁵ Property Name REMUDA SOUTH 25 STATE	⁶ Well Number 709H
⁷ OGRID No. 005380	⁸ Operator Name XTO ENERGY, INC.	⁹ Elevation 3,096'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	25	23 S	29 E		2,385	NORTH	630	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	31	23 S	30 E		200	SOUTH	990	WEST	EDDY

¹² Dedicated Acres 240	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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.

<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> SEC. 25 T23S R29E </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> SEC. 30 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> SEC. 36 </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> SEC. 31 T23S R30E </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> SEC. 1 T24S R29E </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> SEC. 6 T24S R30E </div> <div style="border: 1px solid black; padding: 5px;"> LOT ACREAGE TABLE SEC. 30 LOT 3 - 40.39 ACRES LOT 4 - 40.49 ACRES SEC. 31 LOT 1 - 40.58 ACRES LOT 2 - 40.65 ACRES LOT 3 - 40.71 ACRES LOT 4 - 40.78 ACRES </div>	<div style="margin-bottom: 10px;"> SHL (NAD83 NME) Y = 464,594.1 X = 665,488.3 LAT. = 32.276605 °N LONG. = 103.931622 °W FTP (NAD83 NME) Y = 463,998.5 X = 667,110.7 LAT. = 32.274951 °N LONG. = 103.926380 °W </div> <div style="margin-bottom: 10px;"> LTP (NAD83 NME) Y = 456,688.8 X = 667,143.4 LAT. = 32.254857 °N LONG. = 103.926364 °W BHL (NAD83 NME) Y = 456,558.8 X = 667,143.9 LAT. = 32.254500 °N LONG. = 103.926364 °W </div> <div style="margin-bottom: 10px;"> CORNER COORDINATES (NAD83 NME) A - Y = 464,317.7 N , X = 666,119.3 E B - Y = 461,669.9 N , X = 666,130.8 E C - Y = 459,009.7 N , X = 666,144.1 E D - Y = 456,352.9 N , X = 666,154.8 E E - Y = 464,323.5 N , X = 667,468.9 E F - Y = 461,674.8 N , X = 667,485.7 E G - Y = 459,016.5 N , X = 667,503.8 E H - Y = 456,361.0 N , X = 667,520.7 E </div> <div style="margin-bottom: 10px;"> SHL (NAD27 NME) Y = 464,534.1 X = 624,305.5 LAT. = 32.276481 °N LONG. = 103.931131 °W FTP (NAD27 NME) Y = 463,938.6 X = 625,927.8 LAT. = 32.274827 °N LONG. = 103.925889 °W </div> <div style="margin-bottom: 10px;"> LTP (NAD27 NME) Y = 456,629.1 X = 625,960.3 LAT. = 32.254733 °N LONG. = 103.925874 °W BHL (NAD27 NME) Y = 456,499.1 X = 625,960.8 LAT. = 32.254376 °N LONG. = 103.925874 °W </div> <div> CORNER COORDINATES (NAD27 NME) A - Y = 464,257.8 N , X = 624,936.5 E B - Y = 461,610.1 N , X = 624,947.9 E C - Y = 458,949.9 N , X = 624,961.1 E D - Y = 456,293.2 N , X = 624,971.7 E E - Y = 464,263.5 N , X = 626,286.1 E F - Y = 461,615.0 N , X = 626,302.8 E G - Y = 458,956.7 N , X = 626,320.8 E H - Y = 456,301.3 N , X = 626,337.5 E </div>	<div style="margin-bottom: 10px;"> ¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <div style="display: flex; justify-content: space-between;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">06/04/2021</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Signature</div> <div>Date</div> </div> <div style="border-bottom: 1px solid black; width: 100%; text-align: center;">Cassie Evans</div> <div style="border-bottom: 1px solid black; width: 100%; text-align: center;">Printed Name</div> <div style="border-bottom: 1px solid black; width: 100%; text-align: center;">cassie.evans@exxonmobil.com</div> <div style="border-bottom: 1px solid black; width: 100%; text-align: center;">E-mail Address</div> </div> <div> ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">05-20-2021</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">Date of Survey</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">Signature and Seal of Professional Surveyor:</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">Date of Survey</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">Signature and Seal of Professional Surveyor:</div> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">Date of Survey</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="border-bottom: 1px solid black; width: 60%;"></div> <div style="border-bottom: 1px solid black; width: 30%; text-align: center;">Signature and Seal of Professional Surveyor:</div> </div> </div>
--	--	--

MARK DILLON HARP 23786
Certificate Number

LM

2021030344

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

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

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

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

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

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

Form APD Comments

Permit 296986

PERMIT COMMENTS

Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707		API Number: 30-015-48540
		Well: REMUDA SOUTH 25 STATE #709H

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

District I

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

District II

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

District III

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

District IV

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

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

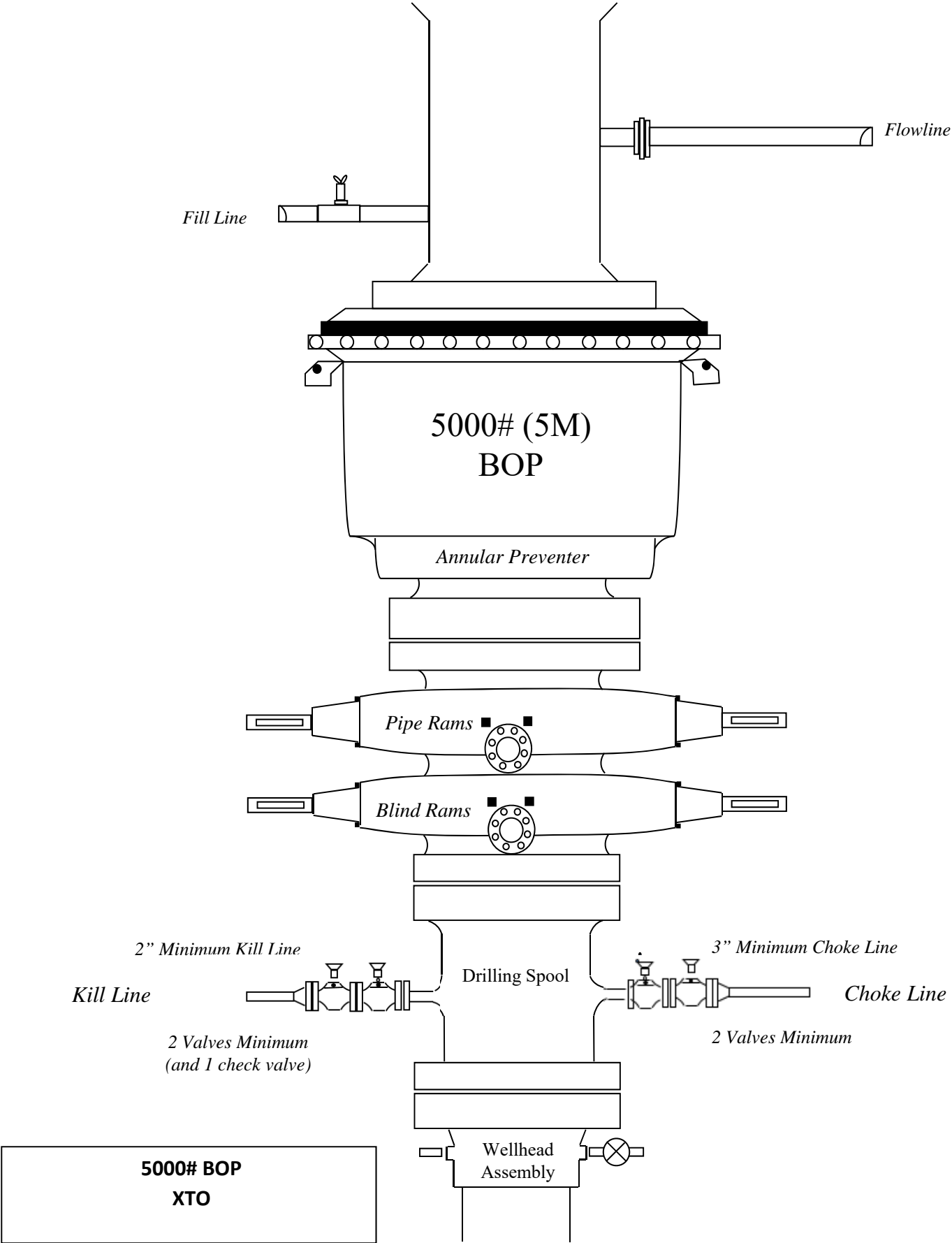
Form APD Conditions

Permit 296986

PERMIT CONDITIONS OF APPROVAL

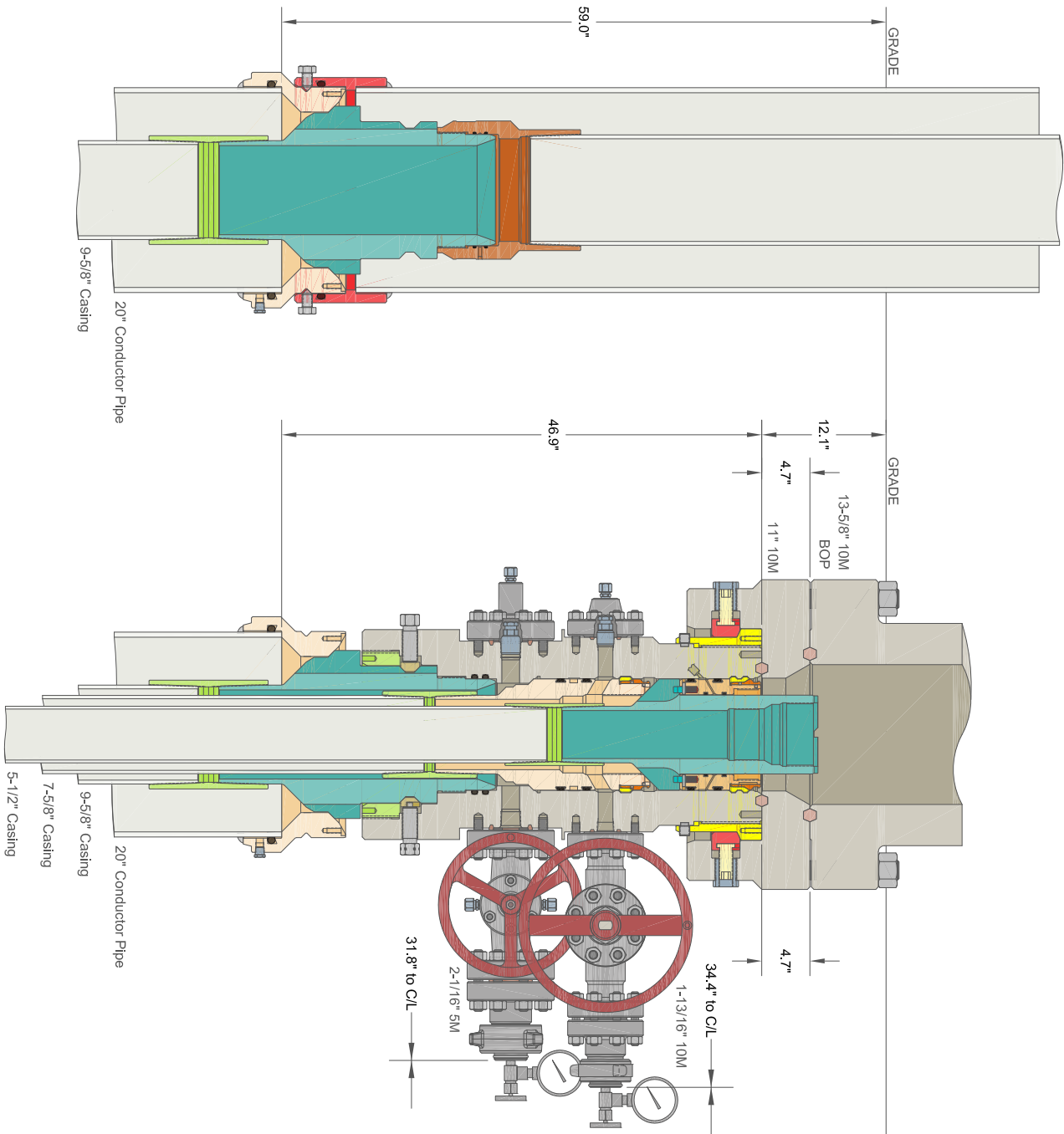
Operator Name and Address: XTO ENERGY, INC [5380] 6401 Holiday Hill Road Midland, TX 79707	API Number: 30-015-48540
	Well: REMUDA SOUTH 25 STATE #709H

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 Operations Choke Manifold 5M Service



<p>20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead</p> <p>With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head</p> <p>And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers</p>	DRAWN	DLE	18JAN21
	APPRV		
	DRAWING NO.	HBE0000479	

XTO ENERGY INC
ICARUS PAD

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



HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, 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 H₂S 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 H₂S, 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 (SO₂). 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 H₂S and SO₂

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

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

XTO Energy Inc.
Remuda South 25 State 709H
Projected TD: 16838' MD / 9026' TVD
SHL: 2385' FNL & 630' FEL , Section 25, T23S, R29E
BHL: 200' FSL & 990' FWL , Section 31, T23S, R30E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	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	8975'	Water/Oil/Gas
Target/Land Curve	9021'	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 7750' and cemented to 200' inside the previous casing string. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 16838 MD/TD and 5.5 x 5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 7250 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	1.90	2.62	4.89
8.75	0' – 3319'	7.625	29.7	RY P-110	Flush Joint	New	3.49	3.30	2.42
8.75	3319' – 7750'	7.625	29.7	HC L-80	Flush Joint	New	2.54	2.73	3.09
6.75	0' – 7650'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.79	2.67
6.75	7650' - 8950'	5.5	23	RY P-110	Semi-Flush	New	1.21	3.12	6.95
6.75	8950' - 16838'	5	18	RY P-110	Semi-Premium	New	1.16	2.87	10.13

- 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 ft³/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 ft³/sx, 10.13 gal/sx water)
 Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)
 Top of Cement: Surface
 Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 7750'

1st Stage

Optional Lead: 160 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)
 TOC: 2719
 Tail: 180 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/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 ft³/sx, 9.61 gal/sx water)
 Tail: 300 sxs Class C (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)
 Top of Cement: 0
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (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 +/- 16838'

Lead: 50 sxs Class C (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 7250 feet
 Tail: 770 sxs Class C (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 8726 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 2708 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 7750'	8.75	FW / Cut Brine	9.4-9.9	30-32	NC
7750' to 16838'	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 4694 psi.

10. Anticipated Starting Date and Duration of Operations

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

Well Plan Report - Remuda 709H

Measured
Depth: 16837.58 ft

TVD RKB: 9026.00 ft

Location

Cartographic Reference
System: New Mexico East -
NAD 27

Northing: 464534.10 ft

Easting: 624305.50 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 709H

Plan Sections									
Remuda 709H									
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	
3500	0	0	3500	0	0	0	0	0	
4395.89	17.92	98.77	4381.36	-21.19	137.32	2	0	2	
8726.07	17.92	98.77	8501.52	-224.35	1453.93	0	0	0	
9598.01	89.96	179.74	9021	-795.5	1622.3	8.26	9.29	10	FTP 5
16837.58	89.96	179.74	9026	-8035	1655.3	0	0	0	BHL 5

Position Uncertainty														
Remuda 709H														
Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Bias (ft)	Lateral Error (ft)	Bias (ft)	Vertical Error (ft)	Magnitude (ft)	Semi-major of Bias (ft)	Semi-minor Error (ft)	Semi-minor Error (ft)	Tool Azimuth (°)	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	2	98.772	3599.98	13.294	0	13.504	0	5.043	0	0	13.85	12.941	-42.7	MWD+IFR1+MS
3700	4	98.772	3699.838	13.799	0	13.84	0	5.177	0	0	14.206	13.449	-36.739	MWD+IFR1+MS
3800	6	98.772	3799.452	14.279	0	14.176	0	5.314	0	0	14.583	13.925	-28.993	MWD+IFR1+MS
3900	8	98.772	3898.702	14.735	0	14.511	0	5.456	0	0	14.983	14.364	-20.108	MWD+IFR1+MS
4000	10	98.772	3997.465	15.167	0	14.847	0	5.604	0	0	15.408	14.768	-11.593	MWD+IFR1+MS
4100	12	98.772	4095.623	15.576	0	15.182	0	5.759	0	0	15.848	15.144	-4.632	MWD+IFR1+MS
4200	14	98.772	4193.055	15.964	0	15.518	0	5.922	0	0	16.295	15.502	0.599	MWD+IFR1+MS
4300	16	98.772	4289.643	16.33	0	15.854	0	6.093	0	0	16.742	15.849	4.454	MWD+IFR1+MS
4395.892	17.918	98.772	4381.361	16.649	0	16.175	0	6.262	0	0	17.157	16.174	7.037	MWD+IFR1+MS
4400	17.918	98.772	4385.27	16.662	0	16.189	0	6.265	0	0	17.17	16.188	7.041	MWD+IFR1+MS
4500	17.918	98.772	4480.42	16.977	0	16.519	0	6.42	0	0	17.472	16.518	7.218	MWD+IFR1+MS
4600	17.918	98.772	4575.57	17.304	0	16.86	0	6.582	0	0	17.784	16.859	7.85	MWD+IFR1+MS
4700	17.918	98.772	4670.719	17.635	0	17.203	0	6.748	0	0	18.1	17.203	8.503	MWD+IFR1+MS
4800	17.918	98.772	4765.869	17.969	0	17.549	0	6.917	0	0	18.42	17.549	9.176	MWD+IFR1+MS
4900	17.918	98.772	4861.019	18.307	0	17.897	0	7.091	0	0	18.743	17.897	9.869	MWD+IFR1+MS
5000	17.918	98.772	4956.169	18.649	0	18.248	0	7.268	0	0	19.07	18.247	10.582	MWD+IFR1+MS
5100	17.918	98.772	5051.319	18.993	0	18.6	0	7.449	0	0	19.399	18.598	11.314	MWD+IFR1+MS
5200	17.918	98.772	5146.469	19.341	0	18.954	0	7.633	0	0	19.732	18.952	12.063	MWD+IFR1+MS
5300	17.918	98.772	5241.619	19.691	0	19.31	0	7.821	0	0	20.067	19.306	12.83	MWD+IFR1+MS
5400	17.918	98.772	5336.769	20.044	0	19.668	0	8.012	0	0	20.406	19.663	13.612	MWD+IFR1+MS
5500	17.918	98.772	5431.919	20.4	0	20.028	0	8.206	0	0	20.747	20.021	14.408	MWD+IFR1+MS
5600	17.918	98.772	5527.068	20.758	0	20.389	0	8.403	0	0	21.09	20.38	15.217	MWD+IFR1+MS
5700	17.918	98.772	5622.218	21.118	0	20.751	0	8.604	0	0	21.436	20.74	16.036	MWD+IFR1+MS
5800	17.918	98.772	5717.368	21.481	0	21.115	0	8.807	0	0	21.784	21.101	16.865	MWD+IFR1+MS
5900	17.918	98.772	5812.518	21.845	0	21.48	0	9.014	0	0	22.135	21.464	17.7	MWD+IFR1+MS
6000	17.918	98.772	5907.668	22.211	0	21.847	0	9.223	0	0	22.488	21.827	18.539	MWD+IFR1+MS
6100	17.918	98.772	6002.818	22.58	0	22.214	0	9.436	0	0	22.842	22.192	19.381	MWD+IFR1+MS
6200	17.918	98.772	6097.968	22.95	0	22.583	0	9.651	0	0	23.199	22.557	20.223	MWD+IFR1+MS

6300	17.918	98.772	6193.118	23.321	0	22.953	0	9.869	0	0	23.557	22.924	21.062	MWD+IFR1+ MS
6400	17.918	98.772	6288.268	23.695	0	23.324	0	10.089	0	0	23.918	23.291	21.896	MWD+IFR1+ MS
6500	17.918	98.772	6383.417	24.07	0	23.696	0	10.313	0	0	24.28	23.659	22.723	MWD+IFR1+ MS
6600	17.918	98.772	6478.567	24.446	0	24.068	0	10.539	0	0	24.644	24.028	23.54	MWD+IFR1+ MS
6700	17.918	98.772	6573.717	24.824	0	24.442	0	10.767	0	0	25.009	24.397	24.346	MWD+IFR1+ MS
6800	17.918	98.772	6668.867	25.203	0	24.816	0	10.999	0	0	25.376	24.768	25.138	MWD+IFR1+ MS
6900	17.918	98.772	6764.017	25.583	0	25.192	0	11.232	0	0	25.744	25.139	25.915	MWD+IFR1+ MS
7000	17.918	98.772	6859.167	25.964	0	25.568	0	11.469	0	0	26.114	25.51	26.674	MWD+IFR1+ MS
7100	17.918	98.772	6954.317	26.347	0	25.945	0	11.708	0	0	26.485	25.882	27.414	MWD+IFR1+ MS
7200	17.918	98.772	7049.467	26.731	0	26.322	0	11.95	0	0	26.857	26.255	28.134	MWD+IFR1+ MS
7300	17.918	98.772	7144.616	27.116	0	26.7	0	12.194	0	0	27.23	26.629	28.833	MWD+IFR1+ MS
7400	17.918	98.772	7239.766	27.501	0	27.079	0	12.441	0	0	27.605	27.003	29.51	MWD+IFR1+ MS
7500	17.918	98.772	7334.916	27.888	0	27.459	0	12.69	0	0	27.981	27.378	30.163	MWD+IFR1+ MS
7600	17.918	98.772	7430.066	28.276	0	27.839	0	12.942	0	0	28.357	27.753	30.793	MWD+IFR1+ MS
7700	17.918	98.772	7525.216	28.665	0	28.219	0	13.196	0	0	28.735	28.129	31.399	MWD+IFR1+ MS
7800	17.918	98.772	7620.366	29.054	0	28.601	0	13.452	0	0	29.114	28.505	31.981	MWD+IFR1+ MS
7900	17.918	98.772	7715.516	29.445	0	28.982	0	13.712	0	0	29.494	28.882	32.538	MWD+IFR1+ MS
8000	17.918	98.772	7810.666	29.836	0	29.365	0	13.973	0	0	29.874	29.26	33.07	MWD+IFR1+ MS
8100	17.918	98.772	7905.816	30.228	0	29.747	0	14.237	0	0	30.256	29.638	33.579	MWD+IFR1+ MS
8200	17.918	98.772	8000.965	30.62	0	30.13	0	14.504	0	0	30.638	30.016	34.063	MWD+IFR1+ MS
8300	17.918	98.772	8096.115	31.014	0	30.514	0	14.773	0	0	31.021	30.395	34.523	MWD+IFR1+ MS
8400	17.918	98.772	8191.265	31.408	0	30.898	0	15.044	0	0	31.405	30.774	34.96	MWD+IFR1+ MS
8500	17.918	98.772	8286.415	31.802	0	31.283	0	15.318	0	0	31.789	31.154	35.373	MWD+IFR1+ MS
8600	17.918	98.772	8381.565	32.198	0	31.668	0	15.594	0	0	32.174	31.535	35.764	MWD+IFR1+ MS
8700	17.918	98.772	8476.715	32.594	0	32.053	0	15.873	0	0	32.56	31.916	36.133	MWD+IFR1+ MS
8726.074	17.918	98.772	8501.524	32.696	0	32.152	0	15.946	0	0	32.659	32.015	36.156	MWD+IFR1+ MS
8800	20.335	120.247	8571.451	32.858	0	32.463	0	16.156	0	0	32.974	32.435	43.345	MWD+IFR1+ MS
8900	26.586	140.103	8663.281	32.866	0	33.973	0	16.568	0	0	34.629	33.192	97.305	MWD+IFR1+ MS
9000	34.546	152.116	8749.396	33.065	0	35.025	0	17.368	0	0	36.809	33.563	103.608	MWD+IFR1+ MS
9100	43.276	159.926	8827.18	32.983	0	35.509	0	18.658	0	0	38.492	33.883	105.486	MWD+IFR1+ MS
9200	52.388	165.509	8894.269	32.467	0	35.767	0	20.409	0	0	39.734	34.164	106.962	MWD+IFR1+ MS
9300	61.703	169.852	8948.625	31.612	0	35.927	0	22.513	0	0	40.6	34.407	108.521	MWD+IFR1+ MS
9400	71.134	173.487	8988.596	30.641	0	36.032	0	24.83	0	0	41.152	34.616	110.194	MWD+IFR1+ MS
9500	80.628	176.73	9012.967	29.841	0	36.095	0	27.219	0	0	41.462	34.802	111.872	MWD+IFR1+ MS
9598.011	89.96	179.738	9021	29.437	0	36.111	0	29.427	0	0	41.607	34.969	113.291	MWD+IFR1+ MS
9600	89.96	179.738	9021.001	29.441	0	36.113	0	29.431	0	0	41.61	34.968	113.313	MWD+IFR1+ MS
9700	89.96	179.738	9021.07	29.646	0	36.222	0	29.637	0	0	41.686	35.001	114.062	MWD+IFR1+ MS
9800	89.96	179.738	9021.14	29.876	0	36.347	0	29.867	0	0	41.766	35.045	114.846	MWD+IFR1+ MS
9900	89.96	179.738	9021.209	30.124	0	36.484	0	30.115	0	0	41.852	35.097	115.654	MWD+IFR1+ MS
10000	89.96	179.738	9021.278	30.39	0	36.633	0	30.381	0	0	41.942	35.156	116.487	MWD+IFR1+ MS
10100	89.96	179.738	9021.347	30.675	0	36.793	0	30.665	0	0	42.037	35.223	117.345	MWD+IFR1+ MS
10200	89.96	179.738	9021.416	30.976	0	36.964	0	30.967	0	0	42.138	35.295	118.229	MWD+IFR1+ MS
10300	89.96	179.738	9021.485	31.294	0	37.146	0	31.285	0	0	42.245	35.374	119.139	MWD+IFR1+ MS
10400	89.96	179.738	9021.554	31.629	0	37.34	0	31.62	0	0	42.358	35.458	120.075	MWD+IFR1+ MS
10500	89.96	179.738	9021.623	31.979	0	37.544	0	31.97	0	0	42.477	35.548	121.037	MWD+IFR1+ MS
10600	89.96	179.738	9021.693	32.345	0	37.759	0	32.336	0	0	42.603	35.642	122.023	MWD+IFR1+ MS
10700	89.96	179.738	9021.762	32.725	0	37.985	0	32.716	0	0	42.736	35.741	123.034	MWD+IFR1+ MS
10800	89.96	179.738	9021.831	33.119	0	38.22	0	33.111	0	0	42.877	35.843	124.067	MWD+IFR1+ MS
10900	89.96	179.738	9021.9	33.528	0	38.466	0	33.519	0	0	43.024	35.949	125.122	MWD+IFR1+ MS

11000	89.96	179.738	9021.969	33.949	0	38.722	0	33.941	0	0	43.18	36.057	126.196	MWD+IFR1+ MS
11100	89.96	179.738	9022.038	34.383	0	38.988	0	34.375	0	0	43.344	36.168	127.287	MWD+IFR1+ MS
11200	89.96	179.738	9022.107	34.83	0	39.263	0	34.822	0	0	43.517	36.281	128.394	MWD+IFR1+ MS
11300	89.96	179.738	9022.176	35.288	0	39.548	0	35.28	0	0	43.698	36.395	129.514	MWD+IFR1+ MS
11400	89.96	179.738	9022.245	35.758	0	39.841	0	35.75	0	0	43.888	36.51	130.642	MWD+IFR1+ MS
11500	89.96	179.738	9022.315	36.238	0	40.144	0	36.231	0	0	44.087	36.626	131.778	MWD+IFR1+ MS
11600	89.96	179.738	9022.384	36.729	0	40.455	0	36.722	0	0	44.296	36.742	132.916	MWD+IFR1+ MS
11700	89.96	179.738	9022.453	37.231	0	40.775	0	37.223	0	0	44.514	36.858	134.055	MWD+IFR1+ MS
11800	89.96	179.738	9022.522	37.741	0	41.103	0	37.734	0	0	44.742	36.974	-44.81	MWD+IFR1+ MS
11900	89.96	179.738	9022.591	38.261	0	41.439	0	38.254	0	0	44.98	37.089	-43.681	MWD+IFR1+ MS
12000	89.96	179.738	9022.66	38.79	0	41.784	0	38.783	0	0	45.227	37.202	-42.562	MWD+IFR1+ MS
12100	89.96	179.738	9022.729	39.328	0	42.136	0	39.321	0	0	45.484	37.315	-41.456	MWD+IFR1+ MS
12200	89.96	179.738	9022.798	39.874	0	42.495	0	39.866	0	0	45.751	37.427	-40.365	MWD+IFR1+ MS
12300	89.96	179.738	9022.867	40.427	0	42.862	0	40.42	0	0	46.028	37.536	-39.292	MWD+IFR1+ MS
12400	89.96	179.738	9022.937	40.988	0	43.236	0	40.981	0	0	46.314	37.645	-38.24	MWD+IFR1+ MS
12500	89.96	179.738	9023.006	41.557	0	43.617	0	41.55	0	0	46.61	37.751	-37.21	MWD+IFR1+ MS
12600	89.96	179.738	9023.075	42.132	0	44.005	0	42.125	0	0	46.916	37.856	-36.204	MWD+IFR1+ MS
12700	89.96	179.738	9023.144	42.714	0	44.4	0	42.707	0	0	47.23	37.959	-35.224	MWD+IFR1+ MS
12800	89.96	179.738	9023.213	43.302	0	44.801	0	43.296	0	0	47.554	38.06	-34.271	MWD+IFR1+ MS
12900	89.96	179.738	9023.282	43.897	0	45.208	0	43.89	0	0	47.887	38.16	-33.345	MWD+IFR1+ MS
13000	89.96	179.738	9023.351	44.497	0	45.622	0	44.491	0	0	48.229	38.258	-32.447	MWD+IFR1+ MS
13100	89.96	179.738	9023.42	45.103	0	46.041	0	45.097	0	0	48.579	38.354	-31.578	MWD+IFR1+ MS
13200	89.96	179.738	9023.49	45.715	0	46.466	0	45.709	0	0	48.937	38.448	-30.737	MWD+IFR1+ MS
13300	89.96	179.738	9023.559	46.332	0	46.897	0	46.326	0	0	49.304	38.541	-29.925	MWD+IFR1+ MS
13400	89.96	179.738	9023.628	46.953	0	47.333	0	46.947	0	0	49.679	38.632	-29.14	MWD+IFR1+ MS
13500	89.96	179.738	9023.697	47.58	0	47.775	0	47.574	0	0	50.061	38.721	-28.384	MWD+IFR1+ MS
13600	89.96	179.738	9023.766	48.211	0	48.222	0	48.205	0	0	50.451	38.81	-27.655	MWD+IFR1+ MS
13700	89.96	179.738	9023.835	48.847	0	48.673	0	48.841	0	0	50.848	38.897	-26.952	MWD+IFR1+ MS
13800	89.96	179.738	9023.904	49.487	0	49.13	0	49.481	0	0	51.252	38.983	-26.276	MWD+IFR1+ MS
13900	89.96	179.738	9023.973	50.131	0	49.592	0	50.125	0	0	51.662	39.067	-25.625	MWD+IFR1+ MS
14000	89.96	179.738	9024.042	50.779	0	50.058	0	50.773	0	0	52.08	39.151	-24.998	MWD+IFR1+ MS
14100	89.96	179.738	9024.112	51.431	0	50.528	0	51.425	0	0	52.503	39.233	-24.395	MWD+IFR1+ MS
14200	89.96	179.738	9024.181	52.086	0	51.003	0	52.081	0	0	52.933	39.315	-23.814	MWD+IFR1+ MS
14300	89.96	179.738	9024.25	52.745	0	51.483	0	52.74	0	0	53.369	39.396	-23.256	MWD+IFR1+ MS
14400	89.96	179.738	9024.319	53.408	0	51.966	0	53.402	0	0	53.811	39.476	-22.718	MWD+IFR1+ MS
14500	89.96	179.738	9024.388	54.074	0	52.453	0	54.068	0	0	54.258	39.555	-22.201	MWD+IFR1+ MS
14600	89.96	179.738	9024.457	54.742	0	52.945	0	54.737	0	0	54.71	39.634	-21.703	MWD+IFR1+ MS
14700	89.96	179.738	9024.526	55.414	0	53.44	0	55.409	0	0	55.168	39.712	-21.224	MWD+IFR1+ MS
14800	89.96	179.738	9024.595	56.089	0	53.939	0	56.084	0	0	55.631	39.79	-20.763	MWD+IFR1+ MS
14900	89.96	179.738	9024.664	56.767	0	54.441	0	56.762	0	0	56.099	39.867	-20.319	MWD+IFR1+ MS
15000	89.96	179.738	9024.734	57.447	0	54.947	0	57.442	0	0	56.571	39.944	-19.891	MWD+IFR1+ MS
15100	89.96	179.738	9024.803	58.13	0	55.457	0	58.125	0	0	57.048	40.02	-19.478	MWD+IFR1+ MS
15200	89.96	179.738	9024.872	58.816	0	55.969	0	58.811	0	0	57.53	40.096	-19.081	MWD+IFR1+ MS
15300	89.96	179.738	9024.941	59.504	0	56.485	0	59.499	0	0	58.016	40.172	-18.697	MWD+IFR1+ MS
15400	89.96	179.738	9025.01	60.194	0	57.004	0	60.189	0	0	58.505	40.248	-18.328	MWD+IFR1+ MS
15500	89.96	179.738	9025.079	60.887	0	57.526	0	60.882	0	0	58.999	40.323	-17.971	MWD+IFR1+ MS
15600	89.96	179.738	9025.148	61.582	0	58.052	0	61.577	0	0	59.497	40.399	-17.627	MWD+IFR1+ MS
15700	89.96	179.738	9025.217	62.279	0	58.58	0	62.274	0	0	59.999	40.474	-17.294	MWD+IFR1+ MS
15800	89.96	179.738	9025.287	62.978	0	59.11	0	62.973	0	0	60.504	40.549	-16.973	MWD+IFR1+ MS

15900	89.96	179.738	9025.356	63.679	0	59.644	0	63.674	0	0	61.013	40.624	-16.663	MWD+IFR1+ MS
16000	89.96	179.738	9025.425	64.382	0	60.18	0	64.377	0	0	61.525	40.7	-16.363	MWD+IFR1+ MS
16100	89.96	179.738	9025.494	65.087	0	60.719	0	65.082	0	0	62.041	40.775	-16.073	MWD+IFR1+ MS
16200	89.96	179.738	9025.563	65.794	0	61.26	0	65.789	0	0	62.56	40.85	-15.792	MWD+IFR1+ MS
16300	89.96	179.738	9025.632	66.502	0	61.804	0	66.498	0	0	63.082	40.925	-15.521	MWD+IFR1+ MS
16400	89.96	179.738	9025.701	67.212	0	62.35	0	67.208	0	0	63.607	41.001	-15.258	MWD+IFR1+ MS
16500	89.96	179.738	9025.77	67.924	0	62.898	0	67.92	0	0	64.135	41.076	-15.004	MWD+IFR1+ MS
16600	89.96	179.738	9025.839	68.637	0	63.449	0	68.633	0	0	64.666	41.152	-14.757	MWD+IFR1+ MS
16700	89.96	179.738	9025.909	69.352	0	64.002	0	69.348	0	0	65.2	41.228	-14.518	MWD+IFR1+ MS
16800	89.96	179.738	9025.978	70.069	0	64.557	0	70.064	0	0	65.736	41.304	-14.286	MWD+IFR1+ MS
16837.58	89.96	179.738	9026	70.337	0	64.765	0	70.333	0	0	65.937	41.333	-14.202	MWD+IFR1+ MS

Plan Targets Remuda 709H				
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL Target Shape (ft)
KOP 5	8994.32	464511.6	625927.8	5322 CIRCLE
FTP 5	9597.89	463738.6	625927.8	5895 CIRCLE
BHL 5	16837.59	456499.1	625960.8	5900 CIRCLE

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
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
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.