

District I1625 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 375767

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

1. Operator Name and Address XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707		2. OGRID Number 373075
		3. API Number 30-015-55687
4. Property Code 336438	5. Property Name REMUDA NORTH 25 ST COM	6. Well No. 163H

7. Surface Location

UL - Lot J	Section 25	Township 23S	Range 29E	Lot Idn	Feet From 2375	N/S Line S	Feet From 1994	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot B	Section 24	Township 23S	Range 29E	Lot Idn B	Feet From 280	N/S Line N	Feet From 2310	E/W Line E	County Eddy
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9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
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Additional Well Information

11. Work Type New Well	12. Well Type GAS	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3059
16. Multiple N	17. Proposed Depth 19056	18. Formation Wolfcamp	19. Contractor	20. Spud Date 1/3/2025
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	298	300	0
Int1	12.25	9.625	40	3300	1480	0
Int2	8.75	7.625	29.7	10368	430	5739
Int2	8.75	7.625	29.7	3400	430	2800
Prod	6.75	5.5	20	19056	600	10592
Prod	6.75	5.5	20	10268	20	9868

Casing/Cement Program: Additional Comments

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22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Hydril	4852	4852	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief.
I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.

Signature:

OIL CONSERVATION DIVISION

Printed Name: Electronically filed by Tiffany Yancey

Title: Production Analyst

Email Address: tiffany.yancey@exxonmobil.com

Date: 10/25/2024

Phone: 432-215-8939

Approved By: Ward Rikala

Title: Petroleum Specialist Supervisor

Approved Date: 11/7/2024

Expiration Date: 11/7/2026

Conditions of Approval Attached

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	<input checked="" type="checkbox"/> Initial Submittal
			<input type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number 30-015 -55687	Pool Code 98220	Pool Name PURPLE SAGE, WOLFCAMP (GAS)	
Property Code 336438	Property Name REMUDA NORTH 25 ST COM	Well Number 163H	
ORGID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC	Ground Level Elevation 3,059'	
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal	

Surface Location									
UL J	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,375' FSL	Ft. from E/W 1,994' FEL	Latitude 32.275104	Longitude -103.936035	County EDDY

Bottom Hole Location									
UL B	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 280' FNL	Ft. from E/W 2,310' FEL	Latitude 32.297004	Longitude -103.937126	County EDDY

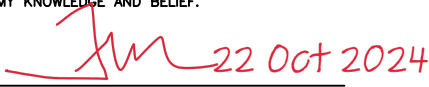


Dedicated Acres 480	Infill or Defining Well INFILL	Defining Well API 30-015-44232	Overlapping Spacing Unit (Y/N) N	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL J	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,285' FSL	Ft. from E/W 2,308' FEL	Latitude 32.274860	Longitude -103.937052	County EDDY

First Take Point (FTP)									
UL G	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,310' FNL	Ft. from E/W 2,310' FEL	Latitude 32.276828	Longitude -103.937058	County EDDY

Last Take Point (LTP)									
UL B	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 330' FNL	Ft. from E/W 2,310' FEL	Latitude 32.296866	Longitude -103.937125	County EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3,059'
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OPERATOR CERTIFICATIONS		SURVEYOR CERTIFICATIONS	
<p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling form the division.</p>		<p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.</p> <p> 22 Oct 2024</p> <p>TIM C. PAPPAS REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 21209</p> 	
Signature  Date 10/23/24		Signature and Seal of Professional Surveyor	
Printed Name Adrian Baker		Certificate Number TIM C. PAPPAS 21209	Date of Survey 10/22/2024
Email Address adrian.baker@exxonmobil.com			

Note: 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.

ACREAGE DEDICATION PLATS

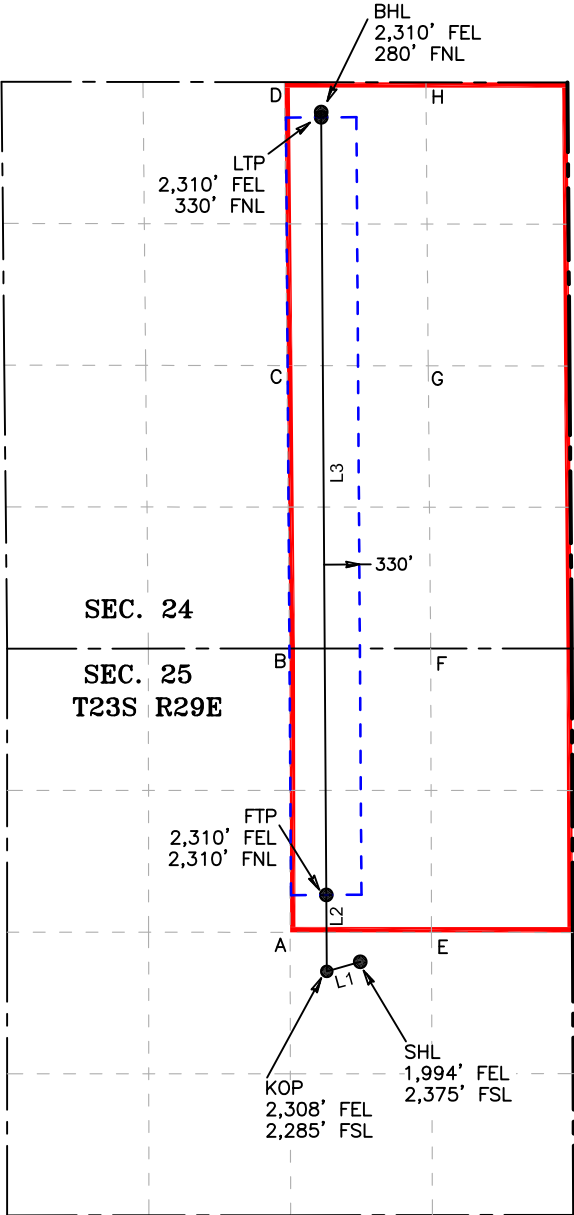
This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is the closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.

LEGEND

- SECTION LINE
- PROPOSED WELLBORE
- 330' BUFFER
- DEDICATED ACREAGE

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	254° 01'06"	326.52'
L2	359° 38'05"	716.21'
L3	359° 37'34"	7,339.58'



COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	464,042.9	N	Y =	471,958.7	N
X =	664,126.4	E	X =	663,760.4	E
LAT. =	32.275104	°N	LAT. =	32.296866	°N
LONG. =	103.936035	°W	LONG. =	103.937125	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	463,953.0	N	Y =	472,008.7	N
X =	663,812.5	E	X =	663,760.0	E
LAT. =	32.274860	°N	LAT. =	32.297004	°N
LONG. =	103.937052	°W	LONG. =	103.937126	°W
FTP (NAD 83 NME)					
Y =	464,669.2	N			
X =	663,807.9	E			
LAT. =	32.276828	°N			
LONG. =	103.937058	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	463,983.0	N	Y =	471,898.6	N
X =	622,943.6	E	X =	622,577.8	E
LAT. =	32.274980	°N	LAT. =	32.296743	°N
LONG. =	103.935544	°W	LONG. =	103.936633	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	463,893.1	N	Y =	471,948.6	N
X =	622,629.7	E	X =	622,577.5	E
LAT. =	32.274736	°N	LAT. =	32.296880	°N
LONG. =	103.936561	°W	LONG. =	103.936633	°W
FTP (NAD 27 NME)					
Y =	464,609.3	N			
X =	622,625.1	E			
LAT. =	32.276704	°N			
LONG. =	103.936567	°W			

CORNER COORDINATES (NAD83 NME)				
A - Y =	464,319.1	N	A - X =	663,469.2 E
B - Y =	466,979.3	N	B - X =	663,464.2 E
C - Y =	469,631.9	N	C - X =	663,440.1 E
D - Y =	472,289.1	N	D - X =	663,415.9 E
E - Y =	464,318.4	N	E - X =	664,794.2 E
F - Y =	466,979.1	N	F - X =	664,786.8 E
G - Y =	469,629.7	N	G - X =	664,763.7 E
H - Y =	472,287.4	N	H - X =	664,742.0 E
CORNER COORDINATES (NAD27 NME)				
A - Y =	464,259.2	N	A - X =	622,286.4 E
B - Y =	466,919.3	N	B - X =	622,281.5 E
C - Y =	469,571.9	N	C - X =	622,257.5 E
D - Y =	472,229.0	N	D - X =	622,233.4 E
E - Y =	464,258.5	N	E - X =	623,611.4 E
F - Y =	466,919.1	N	F - X =	623,604.1 E
G - Y =	469,569.7	N	G - X =	623,581.1 E
H - Y =	472,227.3	N	H - X =	623,559.5 E

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

Form APD Comments

Permit 375767

PERMIT COMMENTS

Operator Name and Address: XTO PERMIAN OPERATING LLC. [373075] 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707		API Number: 30-015-55687
		Well: REMUDA NORTH 25 ST COM #163H
Created By	Comment	Comment Date
vrajan	XTO requests a variance to allow use of a Flexhose, to be able to batch drill, Wild Well Control Plan and a Spudder Rig.	10/25/2024

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Form APD Conditions
Permit 375767

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: XTO PERMIAN OPERATING LLC. [373075] 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	API Number: 30-015-55687
	Well: REMUDA NORTH 25 ST COM #163H

OCD Reviewer	Condition
ward.rikala	Notify the OCD 24 hours prior to casing & cement.
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.
ward.rikala	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.
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.
ward.rikala	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
ward.rikala	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.
ward.rikala	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.

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 Permian Operating, LLC OGRID: 373075 Date: 09/24/2024

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	3 yr Anticipated decline Oil BBL/D	Anticipated Gas MCF/D	3 yr anticipated decline Gas MCF/D	Anticipated Produced Water BBL/D	3 yr anticipated decline Water BBL/D
Remuda North 25 ST 161H	TBD	25 T23S R29E	2375 FSL, 585 FWL	1,100	100	3,250	500	3,500	350
Remuda North 25 ST 501H	TBD	25 T23S R29E	2375 FSL, 615 FWL	900	100	1,250	300	2,250	250
Remuda North 25 ST 162H	TBD	25 T23S R29E	2374 FSL, 645 FWL	1,100	100	3,250	500	3,500	350
Remuda North 25 ST 163H	TBD	25 T23S R29E	2375 FSL, 1994 FEL	1,100	100	3,250	500	3,500	350
Remuda North 25 ST 502H	TBD	25 T23S R29E	2374 FSL, 1964 FEL	900	100	1,250	300	2,250	250

IV. Central Delivery Point Name: Raider Compressor Station [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 North 25 ST 161H	TBD	TBD	TBD	TBD	TBD	TBD

Remuda North 25 ST 501H	TBD	TBD	TBD	TBD	TBD	TBD
Remuda North 25 ST 162H	TBD	TBD	TBD	TBD	TBD	TBD
Remuda North 25 ST 163H	TBD	TBD	TBD	TBD	TBD	TBD
Remuda North 25 ST 502H	TBD	TBD	TBD	TBD	TBD	TBD

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:

Adrian Baker

Title:

Regulatory Advisor

E-mail Address:

adrian.baker@exxonmobil.com

Date:

10/10/24

Phone:

4322363808

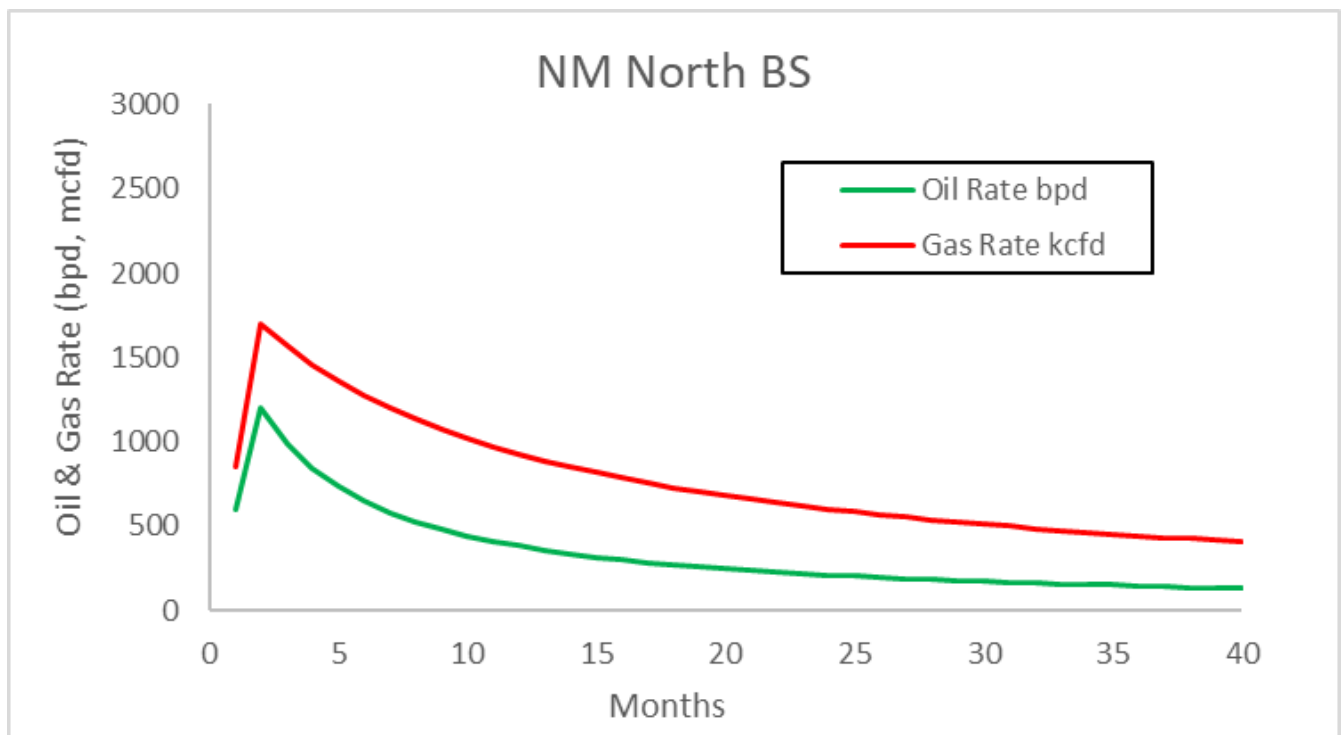
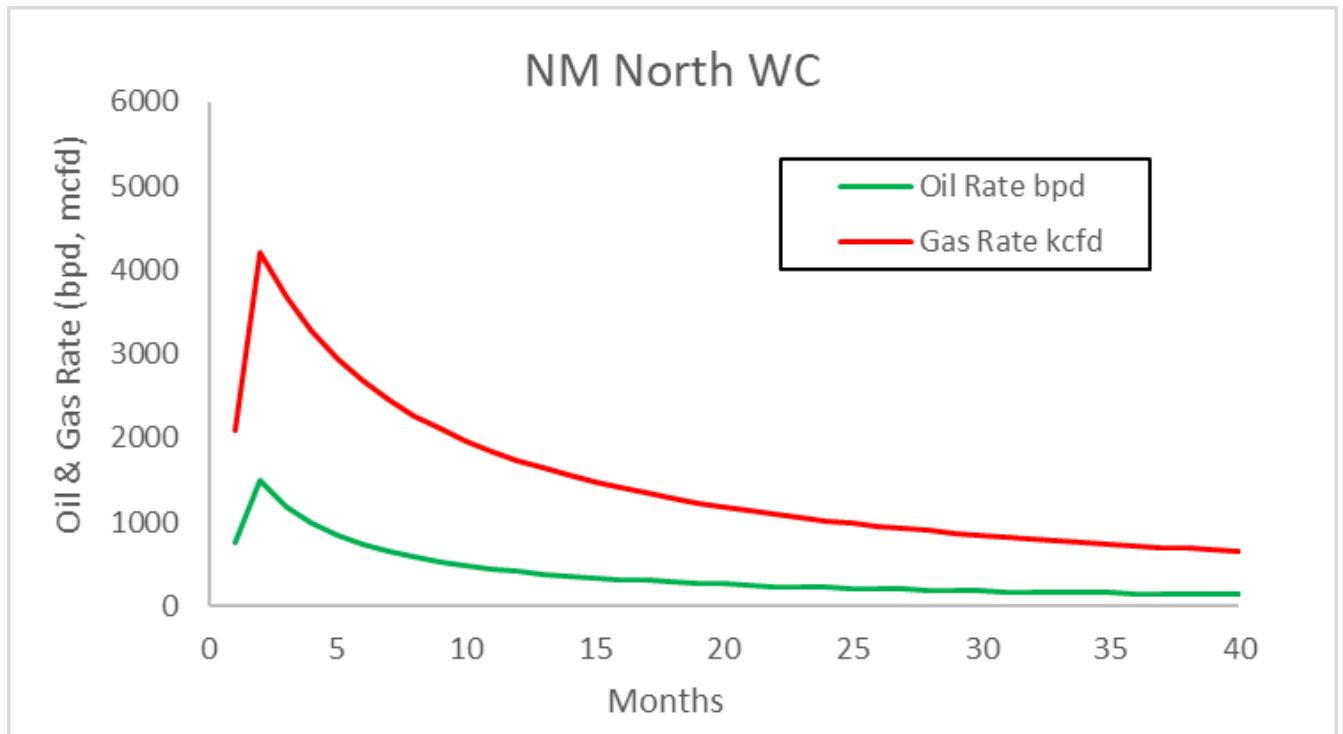
OIL CONSERVATION DIVISION**(Only applicable when submitted as a standalone form)**

Approved By:

Title:

Approval Date:

Conditions of Approval:



VI. Separation Equipment:

XTO Permian Operating LLC. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. XTO utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.

VII. Operational Practices

XTO Permian Operating LLC will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO Permian Operating LLC will turn operations to onsite separation vessels and flow to the gathering pipeline.
- During production operations, XTO Permian Operating LLC will take every practical effort to minimize waste of natural gas through venting and flaring by:
 - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
 - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
 - Flaring in lieu of venting, where technically feasible
 - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
 - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
 - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
 - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications

- Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible.

VIII. Best Management Practices during Maintenance

XTO Permian Operating LLC. will utilize best management practices to minimize venting during active and planned maintenance activities. XTO is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high-pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. XTO will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.

WELL LOCATION INFORMATION

API Number 30-015	Pool Code 98220	Pool Name PURPLE SAGE, WOLFCAMP (GAS)
Property Code	Property Name REMUDA NORTH 25 ST COM	Well Number 163H
ORGID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC	Ground Level Elevation 3,059'
Surface Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal		Mineral Owner: <input checked="" type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal

Surface Location

UL J	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,375' FSL	Ft. from E/W 1,994' FEL	Latitude 32.275104	Longitude -103.936035	County EDDY
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Bottom Hole Location

UL B	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 280' FNL	Ft. from E/W 2,310' FEL	Latitude 32.297004	Longitude -103.937126	County EDDY
---------	---------------	------------------	---------------	-----	--------------------------	----------------------------	-----------------------	--------------------------	----------------

Dedicated Acres 480	Infill or Defining Well INFILL	Defining Well API 30-015-44232	Overlapping Spacing Unit (Y/N) N	Consolidation Code
Order Numbers.			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL J	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,285' FSL	Ft. from E/W 2,308' FEL	Latitude 32.274860	Longitude -103.937052	County EDDY
---------	---------------	------------------	---------------	-----	----------------------------	----------------------------	-----------------------	--------------------------	----------------

First Take Point (FTP)

UL G	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,310' FNL	Ft. from E/W 2,310' FEL	Latitude 32.276828	Longitude -103.937058	County EDDY
---------	---------------	------------------	---------------	-----	----------------------------	----------------------------	-----------------------	--------------------------	----------------

Last Take Point (LTP)

UL B	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 330' FNL	Ft. from E/W 2,310' FEL	Latitude 32.296866	Longitude -103.937125	County EDDY
---------	---------------	------------------	---------------	-----	--------------------------	----------------------------	-----------------------	--------------------------	----------------

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3,059'
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OPERATOR CERTIFICATIONS

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.

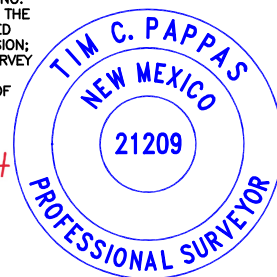
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling form the division.

SURVEYOR CERTIFICATIONS

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.

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

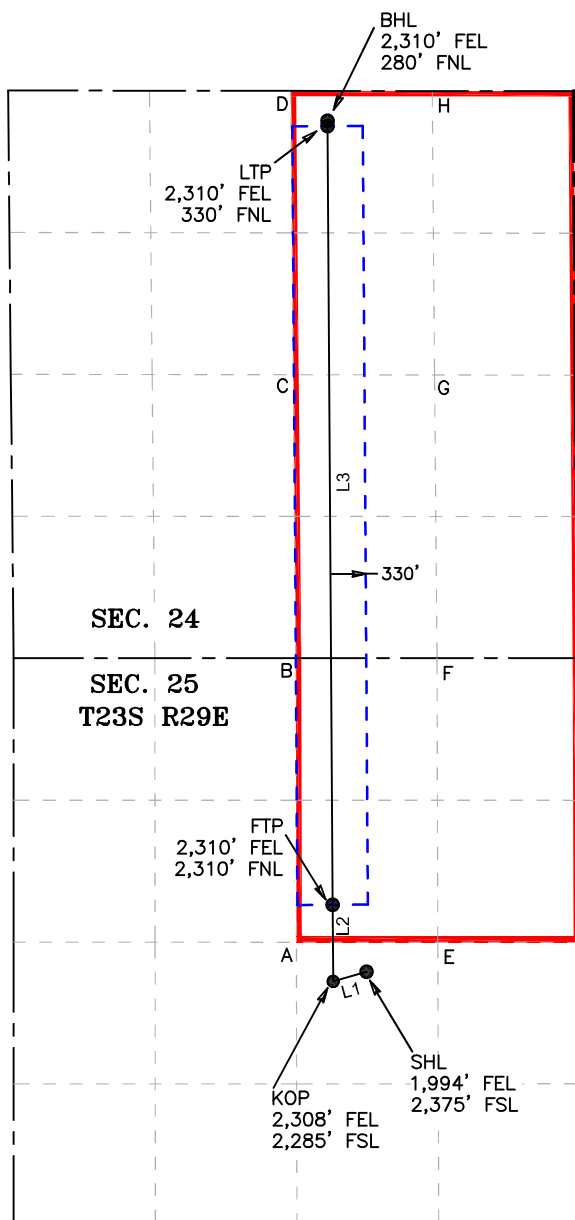
TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209



Signature <i>Adrian Baker</i>	Date 10/23/24	Signature and Seal of Professional Surveyor	
Printed Name Adrian Baker	Certificate Number TIM C. PAPPAS 21209	Date of Survey 10/22/2024	
Email Address adrian.baker@exxonmobil.com			

Note: 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.

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	254° 01'06"	326.52'
L2	359° 38'05"	716.21'
L3	359° 37'34"	7,339.58'



COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	464,042.9	N	Y =	471,958.7	N
X =	664,126.4	E	X =	663,760.4	E
LAT. =	32.275104	°N	LAT. =	32.296866	°N
LONG. =	103.936035	°W	LONG. =	103.937125	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	463,953.0	N	Y =	472,008.7	N
X =	663,812.5	E	X =	663,760.0	E
LAT. =	32.274860	°N	LAT. =	32.297004	°N
LONG. =	103.937052	°W	LONG. =	103.937126	°W
FTP (NAD 83 NME)					
Y =	464,669.2	N			
X =	663,807.9	E			
LAT. =	32.276828	°N			
LONG. =	103.937058	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	463,983.0	N	Y =	471,898.6	N
X =	622,943.6	E	X =	622,577.8	E
LAT. =	32.274980	°N	LAT. =	32.296743	°N
LONG. =	103.935544	°W	LONG. =	103.936633	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	463,893.1	N	Y =	471,948.6	N
X =	622,629.7	E	X =	622,577.5	E
LAT. =	32.274736	°N	LAT. =	32.296880	°N
LONG. =	103.936561	°W	LONG. =	103.936633	°W
FTP (NAD 27 NME)					
Y =	464,609.3	N			
X =	622,625.1	E			
LAT. =	32.276704	°N			
LONG. =	103.936567	°W			

CORNER COORDINATES (NAD83 NME)				
A - Y=	464,319.1	N	A - X=	663,469.2
B - Y=	466,979.3	N	B - X=	663,464.2
C - Y=	469,631.9	N	C - X=	663,440.1
D - Y=	472,289.1	N	D - X=	663,415.9
E - Y=	464,318.4	N	E - X=	664,794.2
F - Y=	466,979.1	N	F - X=	664,786.8
G - Y=	469,629.7	N	G - X=	664,763.7
H - Y=	472,287.4	N	H - X=	664,742.0
CORNER COORDINATES (NAD27 NME)				
A - Y=	464,259.2	N	A - X=	622,286.4
B - Y=	466,919.3	N	B - X=	622,281.5
C - Y=	469,571.9	N	C - X=	622,257.5
D - Y=	472,229.0	N	D - X=	622,233.4
E - Y=	464,258.5	N	E - X=	623,611.4
F - Y=	466,919.1	N	F - X=	623,604.1
G - Y=	469,569.7	N	G - X=	623,581.1
H - Y=	472,227.3	N	H - X=	623,559.5

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

XTO Energy Inc.

Remuda North 25 ST - 163H

Projected TD: 19056' MD / 11284' TVD

SHL: 2375' FSL & 1994' FEL , Section 25, T23S, R29E

BHL: 280' FNL & 2310' FEL , Section 24, T23S, R29E

EDDY County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	203'	Water
Top of Salt	323'	Water
MB 126	1541'	Water
Base of Salt	3075'	Water
Delaware	3301'	Water/Oil/Gas
Brushy Canyon	5739'	Water
Bone Spring	7001'	Water/Oil/Gas
1st Bone Spring Ss	7997'	Water/Oil/Gas
2nd Bone Spring Ss	8508'	Water/Oil/Gas
Wolfcamp X	10342'	Water/Oil/Gas
Wolfcamp Y	10419'	Water/Oil/Gas
Wolfcamp A	10449'	Water/Oil/Gas
Wolfcamp B	10757'	Water/Oil/Gas
Wolfcamp D	11009'	Water/Oil/Gas
Target/Land Curve	11284'	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 @ 298' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3300' 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 10368' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19056 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9868 feet) per Potash regulations.

3. Casing Design

Hole Size	MD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 298'	13.375	54.5	J-55	BTC	New	2.77	8.58	55.97
12.25	0' – 3300'	9.625	40	J-55	BTC	New	1.27	2.74	4.77
8.75	0' – 3400'	7.625	29.7	RY P-110	Flush Joint	New	1.95	3.03	1.81
8.75	3400' – 10368'	7.625	29.7	HC L-80	Flush Joint	New	1.42	2.40	1.96
6.75	0' – 10268'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	1.66	2.24
6.75	10268' - 19056'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	1.51	7.98

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

XTO Permian Operating LLC will abide by R-111-Q and monitor separation Distance to offsets and maintain a Separation Factor greater than 1.0 while drilling through the salt intervals. For blind or inclination only wells, XTO Permian Operating LLC will maintain greater than 300 center-to-center separation.

Wellhead:

XTO Will use a 4 String Slim Hole Multi-Bowl system.

4. Cement Program**Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 298'**

Tail: 300 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 +/- 3300'

Lead: 1350 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 +/- 10368'1st Stage

Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)
 TOC: Brushy Canyon @ 5739
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)
 Top of Cement: 2800
 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 (5739') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to ~500' inside 1st intermediate csg string. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

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

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement to surface. 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: 5.5, 20 New Semi-Flush / Talon, RY P-110 casing to be set at +/- 19056'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 9868 feet
 Tail: 600 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 10592 feet
 Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate 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 5M Hydril and a 13-5/8" minimum 10M Triple Ram BOP. MASP should not exceed 4852 psi.

All BOP testing will be done by an independent service company. Operator will test as per BLM CFR43-3172

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.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss	Comments
			(ppg)	(sec/qt)	(cc)	
0' - 298'	17.5	FW/Native	8.5-9	35-40	NC	Fresh water or native water
298' - 3300'	12.25	Brine	10-10.5	30-32	NC	Fully Saturated salt across salado
3300' to 10368'	8.75	BDE/OBM or FW/Brine	10-10.5	30-32	NC	N/A
10368' to 19056'	6.75	OBM	12.5-13	50-60	NC - 20	N/A

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 surface casing with saturated salt brine solution. A saturated salt brine 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

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 175 to 195 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 7335 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.



U. S. Steel Tubular Products

5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®



MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ®		—
Minimum Yield Strength	110,000	—	psi	—
Maximum Yield Strength	125,000	—	psi	—
Minimum Tensile Strength	125,000	—	psi	—
DIMENSIONS	Pipe	USS-FREEDOM HTQ®		—
Outside Diameter	5.500	6.300	in.	—
Wall Thickness	0.361	--	in.	—
Inside Diameter	4.778	4.778	in.	—
Standard Drift	4.653	4.653	in.	—
Alternate Drift	--	--	in.	—
Nominal Linear Weight, T&C	20.00	--	lb/ft	—
Plain End Weight	19.83	--	lb/ft	—
SECTION AREA	Pipe	USS-FREEDOM HTQ®		—
Critical Area	5.828	5.828	sq. in.	—
Joint Efficiency	—	100.0	%	—
PERFORMANCE	Pipe	USS-FREEDOM HTQ®		—
Minimum Collapse Pressure	11,100	11,100	psi	—
Minimum Internal Yield Pressure	12,640	12,640	psi	—
Minimum Pipe Body Yield Strength	641,000	--	lb	—
Joint Strength	--	641,000	lb	—
Compression Rating	--	641,000	lb	—
Reference Length [4]	--	21,370	ft	—
Maximum Uniaxial Bend Rating [2]	--	91.7	deg/100 ft	—
MAKE-UP DATA	Pipe	USS-FREEDOM HTQ®		—
Make-Up Loss	--	4.13	in.	—
Minimum Make-Up Torque [3]	--	15,000	ft-lb	—
Maximum Make-Up Torque [3]	--	21,000	ft-lb	—
Maximum Operating Torque[3]	--	29,500	ft-lb	—

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4. Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

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U. S. Steel Tubular Products

5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-TALON HTQ™ RD

				
MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000	—	psi	—
Maximum Yield Strength	125,000	—	psi	—
Minimum Tensile Strength	125,000	—	psi	—
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		—
Outside Diameter	5.500	5.900	in.	—
Wall Thickness	0.361	--	in.	—
Inside Diameter	4.778	4.778	in.	—
Standard Drift	4.653	4.653	in.	—
Alternate Drift	—	--	in.	—
Nominal Linear Weight, T&C	20.00	--	lb/ft	—
Plain End Weight	19.83	--	lb/ft	—
SECTION AREA	Pipe	USS-TALON HTQ™ RD		—
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		—
Minimum Collapse Pressure	11,100	11,100	psi	--
Minimum Internal Yield Pressure	12,640	12,640	psi	--
Minimum Pipe Body Yield Strength	641,000	--	lb	--
Joint Strength	--	641,000	lb	--
Compression Rating	--	641,000	lb	--
Reference Length	--	21,370	ft	[5]
Maximum Uniaxial Bend Rating	--	91.7	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		—
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	17,000	ft-lb	[4]
Maximum Make-Up Torque	--	20,000	ft-lb	[4]
Maximum Operating Torque	--	39,500	ft-lb	[4]

UNCONTROLLED

Notes

- Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- Uniaxial bend rating shown is structural only.
- Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- Coupling must meet minimum mechanical properties of the pipe.

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connections@uss.com
www.usstubular.com

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Houston, TX. 77086

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NEW CHOKE HOSE
INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

This is to verify that the items detailed below meet the requirements of the Customer's Purchase Order referenced herein, and are in Conformance with applicable specifications, and that Records of Required Tests are on file and subject to examination. The following items were inspected and hydrostatically tested at **Gates Engineering & Services North America** facilities in Houston, TX, USA.

CUSTOMER: NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#: 15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N: IMR RETEST SN 74621 ASSET #66-1531

PART DESCRIPTION: RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES

SALES ORDER #: 529480
QUANTITY: 1
SERIAL #: 74621 H3-012524-1

SIGNATURE:*F. Cismos***TITLE:****QUALITY ASSURANCE****DATE:****1/25/2024**



H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

TEST OBJECT

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

TEST INFORMATION

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K

Part number:

Description:

Fitting 2: 3.0 x 4-1/16 10K

Part number:

Description:

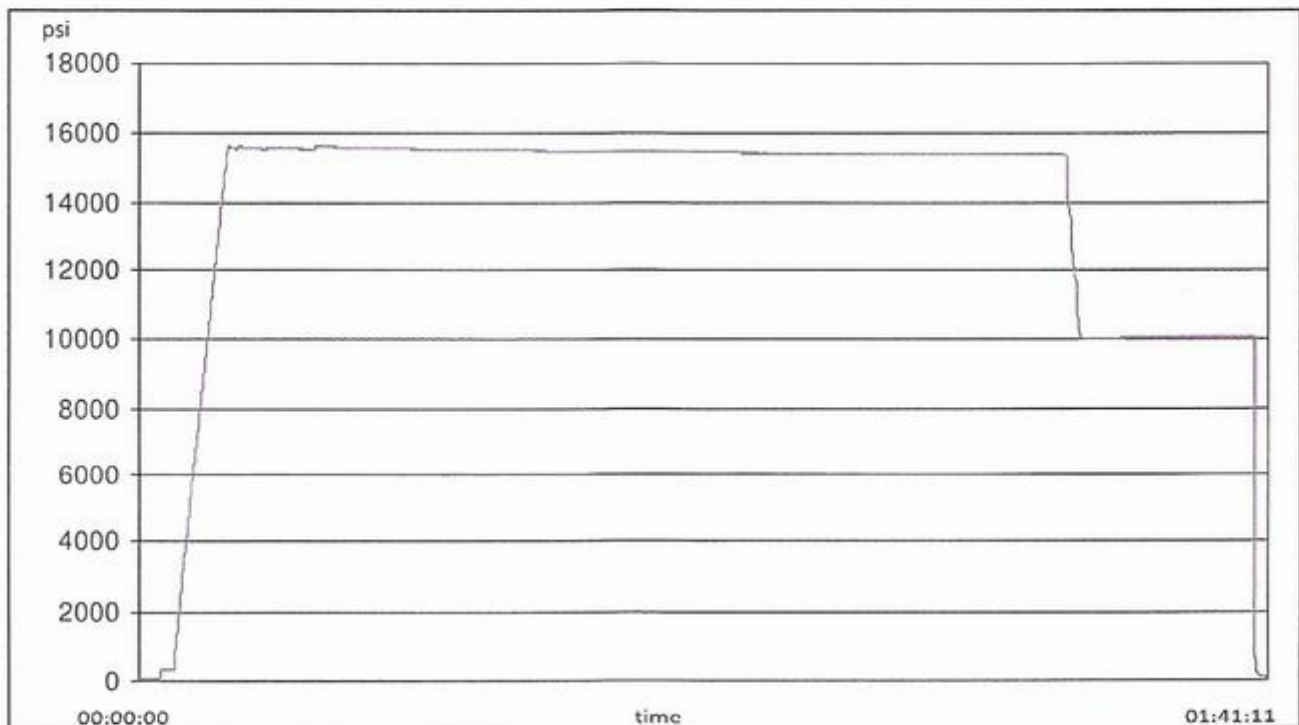
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/16

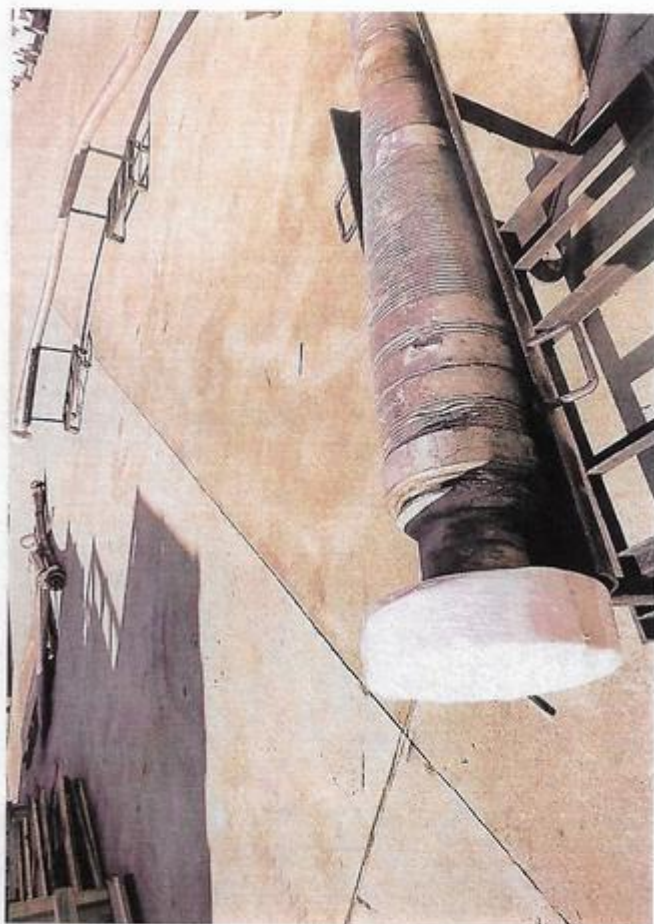
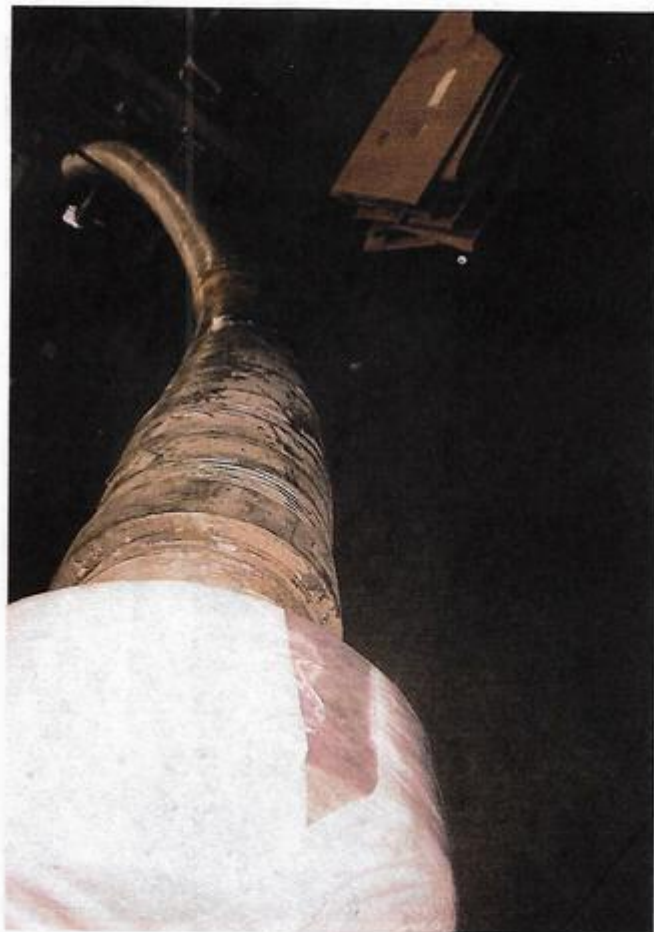
1/25/2024 11:48:06 AM

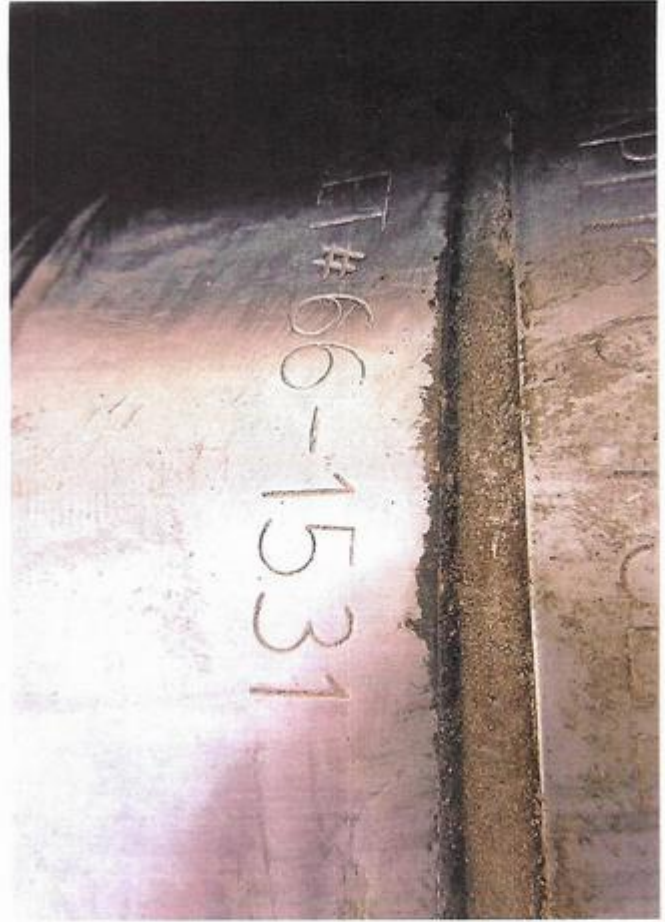
TEST REPORT

GAUGE TRACEABILITY

Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

Comment





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

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped up and tested on the wellhead before drilling operations resume on each well.
 - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
 - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.

XTO Permian Operating, LLC Offline Cementing Variance Request

XTO requests the option to cement the surface and intermediate casing strings offline as a prudent batch drilling efficiency of acreage development.

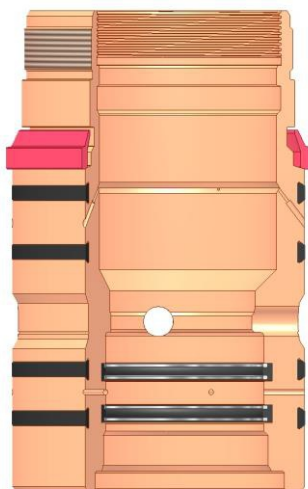
1. Cement Program

No changes to the cement program will take place for offline cementing.

2. Offline Cementing Procedure

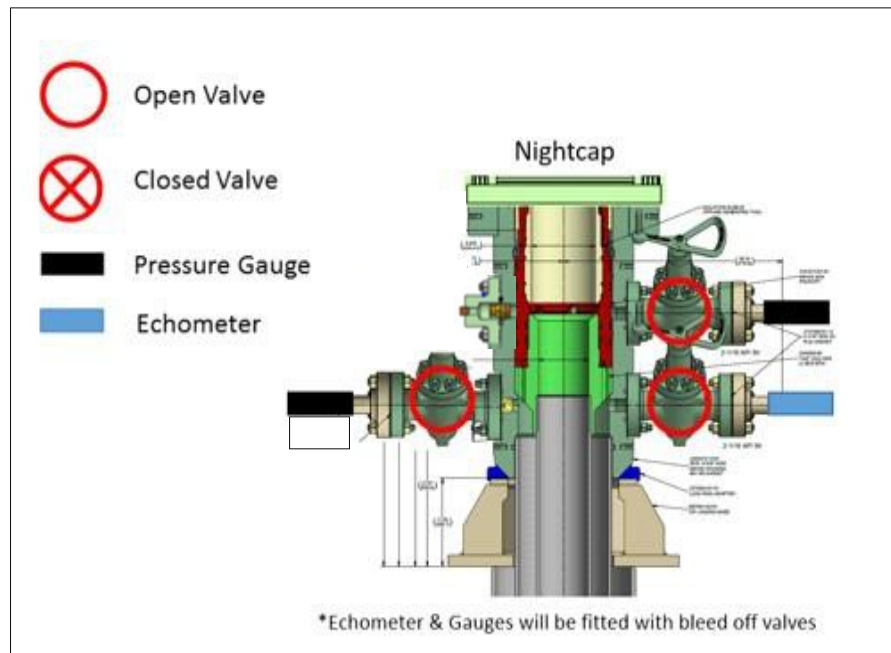
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
 - a. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50-psi compressive strength if kill weight fluid cannot be verified.



Annular packoff with both external and internal seals

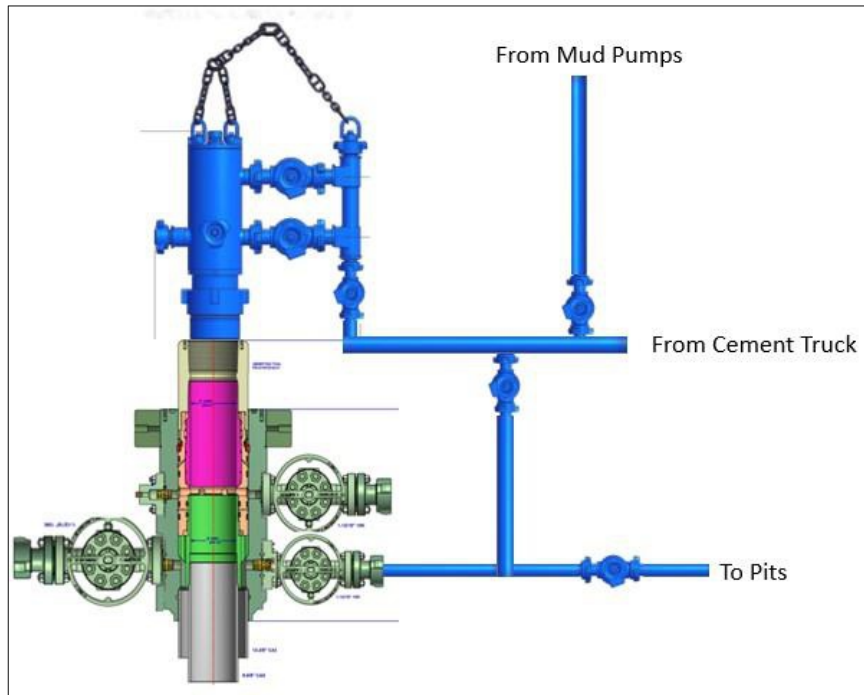
XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nipping up for further remediation.
 - a. Well Control Plan
 - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
 - ii. Rig pumps or a 3rd party pump will be tied into the upper casing valve to pump down the casing ID
 - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
 - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
 - v. Well will be confirmed static
 - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
8. Install offline cement tool
9. Rig up cement equipment

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

10. Circulate bottoms up with cement truck
 - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
 - b. Max anticipated time before circulating with cement truck is 6 hrs
11. Perform cement job taking returns from the annulus wellhead valve
12. Confirm well is static and floats are holding after cement job
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

10,000 PSI Annular BOP Variance Request

Mewbourne Oil Company request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOPL).

1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

12-1/4" Intermediate Hole Section 10M psi Requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	8.000"-9.625"	Annular	5M	-	-
Intermediate Casing	9.625"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

8-3/4" Production Hole Section 10M psi Requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	6.750"-8.000"	Annular	5M	-	-
Production Casing	7"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

6-1/8" Lateral Hole Section 10M psi Requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
DCs and MWD tools	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Mud Motor	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Production Casing	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Upper 3.5"-5.5" VBR	10M 10M
Open-Hole	-	Blind Rams	10M	-	-

VBR = Variable Bore Ram

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the Mewbourne Oil Company drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full-opening safety valve & close
3. Space out drill string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

1. Sound alarm (alert crew)
2. Stab crossover and full-opening safety valve and close
3. Space out string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams (HCR & choke will already be in the closed position)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA Through Stack

1. PRIOR to pulling last joint of drillpipe through stack:
 - a. Perform flow check. If flowing, continue to (b).
 - b. Sound alarm (alert crew)
 - c. Stab full-opening safety valve and close
 - d. Space out drill string with tool joint just beneath the upper variable bore rams
 - e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
 - f. Confirm shut-in
 - g. Notify toolpusher/company representative
 - h. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time
 - i. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
 - a. Sound alarm (alert crew)
 - b. Stab crossover and full-opening safety valve and close
 - c. Space out drill string with upset just beneath the upper variable bore rams
 - d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
 - e. Confirm shut-in
 - f. Notify toolpusher/company representative
 - g. Read and record the following:
 - i. SIDPP & SICP

- ii. Pit gain
 - iii. Time
- h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
 - a. Sound alarm (alert crew)
 - b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
 - c. If impossible to pull string clear of the stack:
 - d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
 - e. Space out drill string with tooljoint just beneath the upper variable bore ram
 - f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
 - g. Confirm shut-in
 - h. Notify toolpusher/company representative
 - i. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time
 - j. Regroup and identify forward plan

Long Lead_Well Planning

Remuda

Remuda North 25 ST 163H

Remuda North 25 ST 163H

OH

Plan: Plan1

Standard Planning Report

08 October, 2024

XTO Energy
Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Project	Remuda		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Remuda North 25 ST 163H				
Site Position:		Northing:	463,983.00 usft	Latitude:	32° 16' 29.926 N
From:	Map	Easting:	622,943.60 usft	Longitude:	103° 56' 7.958 W
Position Uncertainty:	3.0 usft	Slot Radius:	13-3/16 "		

Well	Remuda North 25 ST 163H					
Well Position	+N/-S	0.0 usft	Northing:	463,983.00 usft	Latitude:	32° 16' 29.926 N
	+E/-W	0.0 usft	Easting:	622,943.60 usft	Longitude:	103° 56' 7.958 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,059.0 usft
Grid Convergence:		0.21 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/8/2024	6.33	59.78	47,144.81216425

Design	Plan1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.63

Plan Survey Tool Program	Date	10/8/2024		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	19,056.2	Plan1 (OH)	XOM_R2OWSG MWD+IFR1+ OWSG MWD + IFR1 + Multi-Si

XTO Energy

Planning Report

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Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,553.4	9.07	254.02	3,551.5	-9.9	-34.4	2.00	2.00	0.00	254.02	
5,170.6	9.07	254.02	5,148.5	-80.0	-279.4	0.00	0.00	0.00	0.00	
5,624.0	0.00	0.00	5,600.0	-89.9	-313.9	2.00	-2.00	0.00	180.00	
10,591.8	0.00	0.00	10,567.8	-89.9	-313.9	0.00	0.00	0.00	0.00	
11,716.8	90.00	359.63	11,284.0	626.3	-318.5	8.00	0.00	0.00	359.63	FTP _163H
19,006.2	90.00	359.63	11,284.0	7,915.6	-365.8	0.00	0.00	0.00	0.00	LTP _163H
19,056.2	90.00	359.63	11,284.0	7,965.6	-366.1	0.00	0.00	0.00	0.00	BHL _163H

XTO Energy
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Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
Alluvium - SHL_163H									
203.0	0.00	0.00	203.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
323.0	0.00	0.00	323.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado/Top of Salt									
1,541.0	0.00	0.00	1,541.0	0.0	0.0	0.0	0.00	0.00	0.00
MB 126									
3,075.0	0.00	0.00	3,075.0	0.0	0.0	0.0	0.00	0.00	0.00
Base Salt									
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	2.00	254.02	3,200.0	-0.5	-1.7	-0.5	2.00	2.00	0.00
3,300.0	4.00	254.02	3,299.8	-1.9	-6.7	-1.9	2.00	2.00	0.00
3,301.0	4.02	254.02	3,300.8	-1.9	-6.8	-1.9	2.00	2.00	0.00
Delaware/Lamar									
3,327.0	4.54	254.02	3,326.8	-2.5	-8.6	-2.4	2.00	2.00	0.00
Bell Canyon									
3,400.0	6.00	254.02	3,399.5	-4.3	-15.1	-4.2	2.00	2.00	0.00
3,500.0	8.00	254.02	3,498.7	-7.7	-26.8	-7.5	2.00	2.00	0.00
3,553.4	9.07	254.02	3,551.5	-9.9	-34.4	-9.6	2.00	2.00	0.00
3,600.0	9.07	254.02	3,597.5	-11.9	-41.5	-11.6	0.00	0.00	0.00
3,700.0	9.07	254.02	3,696.3	-16.2	-56.6	-15.9	0.00	0.00	0.00
3,800.0	9.07	254.02	3,795.0	-20.6	-71.8	-20.1	0.00	0.00	0.00
3,900.0	9.07	254.02	3,893.8	-24.9	-86.9	-24.3	0.00	0.00	0.00
4,000.0	9.07	254.02	3,992.5	-29.2	-102.1	-28.6	0.00	0.00	0.00
4,100.0	9.07	254.02	4,091.3	-33.6	-117.2	-32.8	0.00	0.00	0.00
4,186.0	9.07	254.02	4,176.2	-37.3	-130.3	-36.5	0.00	0.00	0.00
Cherry Canyon									
4,200.0	9.07	254.02	4,190.0	-37.9	-132.4	-37.1	0.00	0.00	0.00
4,300.0	9.07	254.02	4,288.8	-42.3	-147.5	-41.3	0.00	0.00	0.00
4,400.0	9.07	254.02	4,387.5	-46.6	-162.7	-45.5	0.00	0.00	0.00
4,500.0	9.07	254.02	4,486.3	-50.9	-177.8	-49.8	0.00	0.00	0.00
4,600.0	9.07	254.02	4,585.0	-55.3	-193.0	-54.0	0.00	0.00	0.00
4,700.0	9.07	254.02	4,683.8	-59.6	-208.1	-58.3	0.00	0.00	0.00
4,800.0	9.07	254.02	4,782.5	-63.9	-223.3	-62.5	0.00	0.00	0.00
4,900.0	9.07	254.02	4,881.3	-68.3	-238.4	-66.7	0.00	0.00	0.00
5,000.0	9.07	254.02	4,980.0	-72.6	-253.6	-71.0	0.00	0.00	0.00
5,100.0	9.07	254.02	5,078.8	-77.0	-268.7	-75.2	0.00	0.00	0.00
5,170.6	9.07	254.02	5,148.5	-80.0	-279.4	-78.2	0.00	0.00	0.00
5,200.0	8.48	254.02	5,177.6	-81.3	-283.7	-79.4	2.00	-2.00	0.00
5,300.0	6.48	254.02	5,276.7	-84.8	-296.3	-82.9	2.00	-2.00	0.00
5,400.0	4.48	254.02	5,376.2	-87.5	-305.4	-85.5	2.00	-2.00	0.00
5,500.0	2.48	254.02	5,476.0	-89.1	-311.3	-87.1	2.00	-2.00	0.00
5,600.0	0.48	254.02	5,576.0	-89.9	-313.8	-87.8	2.00	-2.00	0.00
5,624.0	0.00	0.00	5,600.0	-89.9	-313.9	-87.9	2.00	-2.00	0.00
5,739.0	0.00	0.00	5,715.0	-89.9	-313.9	-87.9	0.00	0.00	0.00
Brushy Canyon Ss.									
7,001.0	0.00	0.00	6,977.0	-89.9	-313.9	-87.9	0.00	0.00	0.00
Bone Spring Lm.									
7,103.0	0.00	0.00	7,079.0	-89.9	-313.9	-87.9	0.00	0.00	0.00
Avalon Ss.									
7,182.0	0.00	0.00	7,158.0	-89.9	-313.9	-87.9	0.00	0.00	0.00

XTO Energy
Planning Report

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Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
Upper Avalon Carb.										
7,373.0	0.00	0.00	7,349.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Upper Avalon Sh.										
7,508.0	0.00	0.00	7,484.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Middle Avalon Carb.										
7,737.0	0.00	0.00	7,713.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Lw. Avalon Sh.										
7,997.0	0.00	0.00	7,973.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
First Bone Spring Carb.										
8,065.0	0.00	0.00	8,041.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
First Bone Spring Ss.										
8,508.0	0.00	0.00	8,484.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring Carb.										
8,888.0	0.00	0.00	8,864.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring A Ss.										
9,015.0	0.00	0.00	8,991.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring A/B Carb.										
9,035.0	0.00	0.00	9,011.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring B Ss.										
9,240.0	0.00	0.00	9,216.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Carb.										
9,522.0	0.00	0.00	9,498.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Harkey Ss.										
9,539.0	0.00	0.00	9,515.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Shale										
9,979.0	0.00	0.00	9,955.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Ss.										
10,243.0	0.00	0.00	10,219.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Ss.- Red Hills										
10,299.0	0.00	0.00	10,275.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp Shale										
10,342.0	0.00	0.00	10,318.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp X Ss.										
10,419.0	0.00	0.00	10,395.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp Y Ss.										
10,449.0	0.00	0.00	10,425.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp A										
10,591.8	0.00	0.00	10,567.8	-89.9	-313.9	-87.9	0.00	0.00	0.00	
10,600.0	0.66	359.63	10,576.0	-89.8	-313.9	-87.8	8.00	8.00	0.00	
10,700.0	8.66	359.63	10,675.6	-81.7	-313.9	-79.7	8.00	8.00	0.00	
10,757.0	13.22	359.63	10,731.5	-70.9	-314.0	-68.9	8.00	8.00	0.00	
Wolfcamp B										
10,800.0	16.66	359.63	10,773.1	-59.8	-314.0	-57.8	8.00	8.00	0.00	
10,900.0	24.66	359.63	10,866.6	-24.6	-314.3	-22.6	8.00	8.00	0.00	
10,951.0	28.74	359.63	10,912.1	-1.7	-314.4	0.4	8.00	8.00	0.00	
Wolfcamp C										
11,000.0	32.66	359.63	10,954.3	23.3	-314.6	25.4	8.00	8.00	0.00	
11,100.0	40.66	359.63	11,034.4	83.0	-315.0	85.0	8.00	8.00	0.00	
11,109.0	41.38	359.63	11,041.2	88.9	-315.0	90.9	8.00	8.00	0.00	
Wolfcamp D										
11,200.0	48.66	359.63	11,105.5	153.2	-315.4	155.2	8.00	8.00	0.00	

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,284.0	55.38	359.63	11,157.2	219.4	-315.9	221.4	8.00	8.00	0.00
Landing Point									
11,300.0	56.66	359.63	11,166.1	232.6	-315.9	234.7	8.00	8.00	0.00
11,400.0	64.66	359.63	11,215.1	319.7	-316.5	321.8	8.00	8.00	0.00
11,500.0	72.66	359.63	11,251.4	412.8	-317.1	414.8	8.00	8.00	0.00
Wolfcamp F									
11,600.0	80.66	359.63	11,274.5	510.0	-317.7	512.1	8.00	8.00	0.00
11,700.0	88.66	359.63	11,283.8	609.5	-318.4	611.6	8.00	8.00	0.00
11,716.8	90.00	359.63	11,284.0	626.3	-318.5	628.3	8.00	8.00	0.00
FTP_163H									
11,800.0	90.00	359.63	11,284.0	709.5	-319.0	711.6	0.00	0.00	0.00
11,900.0	90.00	359.63	11,284.0	809.5	-319.7	811.6	0.00	0.00	0.00
12,000.0	90.00	359.63	11,284.0	909.5	-320.3	911.6	0.00	0.00	0.00
12,100.0	90.00	359.63	11,284.0	1,009.5	-321.0	1,011.6	0.00	0.00	0.00
12,200.0	90.00	359.63	11,284.0	1,109.5	-321.6	1,111.6	0.00	0.00	0.00
12,300.0	90.00	359.63	11,284.0	1,209.5	-322.3	1,211.6	0.00	0.00	0.00
12,400.0	90.00	359.63	11,284.0	1,309.5	-322.9	1,311.6	0.00	0.00	0.00
12,500.0	90.00	359.63	11,284.0	1,409.5	-323.6	1,411.6	0.00	0.00	0.00
12,600.0	90.00	359.63	11,284.0	1,509.5	-324.2	1,511.6	0.00	0.00	0.00
12,700.0	90.00	359.63	11,284.0	1,609.5	-324.9	1,611.6	0.00	0.00	0.00
12,800.0	90.00	359.63	11,284.0	1,709.5	-325.5	1,711.6	0.00	0.00	0.00
12,900.0	90.00	359.63	11,284.0	1,809.5	-326.2	1,811.6	0.00	0.00	0.00
13,000.0	90.00	359.63	11,284.0	1,909.5	-326.8	1,911.6	0.00	0.00	0.00
13,100.0	90.00	359.63	11,284.0	2,009.5	-327.5	2,011.6	0.00	0.00	0.00
13,200.0	90.00	359.63	11,284.0	2,109.5	-328.1	2,111.6	0.00	0.00	0.00
13,300.0	90.00	359.63	11,284.0	2,209.5	-328.8	2,211.6	0.00	0.00	0.00
13,400.0	90.00	359.63	11,284.0	2,309.5	-329.4	2,311.6	0.00	0.00	0.00
13,500.0	90.00	359.63	11,284.0	2,409.5	-330.1	2,411.6	0.00	0.00	0.00
13,600.0	90.00	359.63	11,284.0	2,509.5	-330.7	2,511.6	0.00	0.00	0.00
13,700.0	90.00	359.63	11,284.0	2,609.5	-331.4	2,611.6	0.00	0.00	0.00
13,800.0	90.00	359.63	11,284.0	2,709.5	-332.0	2,711.6	0.00	0.00	0.00
13,900.0	90.00	359.63	11,284.0	2,809.5	-332.7	2,811.6	0.00	0.00	0.00
14,000.0	90.00	359.63	11,284.0	2,909.5	-333.3	2,911.6	0.00	0.00	0.00
14,100.0	90.00	359.63	11,284.0	3,009.5	-334.0	3,011.6	0.00	0.00	0.00
14,200.0	90.00	359.63	11,284.0	3,109.5	-334.6	3,111.6	0.00	0.00	0.00
14,300.0	90.00	359.63	11,284.0	3,209.5	-335.3	3,211.6	0.00	0.00	0.00
14,400.0	90.00	359.63	11,284.0	3,309.5	-335.9	3,311.6	0.00	0.00	0.00
14,500.0	90.00	359.63	11,284.0	3,409.4	-336.6	3,411.6	0.00	0.00	0.00
14,600.0	90.00	359.63	11,284.0	3,509.4	-337.2	3,511.6	0.00	0.00	0.00
14,700.0	90.00	359.63	11,284.0	3,609.4	-337.9	3,611.6	0.00	0.00	0.00
14,800.0	90.00	359.63	11,284.0	3,709.4	-338.5	3,711.6	0.00	0.00	0.00
14,900.0	90.00	359.63	11,284.0	3,809.4	-339.2	3,811.6	0.00	0.00	0.00
15,000.0	90.00	359.63	11,284.0	3,909.4	-339.8	3,911.6	0.00	0.00	0.00
15,100.0	90.00	359.63	11,284.0	4,009.4	-340.5	4,011.6	0.00	0.00	0.00
15,200.0	90.00	359.63	11,284.0	4,109.4	-341.1	4,111.6	0.00	0.00	0.00
15,300.0	90.00	359.63	11,284.0	4,209.4	-341.8	4,211.6	0.00	0.00	0.00
15,400.0	90.00	359.63	11,284.0	4,309.4	-342.4	4,311.6	0.00	0.00	0.00
15,500.0	90.00	359.63	11,284.0	4,409.4	-343.0	4,411.6	0.00	0.00	0.00
15,600.0	90.00	359.63	11,284.0	4,509.4	-343.7	4,511.6	0.00	0.00	0.00
15,700.0	90.00	359.63	11,284.0	4,609.4	-344.3	4,611.6	0.00	0.00	0.00
15,800.0	90.00	359.63	11,284.0	4,709.4	-345.0	4,711.6	0.00	0.00	0.00
15,900.0	90.00	359.63	11,284.0	4,809.4	-345.6	4,811.6	0.00	0.00	0.00
16,000.0	90.00	359.63	11,284.0	4,909.4	-346.3	4,911.6	0.00	0.00	0.00

XTO Energy
Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,100.0	90.00	359.63	11,284.0	5,009.4	-346.9	5,011.6	0.00	0.00	0.00
16,200.0	90.00	359.63	11,284.0	5,109.4	-347.6	5,111.6	0.00	0.00	0.00
16,300.0	90.00	359.63	11,284.0	5,209.4	-348.2	5,211.6	0.00	0.00	0.00
16,400.0	90.00	359.63	11,284.0	5,309.4	-348.9	5,311.6	0.00	0.00	0.00
16,500.0	90.00	359.63	11,284.0	5,409.4	-349.5	5,411.6	0.00	0.00	0.00
16,600.0	90.00	359.63	11,284.0	5,509.4	-350.2	5,511.6	0.00	0.00	0.00
16,700.0	90.00	359.63	11,284.0	5,609.4	-350.8	5,611.6	0.00	0.00	0.00
16,800.0	90.00	359.63	11,284.0	5,709.4	-351.5	5,711.6	0.00	0.00	0.00
16,900.0	90.00	359.63	11,284.0	5,809.4	-352.1	5,811.6	0.00	0.00	0.00
17,000.0	90.00	359.63	11,284.0	5,909.4	-352.8	5,911.6	0.00	0.00	0.00
17,100.0	90.00	359.63	11,284.0	6,009.4	-353.4	6,011.6	0.00	0.00	0.00
17,200.0	90.00	359.63	11,284.0	6,109.4	-354.1	6,111.6	0.00	0.00	0.00
17,300.0	90.00	359.63	11,284.0	6,209.4	-354.7	6,211.6	0.00	0.00	0.00
17,400.0	90.00	359.63	11,284.0	6,309.4	-355.4	6,311.6	0.00	0.00	0.00
17,500.0	90.00	359.63	11,284.0	6,409.4	-356.0	6,411.6	0.00	0.00	0.00
17,600.0	90.00	359.63	11,284.0	6,509.4	-356.7	6,511.6	0.00	0.00	0.00
17,700.0	90.00	359.63	11,284.0	6,609.4	-357.3	6,611.6	0.00	0.00	0.00
17,800.0	90.00	359.63	11,284.0	6,709.4	-358.0	6,711.6	0.00	0.00	0.00
17,900.0	90.00	359.63	11,284.0	6,809.4	-358.6	6,811.6	0.00	0.00	0.00
18,000.0	90.00	359.63	11,284.0	6,909.4	-359.3	6,911.6	0.00	0.00	0.00
18,100.0	90.00	359.63	11,284.0	7,009.4	-359.9	7,011.6	0.00	0.00	0.00
18,200.0	90.00	359.63	11,284.0	7,109.4	-360.6	7,111.6	0.00	0.00	0.00
18,300.0	90.00	359.63	11,284.0	7,209.4	-361.2	7,211.6	0.00	0.00	0.00
18,400.0	90.00	359.63	11,284.0	7,309.4	-361.9	7,311.6	0.00	0.00	0.00
18,500.0	90.00	359.63	11,284.0	7,409.4	-362.5	7,411.6	0.00	0.00	0.00
18,600.0	90.00	359.63	11,284.0	7,509.4	-363.2	7,511.6	0.00	0.00	0.00
18,700.0	90.00	359.63	11,284.0	7,609.4	-363.8	7,611.6	0.00	0.00	0.00
18,800.0	90.00	359.63	11,284.0	7,709.4	-364.5	7,711.6	0.00	0.00	0.00
18,900.0	90.00	359.63	11,284.0	7,809.4	-365.1	7,811.6	0.00	0.00	0.00
19,000.0	90.00	359.63	11,284.0	7,909.4	-365.8	7,911.6	0.00	0.00	0.00
19,006.2	90.00	359.63	11,284.0	7,915.6	-365.8	7,917.8	0.00	0.00	0.00
LTP_163H									
19,056.2	90.00	359.63	11,284.0	7,965.6	-366.1	7,967.8	0.00	0.00	0.00
BHL_163H									

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
SHL_163H	0.00	0.00	0.0	0.0	0.0	463,983.00	622,943.60	32° 16' 29.926 N	103° 56' 7.958 W
- plan hits target center									
- Point									
FTP_163H	0.00	0.00	11,284.0	626.3	-318.5	464,609.30	622,625.10	32° 16' 36.136 N	103° 56' 11.641 W
- plan hits target center									
- Point									
BHL_163H	0.00	0.00	11,284.0	7,965.6	-366.1	471,948.60	622,577.50	32° 17' 48.768 N	103° 56' 11.879 W
- plan hits target center									
- Point									
LTP_163H	0.00	0.00	11,284.0	7,915.6	-365.8	471,898.60	622,577.80	32° 17' 48.273 N	103° 56' 11.878 W
- plan hits target center									
- Point									

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.0	0.0	Alluvium				
203.0	203.0	Rustler				
323.0	323.0	Salado/Top of Salt				
1,541.0	1,541.0	MB 126				
3,075.0	3,075.0	Base Salt				
3,301.0	3,300.8	Delaware/Lamar				
3,327.0	3,326.8	Bell Canyon				
4,186.0	4,176.2	Cherry Canyon				
5,739.0	5,715.0	Brushy Canyon Ss.				
7,001.0	6,977.0	Bone Spring Lm.				
7,103.0	7,079.0	Avalon Ss.				
7,182.0	7,158.0	Upper Avalon Carb.				
7,373.0	7,349.0	Upper Avalon Sh.				
7,508.0	7,484.0	Middle Avalon Carb.				
7,737.0	7,713.0	Lw. Avalon Sh.				
7,997.0	7,973.0	First Bone Spring Carb.				
8,065.0	8,041.0	First Bone Spring Ss.				
8,508.0	8,484.0	Second Bone Spring Carb.				
8,888.0	8,864.0	Second Bone Spring A Ss.				
9,015.0	8,991.0	Second Bone Spring A/B Carb.				
9,035.0	9,011.0	Second Bone Spring B Ss.				
9,240.0	9,216.0	Third Bone Spring Carb.				
9,522.0	9,498.0	Harkey Ss.				
9,539.0	9,515.0	Third Bone Spring Shale				
9,979.0	9,955.0	Third Bone Spring Ss.				
10,243.0	10,219.0	Third Bone Spring Ss.- Red Hills				
10,299.0	10,275.0	Wolfcamp Shale				
10,342.0	10,318.0	Wolfcamp X Ss.				
10,419.0	10,395.0	Wolfcamp Y Ss.				
10,449.0	10,425.0	Wolfcamp A				
10,757.0	10,731.5	Wolfcamp B				
10,951.0	10,912.1	Wolfcamp C				
11,109.0	11,041.2	Wolfcamp D				
11,284.0	11,157.2	Landing Point				
11,500.0	11,251.4	Wolfcamp F				



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:

Will Dacus, Drilling Manager	832-948-5021
Brian Dunn, Drilling Supervisor	832-653-0490
Robert Bartels, Construction Execution Planner	406-478-3617
Andy Owens, EH & S Manager	903-245-2602
Frank Fuentes, Production Foreman	575-689-3363

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:

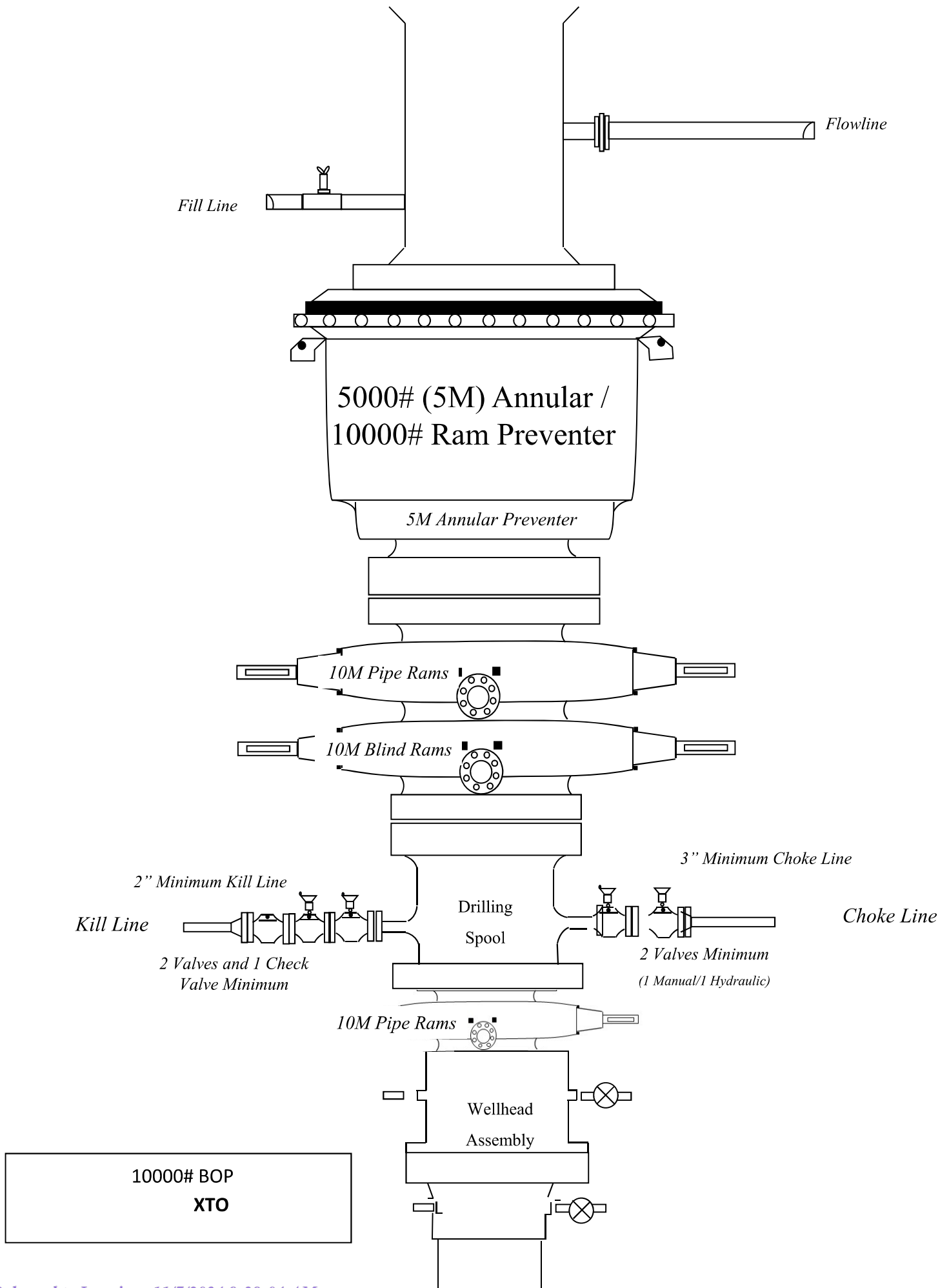
	911
Carlsbad Medical Emergency	575-885-2111
Eunice Medical Emergency	575-394-2112
Hobbs Medical Emergency	575-397-9308
Jal Medical Emergency	575-395-2221
Lovington Medical Emergency	575-396-2359

AGENT NOTIFICATIONS:**For Lea County:**

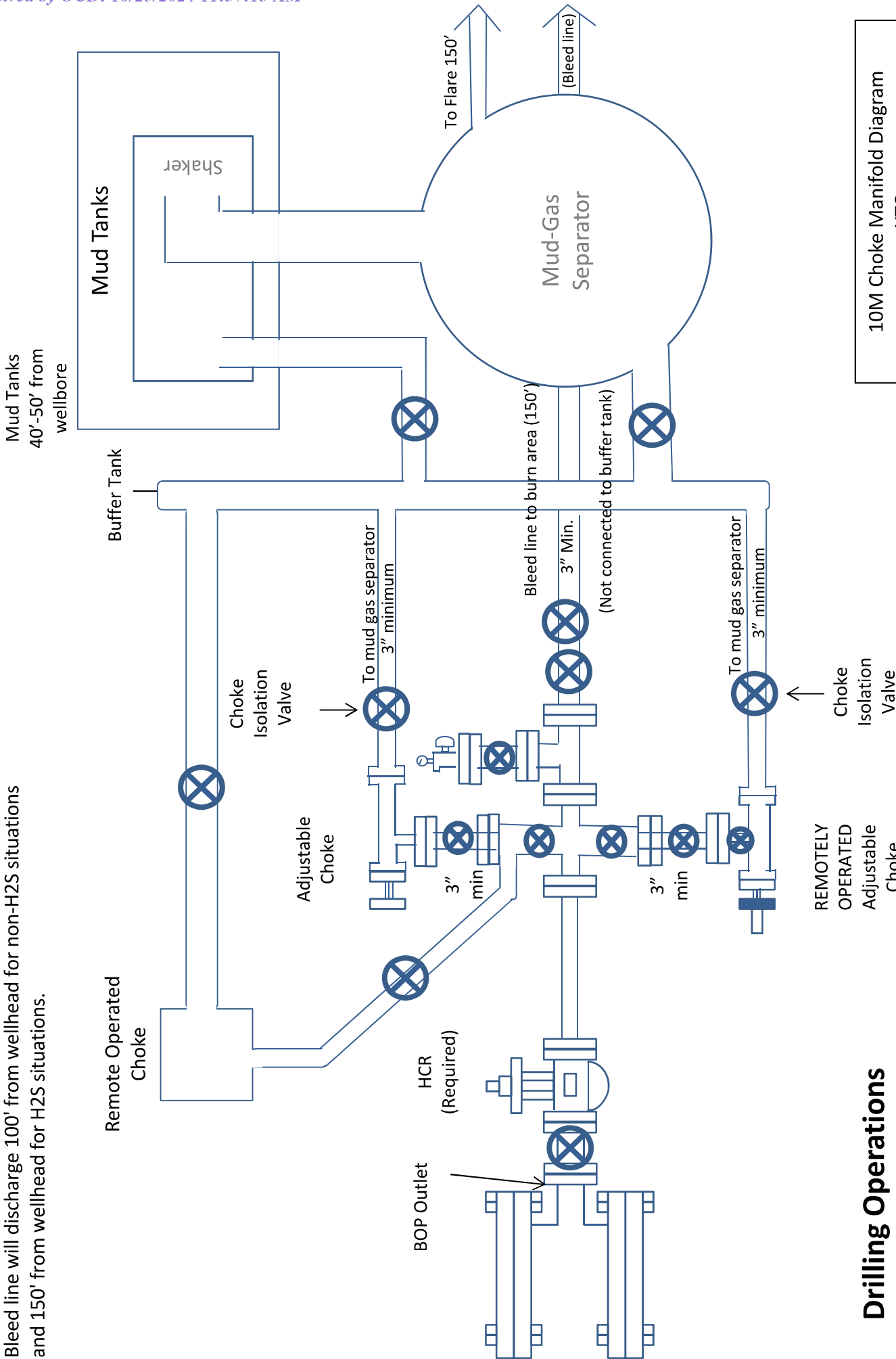
Bureau of Land Management – Hobbs	575-393-3612
New Mexico Oil Conservation Division – Hobbs	575-393-6161

For Eddy County:

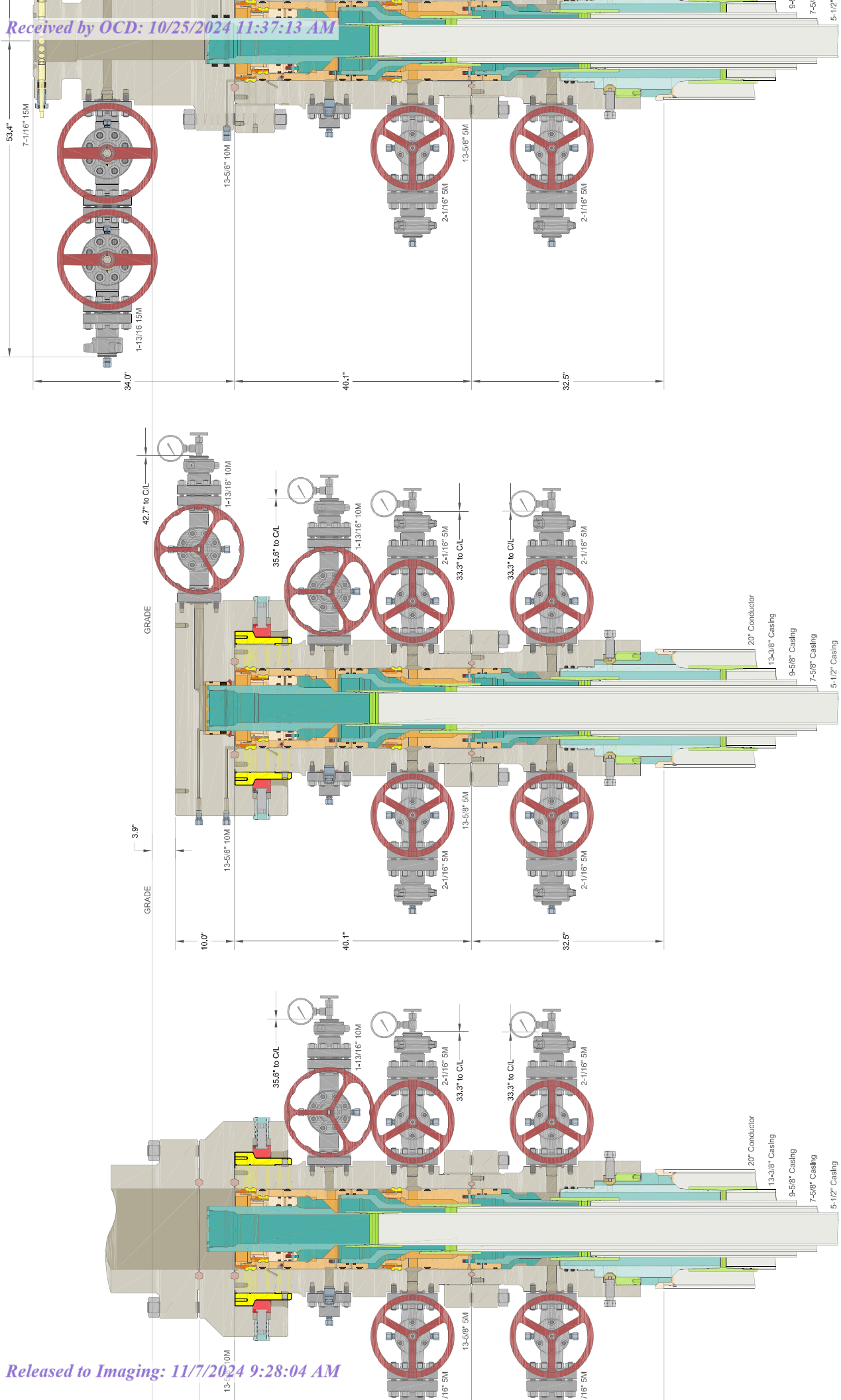
Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283



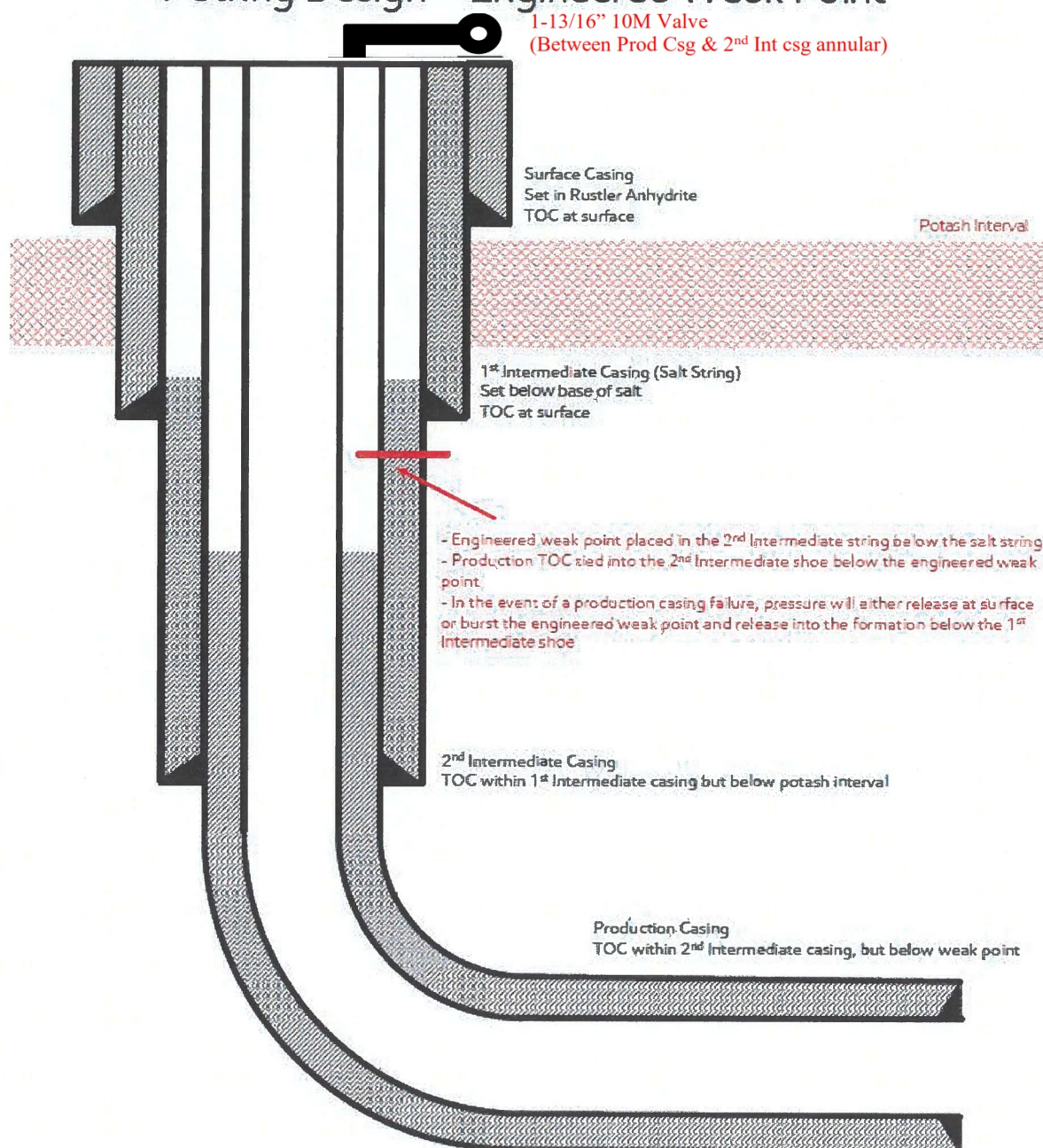
Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



**Drilling Operations
Choke Manifold
10M Service**



4-String Design – Engineered Weak Point



[Figure F] 4 String – 2nd Intermediate casing engineered weak point

31592723_v1

Update May 2024:

XTO is aware of the R111-Q update and will comply with these requirements including (but not limited to):

- 1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
- 2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
- 3) Bradenhead squeeze to be completed within 180 days to tie back TOC to salt string at least 500ft but with top below Marker Bed 126
- 4) Production cement to be tied back no less than 500ft inside previous casing shoe

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 Permian Operating, LLC OGRID: 373075 Date: 09/24/2024

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	3 yr Anticipated decline Oil BBL/D	Anticipated Gas MCF/D	3 yr anticipated decline Gas MCF/D	Anticipated Produced Water BBL/D	3 yr anticipated decline Water BBL/D
Remuda North 25 ST 161H	TBD	25 T23S R29E	2375 FSL, 585 FWL	1,100	100	3,250	500	3,500	350
Remuda North 25 ST 501H	TBD	25 T23S R29E	2375 FSL, 615 FWL	900	100	1,250	300	2,250	250
Remuda North 25 ST 162H	TBD	25 T23S R29E	2374 FSL, 645 FWL	1,100	100	3,250	500	3,500	350
Remuda North 25 ST 163H	TBD	25 T23S R29E	2375 FSL, 1994 FEL	1,100	100	3,250	500	3,500	350
Remuda North 25 ST 502H	TBD	25 T23S R29E	2374 FSL, 1964 FEL	900	100	1,250	300	2,250	250

IV. Central Delivery Point Name: _____ Raider Compressor Station _____ [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 North 25 ST 161H	TBD	TBD	TBD	TBD	TBD	TBD

Remuda North 25 ST 501H	TBD	TBD	TBD	TBD	TBD	TBD
Remuda North 25 ST 162H	TBD	TBD	TBD	TBD	TBD	TBD
Remuda North 25 ST 163H	TBD	TBD	TBD	TBD	TBD	TBD
Remuda North 25 ST 502H	TBD	TBD	TBD	TBD	TBD	TBD

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:

Adrian Baker

Title:

Regulatory Advisor

E-mail Address:

adrian.baker@exxonmobil.com

Date:

10/10/24

Phone:

4322363808

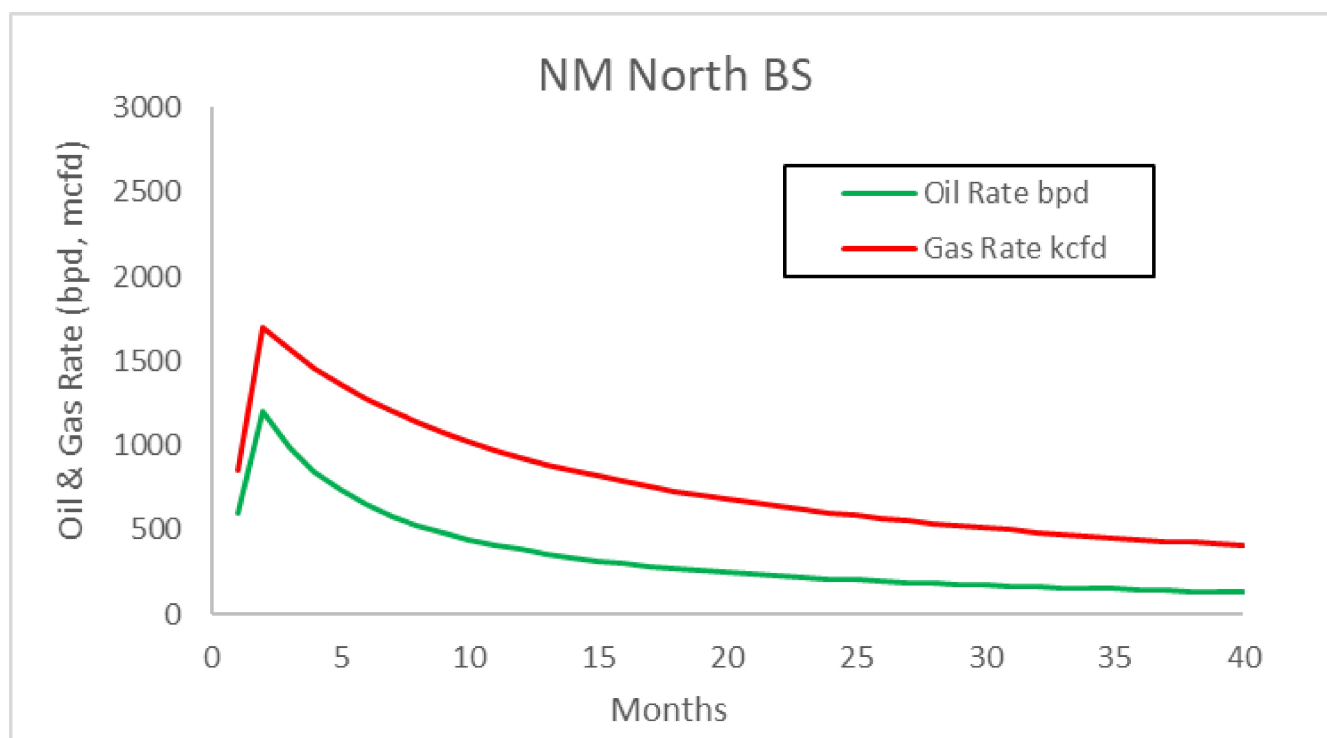
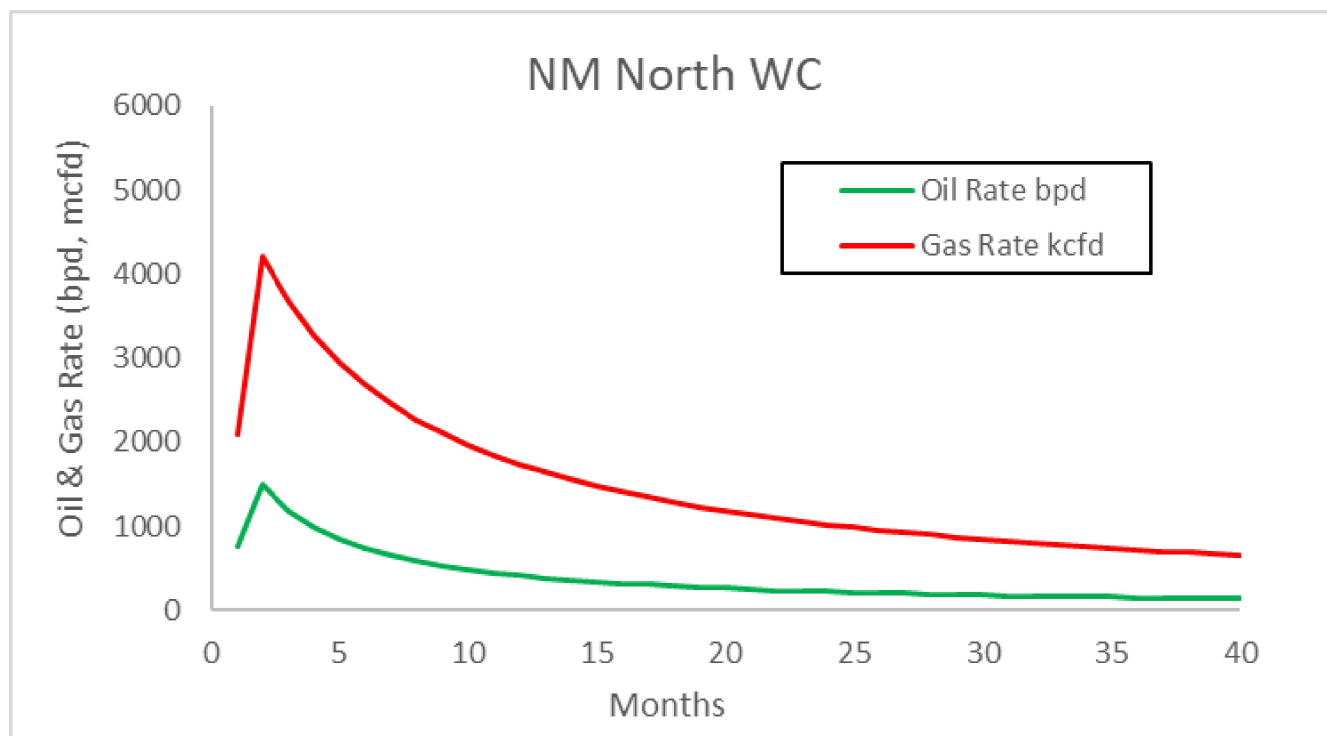
OIL CONSERVATION DIVISION**(Only applicable when submitted as a standalone form)**

Approved By:

Title:

Approval Date:

Conditions of Approval:



VI. Separation Equipment:

XTO Permian Operating LLC. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. XTO utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.

VII. Operational Practices

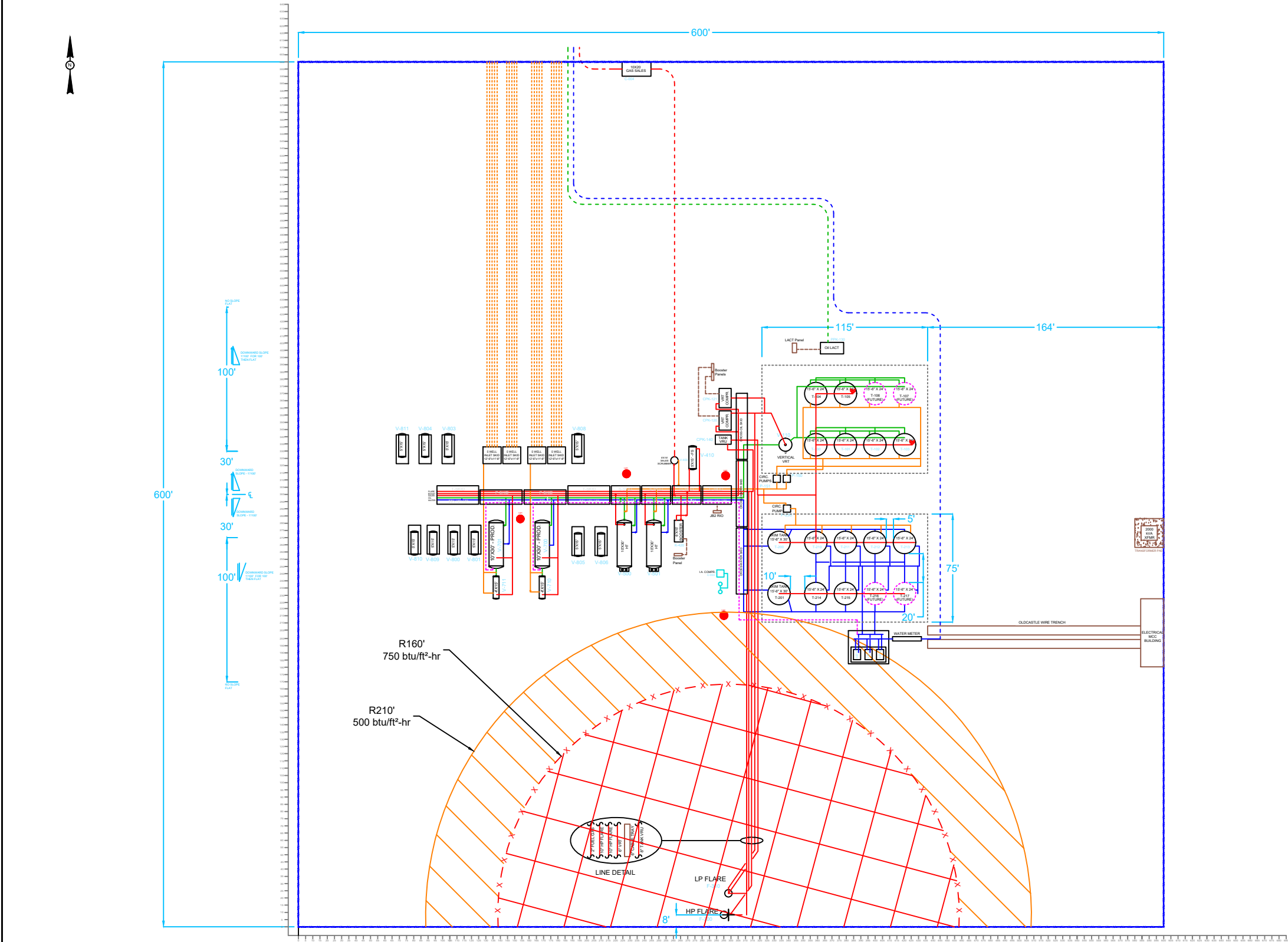
XTO Permian Operating LLC will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO Permian Operating LLC will turn operations to onsite separation vessels and flow to the gathering pipeline.
- During production operations, XTO Permian Operating LLC will take every practical effort to minimize waste of natural gas through venting and flaring by:
 - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
 - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
 - Flaring in lieu of venting, where technically feasible
 - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
 - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
 - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
 - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications

- Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible.

VIII. Best Management Practices during Maintenance

XTO Permian Operating LLC. will utilize best management practices to minimize venting during active and planned maintenance activities. XTO is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high-pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. XTO will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.



NOTES:
1)
2)

ISSUED FOR REVIEW

DATE: _____
SIGN: _____

Revision	Description of Change	Date	By	<div><div>XTOENERGY</div><div>REMUDA 500 TANK BATTERY COUNTY</div></div>							
0	ISSUED FOR REVIEW	03-01-18	MFF	PLOT PLAN							
1	FACILITY UPGRADE, REMOVED FUTURE TESTERS	12-11-20	JSF	XTO - DB - REM5 - 00CTB - PLOT - 000 - 0101 - 1							
				Company	Division	Field	Facility	Doc Type	Equip	Doc #	Revision

Long Lead_Well Planning

Remuda

Remuda North 25 ST 163H

Remuda North 25 ST 163H

OH

Plan: Plan1

Standard Planning Report

08 October, 2024

XTO Energy
Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Project	Remuda		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Remuda North 25 ST 163H		
Site Position:		Northing:	463,983.00 usft
From:	Map	Easting:	622,943.60 usft
Position Uncertainty:	3.0 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 16' 29.926 N
		Longitude:	103° 56' 7.958 W

Well	Remuda North 25 ST 163H					
Well Position	+N/-S	0.0 usft	Northing:	463,983.00 usft	Latitude:	32° 16' 29.926 N
	+E/-W	0.0 usft	Easting:	622,943.60 usft	Longitude:	103° 56' 7.958 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,059.0 usft
Grid Convergence:		0.21 °				

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	10/8/2024	6.33	59.78	47,144.81216425

Design	Plan1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	359.63	

Plan Survey Tool Program	Date	10/8/2024			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks	
1	0.0	19,056.2	Plan1 (OH)	XOM_R2OWSG MWD+IFR1+	
				OWSG MWD + IFR1 + Multi-SI	

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,553.4	9.07	254.02	3,551.5	-9.9	-34.4	2.00	2.00	0.00	254.02	
5,170.6	9.07	254.02	5,148.5	-80.0	-279.4	0.00	0.00	0.00	0.00	
5,624.0	0.00	0.00	5,600.0	-89.9	-313.9	2.00	-2.00	0.00	180.00	
10,591.8	0.00	0.00	10,567.8	-89.9	-313.9	0.00	0.00	0.00	0.00	
11,716.8	90.00	359.63	11,284.0	626.3	-318.5	8.00	0.00	0.00	359.63	FTP _163H
19,006.2	90.00	359.63	11,284.0	7,915.6	-365.8	0.00	0.00	0.00	0.00	LTP _163H
19,056.2	90.00	359.63	11,284.0	7,965.6	-366.1	0.00	0.00	0.00	0.00	BHL _163H

XTO Energy
Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
Alluvium - SHL_163H									
203.0	0.00	0.00	203.0	0.0	0.0	0.0	0.00	0.00	0.00
Rustler									
323.0	0.00	0.00	323.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado/Top of Salt									
1,541.0	0.00	0.00	1,541.0	0.0	0.0	0.0	0.00	0.00	0.00
MB 126									
3,075.0	0.00	0.00	3,075.0	0.0	0.0	0.0	0.00	0.00	0.00
Base Salt									
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	2.00	254.02	3,200.0	-0.5	-1.7	-0.5	2.00	2.00	0.00
3,300.0	4.00	254.02	3,299.8	-1.9	-6.7	-1.9	2.00	2.00	0.00
3,301.0	4.02	254.02	3,300.8	-1.9	-6.8	-1.9	2.00	2.00	0.00
Delaware/Lamar									
3,327.0	4.54	254.02	3,326.8	-2.5	-8.6	-2.4	2.00	2.00	0.00
Bell Canyon									
3,400.0	6.00	254.02	3,399.5	-4.3	-15.1	-4.2	2.00	2.00	0.00
3,500.0	8.00	254.02	3,498.7	-7.7	-26.8	-7.5	2.00	2.00	0.00
3,553.4	9.07	254.02	3,551.5	-9.9	-34.4	-9.6	2.00	2.00	0.00
3,600.0	9.07	254.02	3,597.5	-11.9	-41.5	-11.6	0.00	0.00	0.00
3,700.0	9.07	254.02	3,696.3	-16.2	-56.6	-15.9	0.00	0.00	0.00
3,800.0	9.07	254.02	3,795.0	-20.6	-71.8	-20.1	0.00	0.00	0.00
3,900.0	9.07	254.02	3,893.8	-24.9	-86.9	-24.3	0.00	0.00	0.00
4,000.0	9.07	254.02	3,992.5	-29.2	-102.1	-28.6	0.00	0.00	0.00
4,100.0	9.07	254.02	4,091.3	-33.6	-117.2	-32.8	0.00	0.00	0.00
4,186.0	9.07	254.02	4,176.2	-37.3	-130.3	-36.5	0.00	0.00	0.00
Cherry Canyon									
4,200.0	9.07	254.02	4,190.0	-37.9	-132.4	-37.1	0.00	0.00	0.00
4,300.0	9.07	254.02	4,288.8	-42.3	-147.5	-41.3	0.00	0.00	0.00
4,400.0	9.07	254.02	4,387.5	-46.6	-162.7	-45.5	0.00	0.00	0.00
4,500.0	9.07	254.02	4,486.3	-50.9	-177.8	-49.8	0.00	0.00	0.00
4,600.0	9.07	254.02	4,585.0	-55.3	-193.0	-54.0	0.00	0.00	0.00
4,700.0	9.07	254.02	4,683.8	-59.6	-208.1	-58.3	0.00	0.00	0.00
4,800.0	9.07	254.02	4,782.5	-63.9	-223.3	-62.5	0.00	0.00	0.00
4,900.0	9.07	254.02	4,881.3	-68.3	-238.4	-66.7	0.00	0.00	0.00
5,000.0	9.07	254.02	4,980.0	-72.6	-253.6	-71.0	0.00	0.00	0.00
5,100.0	9.07	254.02	5,078.8	-77.0	-268.7	-75.2	0.00	0.00	0.00
5,170.6	9.07	254.02	5,148.5	-80.0	-279.4	-78.2	0.00	0.00	0.00
5,200.0	8.48	254.02	5,177.6	-81.3	-283.7	-79.4	2.00	-2.00	0.00
5,300.0	6.48	254.02	5,276.7	-84.8	-296.3	-82.9	2.00	-2.00	0.00
5,400.0	4.48	254.02	5,376.2	-87.5	-305.4	-85.5	2.00	-2.00	0.00
5,500.0	2.48	254.02	5,476.0	-89.1	-311.3	-87.1	2.00	-2.00	0.00
5,600.0	0.48	254.02	5,576.0	-89.9	-313.8	-87.8	2.00	-2.00	0.00
5,624.0	0.00	0.00	5,600.0	-89.9	-313.9	-87.9	2.00	-2.00	0.00
5,739.0	0.00	0.00	5,715.0	-89.9	-313.9	-87.9	0.00	0.00	0.00
Brushy Canyon Ss.									
7,001.0	0.00	0.00	6,977.0	-89.9	-313.9	-87.9	0.00	0.00	0.00
Bone Spring Lm.									
7,103.0	0.00	0.00	7,079.0	-89.9	-313.9	-87.9	0.00	0.00	0.00
Avalon Ss.									
7,182.0	0.00	0.00	7,158.0	-89.9	-313.9	-87.9	0.00	0.00	0.00

XTO Energy
Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
Upper Avalon Carb.										
7,373.0	0.00	0.00	7,349.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Upper Avalon Sh.										
7,508.0	0.00	0.00	7,484.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Middle Avalon Carb.										
7,737.0	0.00	0.00	7,713.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Lw. Avalon Sh.										
7,997.0	0.00	0.00	7,973.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
First Bone Spring Carb.										
8,065.0	0.00	0.00	8,041.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
First Bone Spring Ss.										
8,508.0	0.00	0.00	8,484.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring Carb.										
8,888.0	0.00	0.00	8,864.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring A Ss.										
9,015.0	0.00	0.00	8,991.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring A/B Carb.										
9,035.0	0.00	0.00	9,011.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Second Bone Spring B Ss.										
9,240.0	0.00	0.00	9,216.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Carb.										
9,522.0	0.00	0.00	9,498.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Harkey Ss.										
9,539.0	0.00	0.00	9,515.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Shale										
9,979.0	0.00	0.00	9,955.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Ss.										
10,243.0	0.00	0.00	10,219.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Third Bone Spring Ss.- Red Hills										
10,299.0	0.00	0.00	10,275.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp Shale										
10,342.0	0.00	0.00	10,318.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp X Ss.										
10,419.0	0.00	0.00	10,395.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp Y Ss.										
10,449.0	0.00	0.00	10,425.0	-89.9	-313.9	-87.9	0.00	0.00	0.00	
Wolfcamp A										
10,591.8	0.00	0.00	10,567.8	-89.9	-313.9	-87.9	0.00	0.00	0.00	
10,600.0	0.66	359.63	10,576.0	-89.8	-313.9	-87.8	8.00	8.00	0.00	
10,700.0	8.66	359.63	10,675.6	-81.7	-313.9	-79.7	8.00	8.00	0.00	
10,757.0	13.22	359.63	10,731.5	-70.9	-314.0	-68.9	8.00	8.00	0.00	
Wolfcamp B										
10,800.0	16.66	359.63	10,773.1	-59.8	-314.0	-57.8	8.00	8.00	0.00	
10,900.0	24.66	359.63	10,866.6	-24.6	-314.3	-22.6	8.00	8.00	0.00	
10,951.0	28.74	359.63	10,912.1	-1.7	-314.4	0.4	8.00	8.00	0.00	
Wolfcamp C										
11,000.0	32.66	359.63	10,954.3	23.3	-314.6	25.4	8.00	8.00	0.00	
11,100.0	40.66	359.63	11,034.4	83.0	-315.0	85.0	8.00	8.00	0.00	
11,109.0	41.38	359.63	11,041.2	88.9	-315.0	90.9	8.00	8.00	0.00	
Wolfcamp D										
11,200.0	48.66	359.63	11,105.5	153.2	-315.4	155.2	8.00	8.00	0.00	

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,284.0	55.38	359.63	11,157.2	219.4	-315.9	221.4	8.00	8.00	0.00
Landing Point									
11,300.0	56.66	359.63	11,166.1	232.6	-315.9	234.7	8.00	8.00	0.00
11,400.0	64.66	359.63	11,215.1	319.7	-316.5	321.8	8.00	8.00	0.00
11,500.0	72.66	359.63	11,251.4	412.8	-317.1	414.8	8.00	8.00	0.00
Wolfcamp F									
11,600.0	80.66	359.63	11,274.5	510.0	-317.7	512.1	8.00	8.00	0.00
11,700.0	88.66	359.63	11,283.8	609.5	-318.4	611.6	8.00	8.00	0.00
11,716.8	90.00	359.63	11,284.0	626.3	-318.5	628.3	8.00	8.00	0.00
FTP_163H									
11,800.0	90.00	359.63	11,284.0	709.5	-319.0	711.6	0.00	0.00	0.00
11,900.0	90.00	359.63	11,284.0	809.5	-319.7	811.6	0.00	0.00	0.00
12,000.0	90.00	359.63	11,284.0	909.5	-320.3	911.6	0.00	0.00	0.00
12,100.0	90.00	359.63	11,284.0	1,009.5	-321.0	1,011.6	0.00	0.00	0.00
12,200.0	90.00	359.63	11,284.0	1,109.5	-321.6	1,111.6	0.00	0.00	0.00
12,300.0	90.00	359.63	11,284.0	1,209.5	-322.3	1,211.6	0.00	0.00	0.00
12,400.0	90.00	359.63	11,284.0	1,309.5	-322.9	1,311.6	0.00	0.00	0.00
12,500.0	90.00	359.63	11,284.0	1,409.5	-323.6	1,411.6	0.00	0.00	0.00
12,600.0	90.00	359.63	11,284.0	1,509.5	-324.2	1,511.6	0.00	0.00	0.00
12,700.0	90.00	359.63	11,284.0	1,609.5	-324.9	1,611.6	0.00	0.00	0.00
12,800.0	90.00	359.63	11,284.0	1,709.5	-325.5	1,711.6	0.00	0.00	0.00
12,900.0	90.00	359.63	11,284.0	1,809.5	-326.2	1,811.6	0.00	0.00	0.00
13,000.0	90.00	359.63	11,284.0	1,909.5	-326.8	1,911.6	0.00	0.00	0.00
13,100.0	90.00	359.63	11,284.0	2,009.5	-327.5	2,011.6	0.00	0.00	0.00
13,200.0	90.00	359.63	11,284.0	2,109.5	-328.1	2,111.6	0.00	0.00	0.00
13,300.0	90.00	359.63	11,284.0	2,209.5	-328.8	2,211.6	0.00	0.00	0.00
13,400.0	90.00	359.63	11,284.0	2,309.5	-329.4	2,311.6	0.00	0.00	0.00
13,500.0	90.00	359.63	11,284.0	2,409.5	-330.1	2,411.6	0.00	0.00	0.00
13,600.0	90.00	359.63	11,284.0	2,509.5	-330.7	2,511.6	0.00	0.00	0.00
13,700.0	90.00	359.63	11,284.0	2,609.5	-331.4	2,611.6	0.00	0.00	0.00
13,800.0	90.00	359.63	11,284.0	2,709.5	-332.0	2,711.6	0.00	0.00	0.00
13,900.0	90.00	359.63	11,284.0	2,809.5	-332.7	2,811.6	0.00	0.00	0.00
14,000.0	90.00	359.63	11,284.0	2,909.5	-333.3	2,911.6	0.00	0.00	0.00
14,100.0	90.00	359.63	11,284.0	3,009.5	-334.0	3,011.6	0.00	0.00	0.00
14,200.0	90.00	359.63	11,284.0	3,109.5	-334.6	3,111.6	0.00	0.00	0.00
14,300.0	90.00	359.63	11,284.0	3,209.5	-335.3	3,211.6	0.00	0.00	0.00
14,400.0	90.00	359.63	11,284.0	3,309.5	-335.9	3,311.6	0.00	0.00	0.00
14,500.0	90.00	359.63	11,284.0	3,409.4	-336.6	3,411.6	0.00	0.00	0.00
14,600.0	90.00	359.63	11,284.0	3,509.4	-337.2	3,511.6	0.00	0.00	0.00
14,700.0	90.00	359.63	11,284.0	3,609.4	-337.9	3,611.6	0.00	0.00	0.00
14,800.0	90.00	359.63	11,284.0	3,709.4	-338.5	3,711.6	0.00	0.00	0.00
14,900.0	90.00	359.63	11,284.0	3,809.4	-339.2	3,811.6	0.00	0.00	0.00
15,000.0	90.00	359.63	11,284.0	3,909.4	-339.8	3,911.6	0.00	0.00	0.00
15,100.0	90.00	359.63	11,284.0	4,009.4	-340.5	4,011.6	0.00	0.00	0.00
15,200.0	90.00	359.63	11,284.0	4,109.4	-341.1	4,111.6	0.00	0.00	0.00
15,300.0	90.00	359.63	11,284.0	4,209.4	-341.8	4,211.6	0.00	0.00	0.00
15,400.0	90.00	359.63	11,284.0	4,309.4	-342.4	4,311.6	0.00	0.00	0.00
15,500.0	90.00	359.63	11,284.0	4,409.4	-343.0	4,411.6	0.00	0.00	0.00
15,600.0	90.00	359.63	11,284.0	4,509.4	-343.7	4,511.6	0.00	0.00	0.00
15,700.0	90.00	359.63	11,284.0	4,609.4	-344.3	4,611.6	0.00	0.00	0.00
15,800.0	90.00	359.63	11,284.0	4,709.4	-345.0	4,711.6	0.00	0.00	0.00
15,900.0	90.00	359.63	11,284.0	4,809.4	-345.6	4,811.6	0.00	0.00	0.00
16,000.0	90.00	359.63	11,284.0	4,909.4	-346.3	4,911.6	0.00	0.00	0.00

XTO Energy
Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,100.0	90.00	359.63	11,284.0	5,009.4	-346.9	5,011.6	0.00	0.00	0.00
16,200.0	90.00	359.63	11,284.0	5,109.4	-347.6	5,111.6	0.00	0.00	0.00
16,300.0	90.00	359.63	11,284.0	5,209.4	-348.2	5,211.6	0.00	0.00	0.00
16,400.0	90.00	359.63	11,284.0	5,309.4	-348.9	5,311.6	0.00	0.00	0.00
16,500.0	90.00	359.63	11,284.0	5,409.4	-349.5	5,411.6	0.00	0.00	0.00
16,600.0	90.00	359.63	11,284.0	5,509.4	-350.2	5,511.6	0.00	0.00	0.00
16,700.0	90.00	359.63	11,284.0	5,609.4	-350.8	5,611.6	0.00	0.00	0.00
16,800.0	90.00	359.63	11,284.0	5,709.4	-351.5	5,711.6	0.00	0.00	0.00
16,900.0	90.00	359.63	11,284.0	5,809.4	-352.1	5,811.6	0.00	0.00	0.00
17,000.0	90.00	359.63	11,284.0	5,909.4	-352.8	5,911.6	0.00	0.00	0.00
17,100.0	90.00	359.63	11,284.0	6,009.4	-353.4	6,011.6	0.00	0.00	0.00
17,200.0	90.00	359.63	11,284.0	6,109.4	-354.1	6,111.6	0.00	0.00	0.00
17,300.0	90.00	359.63	11,284.0	6,209.4	-354.7	6,211.6	0.00	0.00	0.00
17,400.0	90.00	359.63	11,284.0	6,309.4	-355.4	6,311.6	0.00	0.00	0.00
17,500.0	90.00	359.63	11,284.0	6,409.4	-356.0	6,411.6	0.00	0.00	0.00
17,600.0	90.00	359.63	11,284.0	6,509.4	-356.7	6,511.6	0.00	0.00	0.00
17,700.0	90.00	359.63	11,284.0	6,609.4	-357.3	6,611.6	0.00	0.00	0.00
17,800.0	90.00	359.63	11,284.0	6,709.4	-358.0	6,711.6	0.00	0.00	0.00
17,900.0	90.00	359.63	11,284.0	6,809.4	-358.6	6,811.6	0.00	0.00	0.00
18,000.0	90.00	359.63	11,284.0	6,909.4	-359.3	6,911.6	0.00	0.00	0.00
18,100.0	90.00	359.63	11,284.0	7,009.4	-359.9	7,011.6	0.00	0.00	0.00
18,200.0	90.00	359.63	11,284.0	7,109.4	-360.6	7,111.6	0.00	0.00	0.00
18,300.0	90.00	359.63	11,284.0	7,209.4	-361.2	7,211.6	0.00	0.00	0.00
18,400.0	90.00	359.63	11,284.0	7,309.4	-361.9	7,311.6	0.00	0.00	0.00
18,500.0	90.00	359.63	11,284.0	7,409.4	-362.5	7,411.6	0.00	0.00	0.00
18,600.0	90.00	359.63	11,284.0	7,509.4	-363.2	7,511.6	0.00	0.00	0.00
18,700.0	90.00	359.63	11,284.0	7,609.4	-363.8	7,611.6	0.00	0.00	0.00
18,800.0	90.00	359.63	11,284.0	7,709.4	-364.5	7,711.6	0.00	0.00	0.00
18,900.0	90.00	359.63	11,284.0	7,809.4	-365.1	7,811.6	0.00	0.00	0.00
19,000.0	90.00	359.63	11,284.0	7,909.4	-365.8	7,911.6	0.00	0.00	0.00
19,006.2	90.00	359.63	11,284.0	7,915.6	-365.8	7,917.8	0.00	0.00	0.00
LTP_163H									
19,056.2	90.00	359.63	11,284.0	7,965.6	-366.1	7,967.8	0.00	0.00	0.00
BHL_163H									

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Design Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
SHL_163H	0.00	0.00	0.0	0.0	0.0	463,983.00	622,943.60	32° 16' 29.926 N	103° 56' 7.958 W
- plan hits target center									
- Point									
FTP_163H	0.00	0.00	11,284.0	626.3	-318.5	464,609.30	622,625.10	32° 16' 36.136 N	103° 56' 11.641 W
- plan hits target center									
- Point									
BHL_163H	0.00	0.00	11,284.0	7,965.6	-366.1	471,948.60	622,577.50	32° 17' 48.768 N	103° 56' 11.879 W
- plan hits target center									
- Point									
LTP_163H	0.00	0.00	11,284.0	7,915.6	-365.8	471,898.60	622,577.80	32° 17' 48.273 N	103° 56' 11.878 W
- plan hits target center									
- Point									

XTO Energy

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well Remuda North 25 ST 163H
Company:	Long Lead_Well Planning	TVD Reference:	RKB (+32) @ 3091.0usft
Project:	Remuda	MD Reference:	RKB (+32) @ 3091.0usft
Site:	Remuda North 25 ST 163H	North Reference:	Grid
Well:	Remuda North 25 ST 163H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Plan1		

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
0.0	0.0	Alluvium				
203.0	203.0	Rustler				
323.0	323.0	Salado/Top of Salt				
1,541.0	1,541.0	MB 126				
3,075.0	3,075.0	Base Salt				
3,301.0	3,300.8	Delaware/Lamar				
3,327.0	3,326.8	Bell Canyon				
4,186.0	4,176.2	Cherry Canyon				
5,739.0	5,715.0	Brushy Canyon Ss.				
7,001.0	6,977.0	Bone Spring Lm.				
7,103.0	7,079.0	Avalon Ss.				
7,182.0	7,158.0	Upper Avalon Carb.				
7,373.0	7,349.0	Upper Avalon Sh.				
7,508.0	7,484.0	Middle Avalon Carb.				
7,737.0	7,713.0	Lw. Avalon Sh.				
7,997.0	7,973.0	First Bone Spring Carb.				
8,065.0	8,041.0	First Bone Spring Ss.				
8,508.0	8,484.0	Second Bone Spring Carb.				
8,888.0	8,864.0	Second Bone Spring A Ss.				
9,015.0	8,991.0	Second Bone Spring A/B Carb.				
9,035.0	9,011.0	Second Bone Spring B Ss.				
9,240.0	9,216.0	Third Bone Spring Carb.				
9,522.0	9,498.0	Harkey Ss.				
9,539.0	9,515.0	Third Bone Spring Shale				
9,979.0	9,955.0	Third Bone Spring Ss.				
10,243.0	10,219.0	Third Bone Spring Ss.- Red Hills				
10,299.0	10,275.0	Wolfcamp Shale				
10,342.0	10,318.0	Wolfcamp X Ss.				
10,419.0	10,395.0	Wolfcamp Y Ss.				
10,449.0	10,425.0	Wolfcamp A				
10,757.0	10,731.5	Wolfcamp B				
10,951.0	10,912.1	Wolfcamp C				
11,109.0	11,041.2	Wolfcamp D				
11,284.0	11,157.2	Landing Point				
11,500.0	11,251.4	Wolfcamp F				