

**District I**

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

**District II**

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

**District III**

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

**District IV**

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

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

Form C-101  
August 1, 2011

Permit 375749

**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 30-015-55558
4. Property Code 336438	5. Property Name Remuda 25 ST	6. Well No. 161H

**7. Surface Location**

UL - Lot L	Section 25	Township 23S	Range 29E	Lot Idn	Feet From 2375	N/S Line S	Feet From 585	E/W Line W	County Eddy
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**8. Proposed Bottom Hole Location**

UL - Lot E	Section 25	Township 23S	Range 29E	Lot Idn D	Feet From 330	N/S Line N	Feet From 330	E/W Line W	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 3066
16. Multiple N	17. Proposed Depth 18999	18. Formation Wolfcamp	19. Contractor	20. Spud Date 12/15/2024
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	245	250	0
Int1	12.25	9.625	40	3247	11450	0
Int2	8.75	7.6256	29.7	3347	430	5686
Int1	8.75	7.625	29.7	10314	420	2747
Prod	6.75	5.5	20	18999	600	10530
Prod	6.75	5.5	20		200	

**Casing/Cement Program: Additional Comments**

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**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	4829	HYDRIL
Double Ram	10000	4829	HYDRIL

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:

Printed Name: Electronically filed by Tiffany Yancey

Title: Production Analyst

Email Address: tiffany.yancey@exxonmobil.com

Date: 10/24/2024

Phone: 432-215-8939

**OIL CONSERVATION DIVISION**

Approved By: Ward Rikala

Title: Petroleum Specialist Supervisor

Approved Date: 10/25/2024

Expiration Date: 10/25/2026

Conditions of Approval Attached

## WELL LOCATION INFORMATION

API Number 30-015- <b>55558</b>	Pool Code 98220	Pool Name PURPLE SAGE; WOLFCAMP (GAS)
Property Code <b>336438</b>	Property Name REMUDA NORTH 25 ST	Well Number 161H
ORGID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC	Ground Level Elevation 3,066'
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 L	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,375' FSL	Ft. from E/W 585' FWL	Latitude 32.275126	Longitude -103.944851	County EDDY
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## Bottom Hole Location

UL D	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 280' FNL	Ft. from E/W 330' FWL	Latitude 32.297041	Longitude -103.945743	County EDDY
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Dedicated Acres 480	Infill or Defining Well INFILL	Defining Well API 30-015-44313	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 L	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,286' FSL	Ft. from E/W 335' FWL	Latitude 32.274884	Longitude -103.945662	County EDDY
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## First Take Point (FTP)

UL E	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,310' FNL	Ft. from E/W 330' FWL	Latitude 32.276853	Longitude -103.945669	County EDDY
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## Last Take Point (LTP)

UL D	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 330' FNL	Ft. from E/W 330' FWL	Latitude 32.296903	Longitude -103.945742	County EDDY
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Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3,066'
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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.

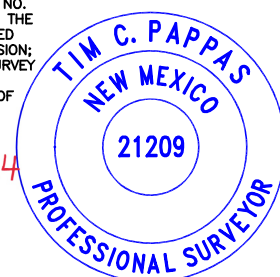
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or 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	Email Address adrian.baker@exxonmobil.com	Certificate Number TIM C. PAPPAS 21209	Date of Survey 10/22/2024

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.

LEGEND

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SECTION LINE

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PROPOSED WELLBORE

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330' BUFFER

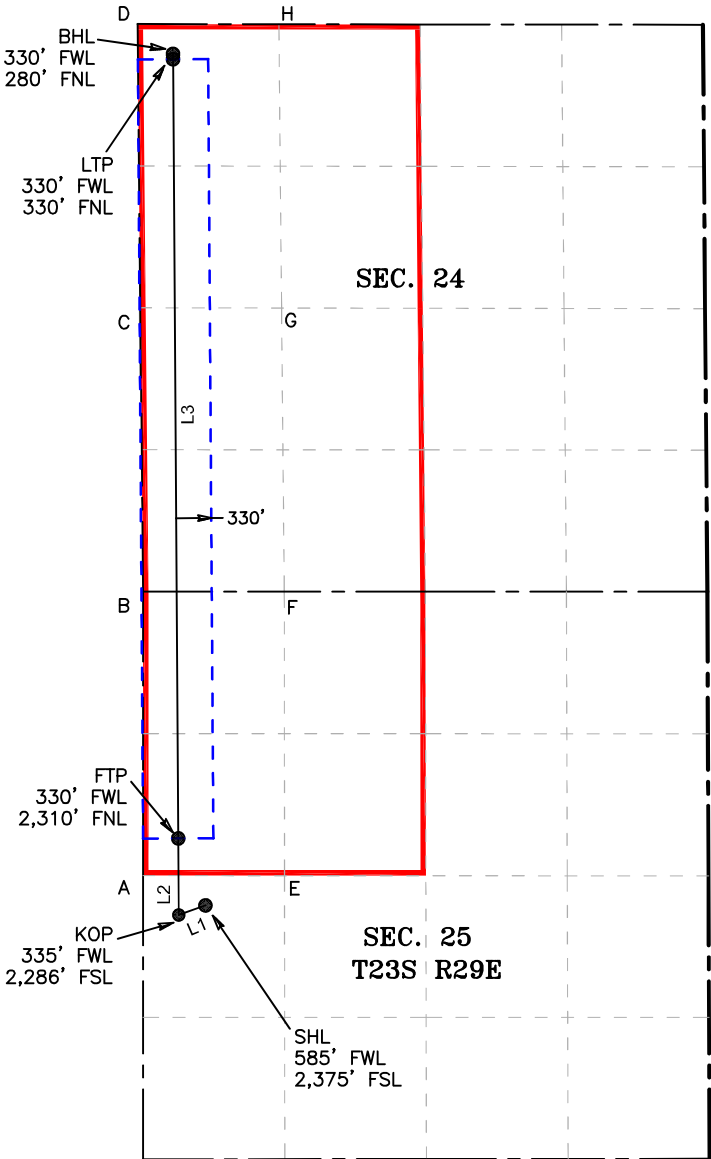
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DEDICATED ACREAGE

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	250° 25'53"	265.66'
L2	359° 37'14"	716.12'
L3	359° 36'50"	7,344.20'

COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	464,041.2	N	Y =	471,962.4	N
X =	661,401.9	E	X =	661,097.8	E
LAT. =	32.275126	°N	LAT. =	32.296903	°N
LONG. =	103.944851	°W	LONG. =	103.945742	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	463,952.3	N	Y =	472,012.4	N
X =	661,151.6	E	X =	661,097.3	E
LAT. =	32.274884	°N	LAT. =	32.297041	°N
LONG. =	103.945662	°W	LONG. =	103.945743	°W
FTP (NAD 83 NME)					
Y =	464,668.4	N			
X =	661,146.8	E			
LAT. =	32.276853	°N			
LONG. =	103.945669	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	463,981.3	N	Y =	471,902.3	N
X =	620,219.1	E	X =	619,915.3	E
LAT. =	32.275002	°N	LAT. =	32.296780	°N
LONG. =	103.944359	°W	LONG. =	103.945249	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	463,892.4	N	Y =	471,952.3	N
X =	619,968.8	E	X =	619,914.8	E
LAT. =	32.274761	°N	LAT. =	32.296917	°N
LONG. =	103.945170	°W	LONG. =	103.945250	°W
FTP (NAD 27 NME)					
Y =	464,608.5	N			
X =	619,964.0	E			
LAT. =	32.276729	°N			
LONG. =	103.945177	°W			

CORNER COORDINATES (NAD83 NME)					
A - Y =	464,320.4	N	A - X =	660,816.8	E
B - Y =	466,978.2	N	B - X =	660,817.0	E
C - Y =	469,636.2	N	C - X =	660,790.3	E
D - Y =	472,292.9	N	D - X =	660,764.6	E
E - Y =	464,319.7	N	E - X =	662,143.0	E
F - Y =	466,978.8	N	F - X =	662,140.6	E
G - Y =	469,634.0	N	G - X =	662,115.2	E
H - Y =	472,291.0	N	H - X =	662,090.3	E
CORNER COORDINATES (NAD27 NME)					
A - Y =	464,260.5	N	A - X =	619,634.0	E
B - Y =	466,918.2	N	B - X =	619,634.3	E
C - Y =	469,576.2	N	C - X =	619,607.7	E
D - Y =	472,232.8	N	D - X =	619,582.1	E
E - Y =	464,259.8	N	E - X =	620,960.2	E
F - Y =	466,918.8	N	F - X =	620,957.9	E
G - Y =	469,574.0	N	G - X =	620,932.6	E
H - Y =	472,230.9	N	H - X =	620,907.8	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 Conditions  
Permit 375749

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: XTO PERMIAN OPERATING LLC. [373075] 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	API Number: 30-015-55558
	Well: Remuda 25 ST #161H

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

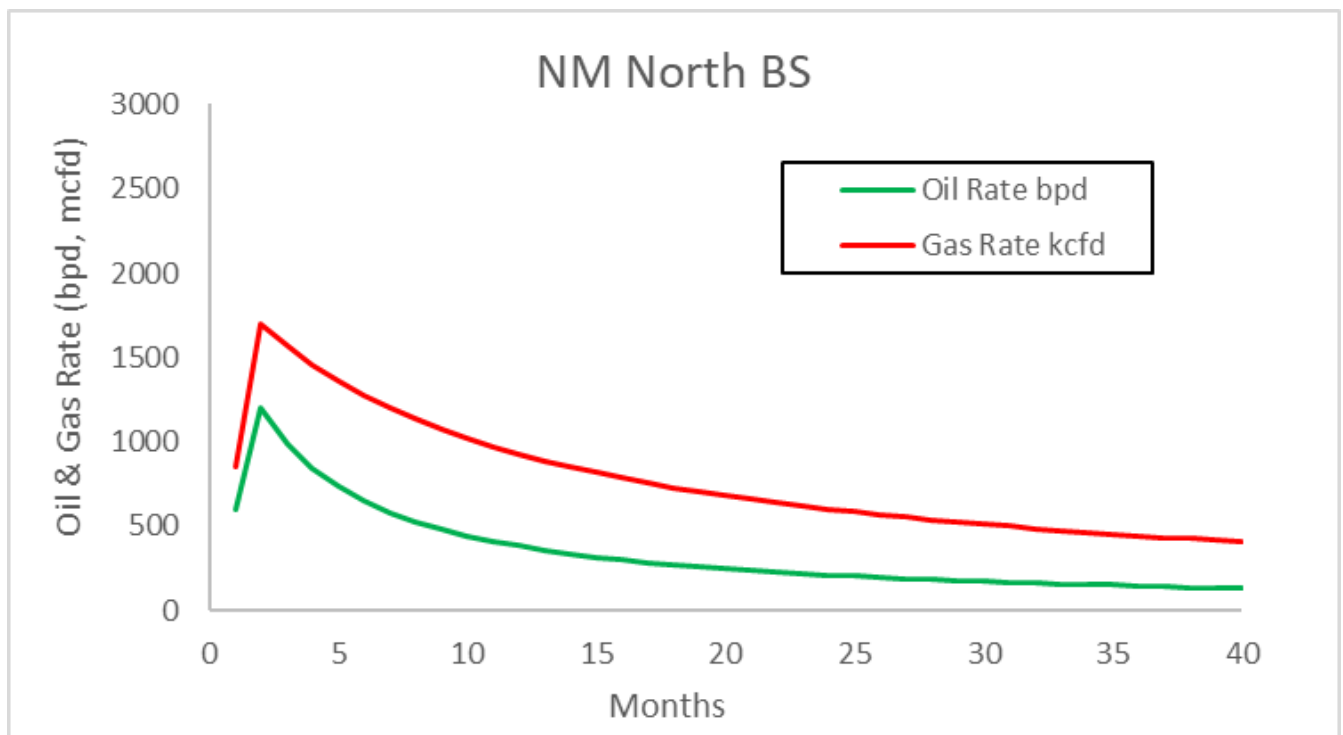
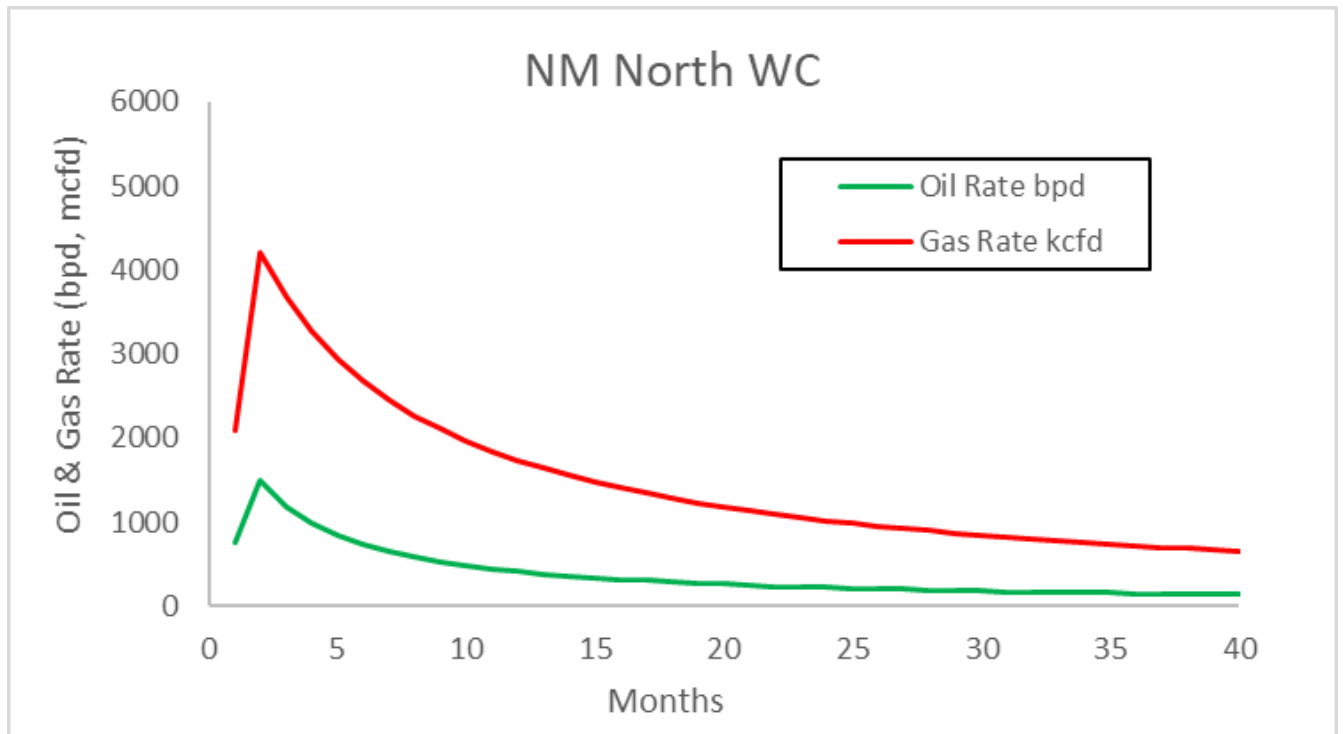
**(Only applicable when submitted as a standalone form)**

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	Well Number 161H
ORGID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC	Ground Level Elevation 3,066'
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 L	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,375' FSL	Ft. from E/W 585' FWL	Latitude 32.275126	Longitude -103.944851	County EDDY
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## Bottom Hole Location

UL D	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 280' FNL	Ft. from E/W 330' FWL	Latitude 32.297041	Longitude -103.945743	County EDDY
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Dedicated Acres 480	Infill or Defining Well INFILL	Defining Well API 30-015-44313	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 L	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,286' FSL	Ft. from E/W 335' FWL	Latitude 32.274884	Longitude -103.945662	County EDDY
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## First Take Point (FTP)

UL E	Section 25	Township 23 S	Range 29 E	Lot	Ft. from N/S 2,310' FNL	Ft. from E/W 330' FWL	Latitude 32.276853	Longitude -103.945669	County EDDY
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## Last Take Point (LTP)

UL D	Section 24	Township 23 S	Range 29 E	Lot	Ft. from N/S 330' FNL	Ft. from E/W 330' FWL	Latitude 32.296903	Longitude -103.945742	County EDDY
---------	---------------	------------------	---------------	-----	--------------------------	--------------------------	-----------------------	--------------------------	----------------

Unitized Area or Area of Uniform Interest	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3,066'
---	--	--------------------------------

## 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.

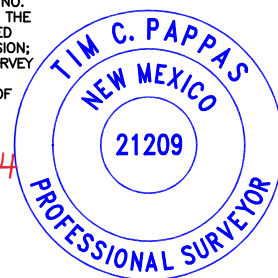
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or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



LEGEND

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SECTION LINE

---

PROPOSED WELLBORE

---

330' BUFFER

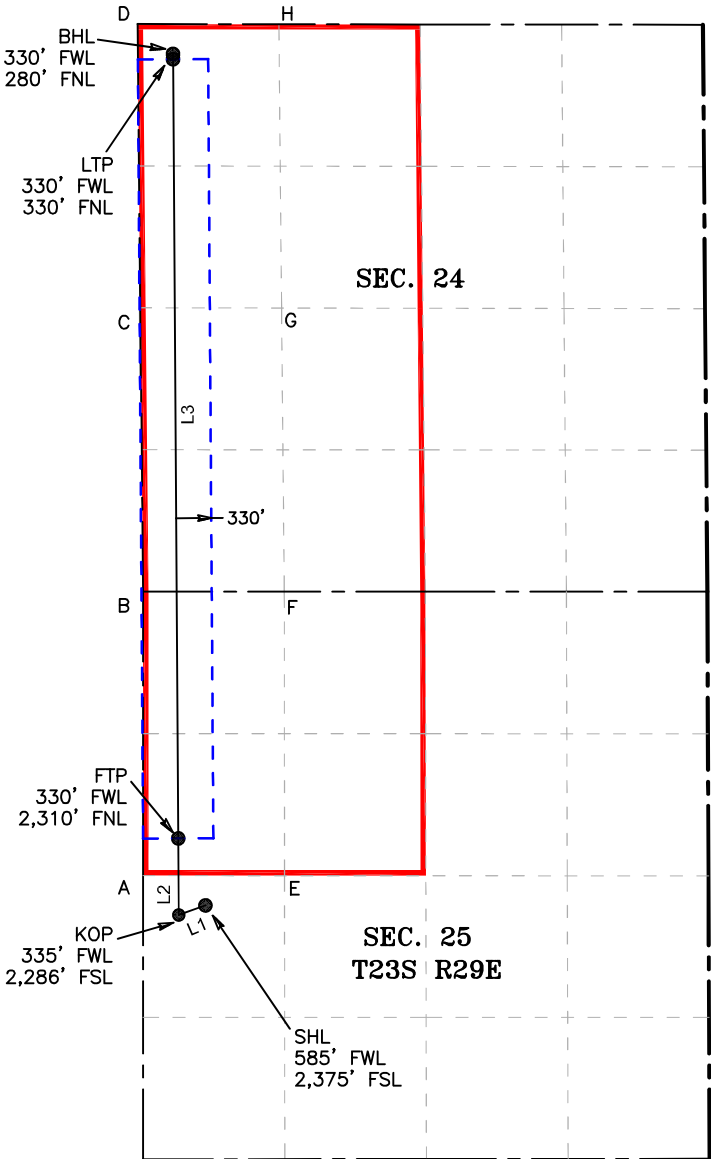
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DEDICATED ACREAGE

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	250° 25'53"	265.66'
L2	359° 37'14"	716.12'
L3	359° 36'50"	7,344.20'

COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	464,041.2	N	Y =	471,962.4	N
X =	661,401.9	E	X =	661,097.8	E
LAT. =	32.275126	°N	LAT. =	32.296903	°N
LONG. =	103.944851	°W	LONG. =	103.945742	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	463,952.3	N	Y =	472,012.4	N
X =	661,151.6	E	X =	661,097.3	E
LAT. =	32.274884	°N	LAT. =	32.297041	°N
LONG. =	103.945662	°W	LONG. =	103.945743	°W
FTP (NAD 83 NME)					
Y =	464,668.4	N			
X =	661,146.8	E			
LAT. =	32.276853	°N			
LONG. =	103.945669	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	463,981.3	N	Y =	471,902.3	N
X =	620,219.1	E	X =	619,915.3	E
LAT. =	32.275002	°N	LAT. =	32.296780	°N
LONG. =	103.944359	°W	LONG. =	103.945249	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	463,892.4	N	Y =	471,952.3	N
X =	619,968.8	E	X =	619,914.8	E
LAT. =	32.274761	°N	LAT. =	32.296917	°N
LONG. =	103.945170	°W	LONG. =	103.945250	°W
FTP (NAD 27 NME)					
Y =	464,608.5	N			
X =	619,964.0	E			
LAT. =	32.276729	°N			
LONG. =	103.945177	°W			

CORNER COORDINATES (NAD83 NME)				
A - Y =	464,320.4	N	A - X =	660,816.8 E
B - Y =	466,978.2	N	B - X =	660,817.0 E
C - Y =	469,636.2	N	C - X =	660,790.3 E
D - Y =	472,292.9	N	D - X =	660,764.6 E
E - Y =	464,319.7	N	E - X =	662,143.0 E
F - Y =	466,978.8	N	F - X =	662,140.6 E
G - Y =	469,634.0	N	G - X =	662,115.2 E
H - Y =	472,291.0	N	H - X =	662,090.3 E
CORNER COORDINATES (NAD27 NME)				
A - Y =	464,260.5	N	A - X =	619,634.0 E
B - Y =	466,918.2	N	B - X =	619,634.3 E
C - Y =	469,576.2	N	C - X =	619,607.7 E
D - Y =	472,232.8	N	D - X =	619,582.1 E
E - Y =	464,259.8	N	E - X =	620,960.2 E
F - Y =	466,918.8	N	F - X =	620,957.9 E
G - Y =	469,574.0	N	G - X =	620,932.6 E
H - Y =	472,230.9	N	H - X =	620,907.8 E



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

XTO Energy Inc.  
Remuda North 25 ST - 161H  
Projected TD: 18999.26' MD / 11231' TVD  
SHL: 2375' FSL & 585' FWL , Section 25, T23S, R29E  
BHL: 280' FNL & 330' FWL , 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	150'	Water
Top of Salt	270'	Water
MB 126	1548'	Water
Base of Salt	3022'	Water
Delaware	3248'	Water/Oil/Gas
Brushy Canyon	5686'	Water
Bone Spring	6948'	Water/Oil/Gas
1st Bone Spring Ss	7944'	Water/Oil/Gas
2nd Bone Spring Ss	8455'	Water/Oil/Gas
Wolfcamp X	10289'	Water/Oil/Gas
Wolfcamp Y	10366'	Water/Oil/Gas
Wolfcamp A	10396'	Water/Oil/Gas
Wolfcamp B	10704'	Water/Oil/Gas
Wolfcamp D	11056'	Water/Oil/Gas
Target/Land Curve	11231'	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 @ 245' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3247' 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 10314.8' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 18999.26 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9814.8 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' – 245'	13.375	54.5	J-55	BTC	New	2.81	10.43	68.08
12.25	0' – 3247'	9.625	40	J-55	BTC	New	1.28	2.78	4.85
8.75	0' – 3347'	7.625	29.7	RY P-110	Flush Joint	New	1.96	3.07	1.82
8.75	3347' – 10314.8'	7.625	29.7	HC L-80	Flush Joint	New	1.42	2.41	1.96
6.75	0' – 10214.8'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	1.67	2.25
6.75	10214.8' - 18999.26'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	1.52	7.99

· 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 +/- 245**

Tail: 250 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 +/- 3247**

Lead: 1320 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 +/- 10314.8**1st Stage

Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)  
 TOC: Brushy Canyon @ 5686  
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Tail: 420 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)  
 Top of Cement: 2747  
 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 (5686') 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 +/- 18999.26**

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9814.8 feet  
 Tail: 600 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10530.29 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 4829 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' - 245'	17.5	FW/Native	8.5-9	35-40	NC	Fresh water or native water
245' - 3247'	12.25	Sat Brine	10-10.5	30-32	NC	Fully Saturated salt across
3247' to 10314.8'	8.75	BDE/OBM or FW/Brine	10-10.5	30-32	NC	N/A
10314.8' to 18999.26'	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 7300 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  
460 Wildwood Forest Drive, Suite 300S  
Spring, Texas 77380  
1-877-893-9461  
connections@uss.com  
www.usstubular.com



## 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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Spring, Texas 77380

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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:

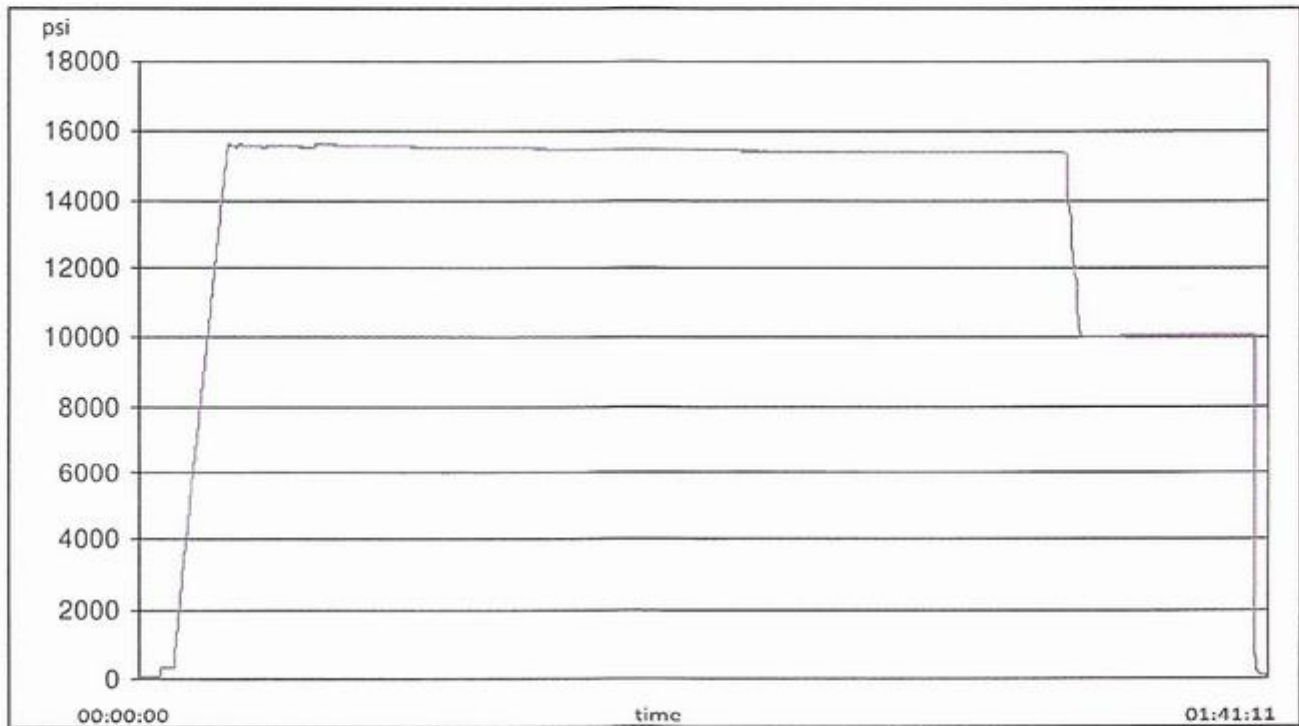
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/16

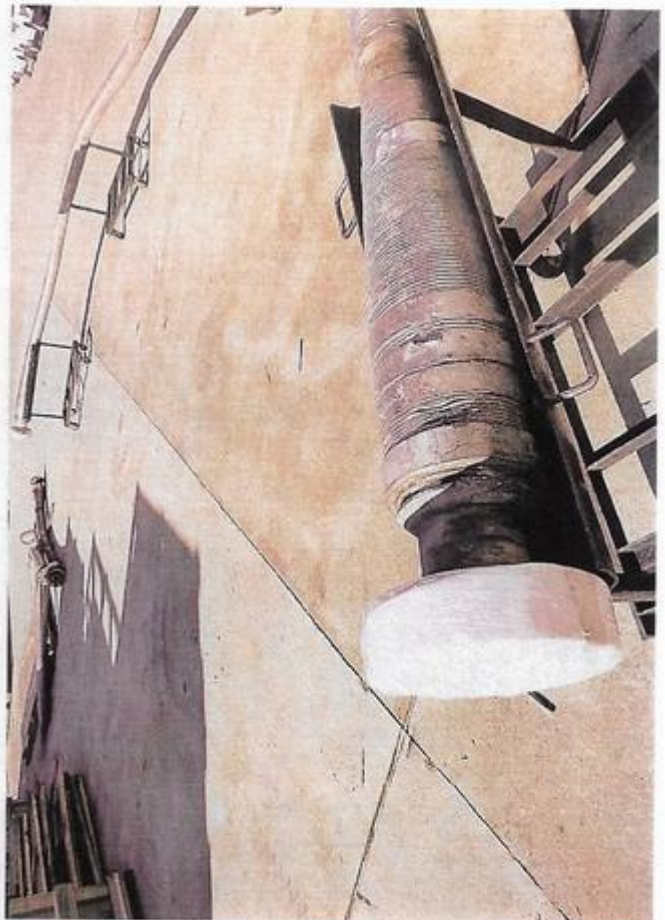
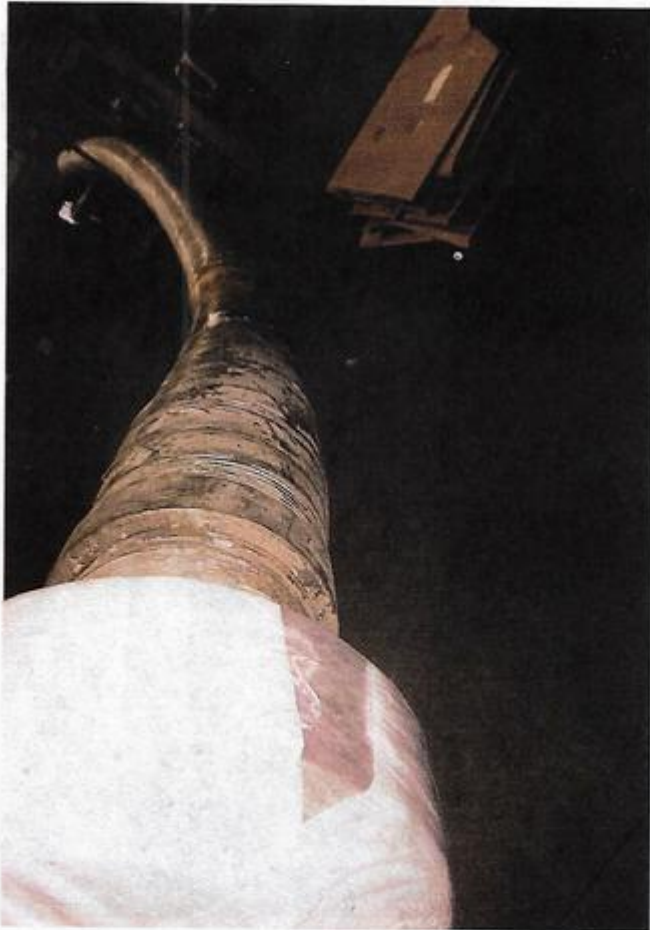
1/25/2024 11:48:06 AM

TEST REPORT

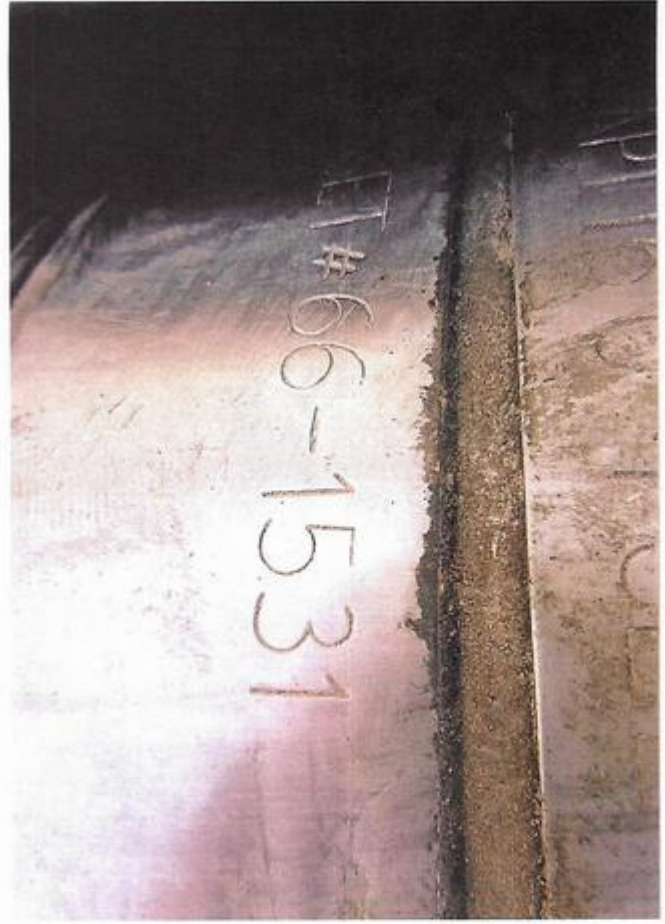
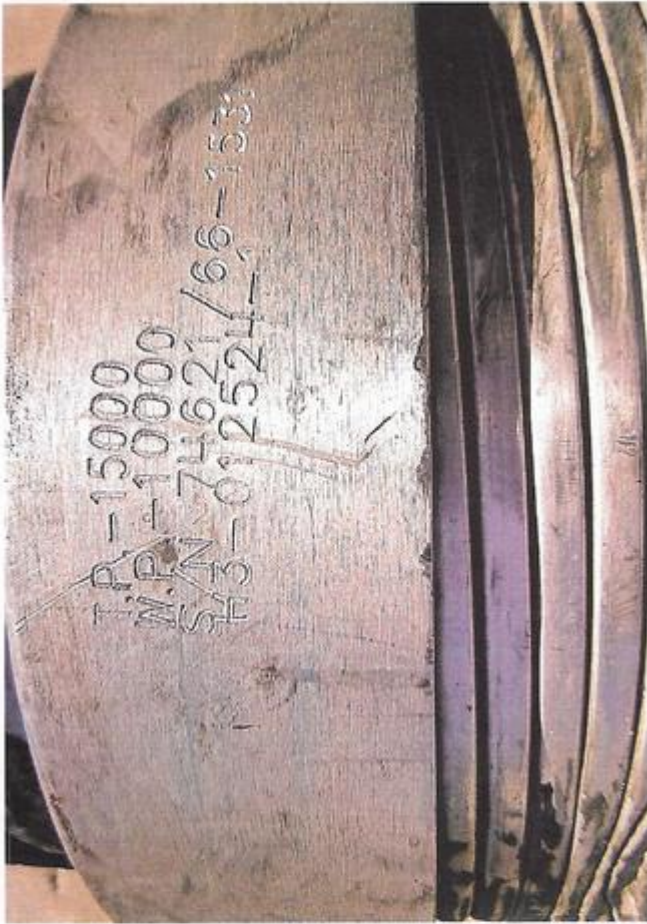
GAUGE TRACEABILITY

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







**QC APPROVED** BY POSSIBILITY™

**Gates**

I.D.: 3" LENGTH: 45'

GRADE: 166 <sup>11/16"</sup> END FITTING: 1 1/16" 10K Flange E/F

W#: 43-012524-1

CUST NAME: Nalco DOC#: 528450

NOTES: 10-15582803 SN: 74621 ASSET 66-1531

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.

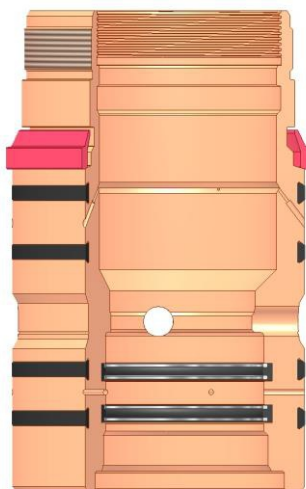
**1. Cement Program**

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.

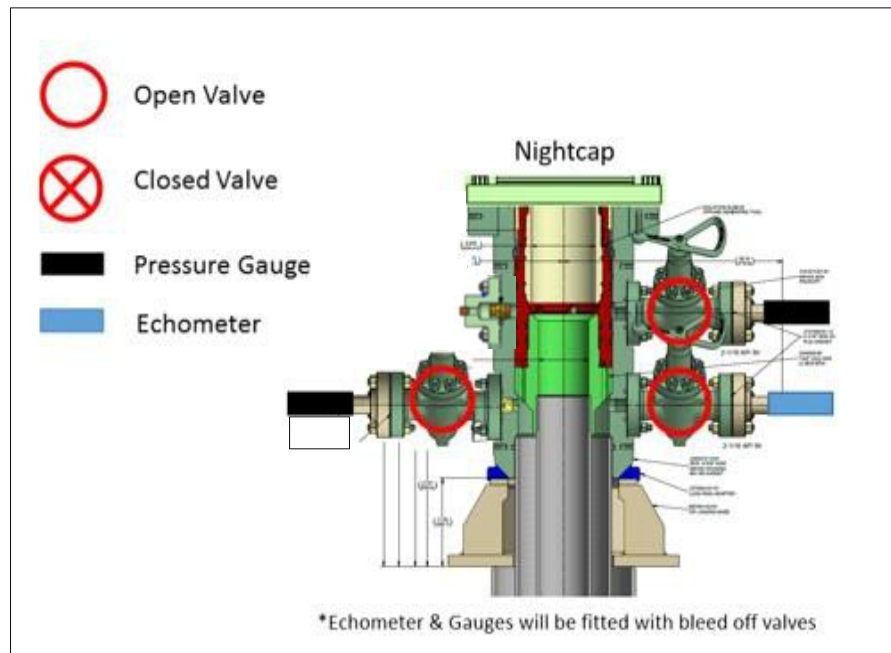
1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
2. Land casing with mandrel
3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
4. Set annular 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

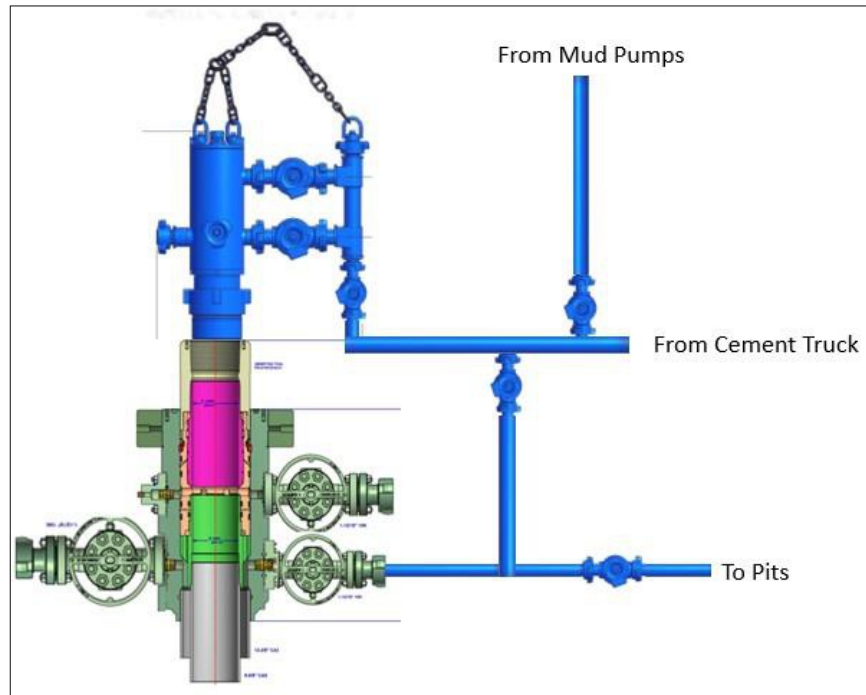


## XTO Permian Operating, LLC Offline Cementing Variance Request



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 3<sup>rd</sup> 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

Well Plan Report - Remuda North 25 ST 161H

Measured Depth: 18999.26 ft  
TVD RKB: 11231.00 ft  
Location  
Cartographic Reference System: New Mexico East - NAD 27  
Northing: 463981.30 ft  
Easting: 620219.10 ft  
RKB: 3098.00 ft  
Ground Level: 472181.70 ft  
North Reference: Grid  
Convergence Angle: 0.21 Deg

Site: A  
Slot: Remuda North 25 ST 161H

Plan Sections Remuda North 25 ST 161H

Measured	TVD				Build		Turn		Dogleg	
	Depth (ft)	Inclination (Deg)	Azimuth (Deg)	RKB (ft)	Y Offset (ft)	X Offset (ft)	Rate (Deg/100ft)	Rate (Deg/100ft)	Rate (Deg/100ft)	Target
0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3100.00		0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00	0.00
3452.71		7.05	250.43	3451.82	-7.26	-20.43	0.00	0.00	2.00	2.00
5262.77		7.05	250.43	5248.18	-81.72	-229.89	0.00	0.00	0.00	0.00
5615.48		0.00	0.00	5600.00	-88.98	-250.32	0.00	0.00	2.00	2.00
10530.29		0.00	0.00	10514.80	-88.98	-250.32	0.00	0.00	0.00	0.00
11655.29		90.00	359.62	11231.00	627.20	-255.10	0.00	0.00	8.00	FTP 5
18949.25		90.00	359.62	11231.00	7921.00	-303.80	0.00	0.00	0.00	LTP 5
18999.26		90.00	359.62	11231.00	7971.01	-304.13	0.00	0.00	0.00	BHL 5

Position Uncertainty Remuda North 25 ST 161H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Tool
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Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	of Bias (ft)	Error (ft)	Error (ft)	Azimuth (°)	Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.346	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.372	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.404	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.440	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.481	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.526	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.575	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.628	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.779	0.000	4.589	0.000	2.683	0.000	5.119	4.207	128.954	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.140	0.000	4.950	0.000	2.742	0.000	5.484	4.565	129.034	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.500	0.000	5.311	0.000	2.804	0.000	5.849	4.924	129.102	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.860	0.000	5.672	0.000	2.869	0.000	6.213	5.282	129.161	MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	6.219	0.000	6.032	0.000	2.936	0.000	6.577	5.640	129.212	MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.579	0.000	6.392	0.000	3.005	0.000	6.939	5.999	129.257	MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.938	0.000	6.752	0.000	3.077	0.000	7.302	6.357	129.297	MWD+IFR1+MS
1900.000	0.000	0.000	1900.000	7.298	0.000	7.112	0.000	3.150	0.000	7.664	6.715	129.333	MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.657	0.000	7.471	0.000	3.226	0.000	8.026	7.074	129.365	MWD+IFR1+MS
2100.000	0.000	0.000	2100.000	8.016	0.000	7.831	0.000	3.303	0.000	8.387	7.432	129.394	MWD+IFR1+MS
2200.000	0.000	0.000	2200.000	8.375	0.000	8.190	0.000	3.382	0.000	8.748	7.791	129.420	MWD+IFR1+MS
2300.000	0.000	0.000	2300.000	8.734	0.000	8.550	0.000	3.462	0.000	9.109	8.149	129.444	MWD+IFR1+MS
2400.000	0.000	0.000	2400.000	9.093	0.000	8.909	0.000	3.545	0.000	9.470	8.507	129.466	MWD+IFR1+MS
2500.000	0.000	0.000	2500.000	9.452	0.000	9.268	0.000	3.629	0.000	9.831	8.866	129.486	MWD+IFR1+MS
2600.000	0.000	0.000	2600.000	9.811	0.000	9.627	0.000	3.714	0.000	10.191	9.224	129.505	MWD+IFR1+MS
2700.000	0.000	0.000	2700.000	10.170	0.000	9.986	0.000	3.801	0.000	10.552	9.583	129.522	MWD+IFR1+MS
2800.000	0.000	0.000	2800.000	10.529	0.000	10.345	0.000	3.889	0.000	10.912	9.941	129.538	MWD+IFR1+MS
2900.000	0.000	0.000	2900.000	10.888	0.000	10.705	0.000	3.979	0.000	11.272	10.299	129.552	MWD+IFR1+MS
3000.000	0.000	0.000	3000.000	11.247	0.000	11.063	0.000	4.070	0.000	11.632	10.658	129.566	MWD+IFR1+MS

3100.000	0.000	0.000	3100.000	11.606	0.000	11.422	0.000	4.163	0.000	11.992	11.016	129.579	MWD+IFR1+MS
3200.000	2.000	250.431	3199.980	12.086	-0.000	11.632	0.000	4.257	0.000	12.319	11.392	130.293	MWD+IFR1+MS
3300.000	4.000	250.431	3299.838	12.597	-0.000	11.979	0.000	4.353	0.000	12.760	11.833	-42.584	MWD+IFR1+MS
3400.000	6.000	250.431	3399.452	13.083	-0.000	12.327	0.000	4.451	0.000	13.218	12.243	-36.368	MWD+IFR1+MS
3452.713	7.054	250.431	3451.823	13.254	-0.000	12.506	0.000	4.501	0.000	13.405	12.430	-35.565	MWD+IFR1+MS
3500.000	7.054	250.431	3498.752	13.404	-0.000	12.666	0.000	4.547	0.000	13.553	12.591	-35.541	MWD+IFR1+MS
3600.000	7.054	250.431	3597.995	13.720	-0.000	13.012	0.000	4.648	0.000	13.864	12.940	-35.470	MWD+IFR1+MS
3700.000	7.054	250.431	3697.238	14.045	-0.000	13.365	0.000	4.751	0.000	14.180	13.300	-35.065	MWD+IFR1+MS
3800.000	7.054	250.431	3796.481	14.372	-0.000	13.719	0.000	4.856	0.000	14.499	13.661	-34.637	MWD+IFR1+MS
3900.000	7.054	250.431	3895.724	14.701	-0.000	14.074	0.000	4.962	0.000	14.820	14.022	-34.183	MWD+IFR1+MS
4000.000	7.054	250.431	3994.967	15.032	-0.000	14.430	0.000	5.071	0.000	15.142	14.384	-33.701	MWD+IFR1+MS
4100.000	7.054	250.431	4094.210	15.364	-0.000	14.787	0.000	5.181	0.000	15.467	14.746	-33.188	MWD+IFR1+MS
4200.000	7.054	250.431	4193.453	15.698	-0.000	15.144	0.000	5.293	0.000	15.794	15.109	-32.641	MWD+IFR1+MS
4300.000	7.054	250.431	4292.696	16.034	-0.000	15.503	0.000	5.407	0.000	16.123	15.472	-32.056	MWD+IFR1+MS
4400.000	7.054	250.431	4391.939	16.371	-0.000	15.862	0.000	5.523	0.000	16.453	15.835	-31.429	MWD+IFR1+MS
4500.000	7.054	250.431	4491.182	16.709	-0.000	16.221	0.000	5.641	0.000	16.785	16.199	-30.755	MWD+IFR1+MS
4600.000	7.054	250.431	4590.425	17.049	-0.000	16.582	0.000	5.761	0.000	17.118	16.563	-30.029	MWD+IFR1+MS
4700.000	7.054	250.431	4689.668	17.390	-0.000	16.942	0.000	5.883	0.000	17.453	16.927	-29.246	MWD+IFR1+MS
4800.000	7.054	250.431	4788.911	17.732	-0.000	17.304	0.000	6.007	0.000	17.790	17.292	-28.399	MWD+IFR1+MS
4900.000	7.054	250.431	4888.154	18.075	-0.000	17.666	0.000	6.133	0.000	18.127	17.657	-27.480	MWD+IFR1+MS
5000.000	7.054	250.431	4987.397	18.419	-0.000	18.028	0.000	6.261	0.000	18.466	18.021	-26.482	MWD+IFR1+MS
5100.000	7.054	250.431	5086.640	18.764	-0.000	18.390	0.000	6.391	0.000	18.807	18.386	-25.395	MWD+IFR1+MS
5200.000	7.054	250.431	5185.883	19.110	-0.000	18.754	0.000	6.523	0.000	19.148	18.751	-24.211	MWD+IFR1+MS
5262.769	7.054	250.431	5248.177	19.324	-0.000	18.978	0.000	6.607	0.000	19.361	18.976	-23.918	MWD+IFR1+MS
5300.000	6.310	250.431	5285.155	19.467	-0.000	19.110	0.000	6.657	0.000	19.487	19.108	-23.840	MWD+IFR1+MS
5400.000	4.310	250.431	5384.721	19.896	-0.000	19.466	0.000	6.795	0.000	19.884	19.466	-21.013	MWD+IFR1+MS
5500.000	2.310	250.431	5484.549	20.371	-0.000	19.824	0.000	6.934	0.000	20.352	19.823	-16.875	MWD+IFR1+MS
5600.000	0.310	250.431	5584.518	20.817	-0.000	20.178	0.000	7.071	0.000	20.818	20.172	-14.319	MWD+IFR1+MS
5615.482	0.000	0.000	5600.000	20.265	0.000	20.831	0.000	7.092	0.000	20.870	20.226	-14.302	MWD+IFR1+MS
5700.000	0.000	0.000	5684.518	20.562	0.000	21.112	0.000	7.208	0.000	21.152	20.521	-14.610	MWD+IFR1+MS
5800.000	0.000	0.000	5784.518	20.916	0.000	21.452	0.000	7.347	0.000	21.494	20.872	-15.305	MWD+IFR1+MS
5900.000	0.000	0.000	5884.518	21.272	0.000	21.793	0.000	7.489	0.000	21.839	21.224	-16.095	MWD+IFR1+MS
6000.000	0.000	0.000	5984.518	21.627	0.000	22.134	0.000	7.632	0.000	22.185	21.575	-16.875	MWD+IFR1+MS



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6100.000	0.000	0.000	6084.518	21.983	0.000	22.477	0.000	7.779	0.000	0.000	22.531	21.927	-17.646	MWD+IFR1+MS
6200.000	0.000	0.000	6184.518	22.339	0.000	22.819	0.000	7.927	0.000	0.000	22.878	22.279	-18.405	MWD+IFR1+MS
6300.000	0.000	0.000	6284.518	22.695	0.000	23.162	0.000	8.078	0.000	0.000	23.226	22.630	-19.152	MWD+IFR1+MS
6400.000	0.000	0.000	6384.518	23.051	0.000	23.506	0.000	8.231	0.000	0.000	23.574	22.982	-19.886	MWD+IFR1+MS
6500.000	0.000	0.000	6484.518	23.407	0.000	23.850	0.000	8.387	0.000	0.000	23.922	23.334	-20.608	MWD+IFR1+MS
6600.000	0.000	0.000	6584.518	23.764	0.000	24.194	0.000	8.545	0.000	0.000	24.271	23.686	-21.315	MWD+IFR1+MS
6700.000	0.000	0.000	6684.518	24.120	0.000	24.539	0.000	8.706	0.000	0.000	24.620	24.037	-22.008	MWD+IFR1+MS
6800.000	0.000	0.000	6784.518	24.476	0.000	24.885	0.000	8.869	0.000	0.000	24.970	24.389	-22.687	MWD+IFR1+MS
6900.000	0.000	0.000	6884.518	24.833	0.000	25.230	0.000	9.035	0.000	0.000	25.320	24.741	-23.351	MWD+IFR1+MS
7000.000	0.000	0.000	6984.518	25.189	0.000	25.576	0.000	9.204	0.000	0.000	25.671	25.093	-23.999	MWD+IFR1+MS
7100.000	0.000	0.000	7084.518	25.546	0.000	25.922	0.000	9.375	0.000	0.000	26.022	25.445	-24.633	MWD+IFR1+MS
7200.000	0.000	0.000	7184.518	25.902	0.000	26.269	0.000	9.548	0.000	0.000	26.373	25.797	-25.251	MWD+IFR1+MS
7300.000	0.000	0.000	7284.518	26.259	0.000	26.616	0.000	9.724	0.000	0.000	26.725	26.149	-25.854	MWD+IFR1+MS
7400.000	0.000	0.000	7384.518	26.616	0.000	26.963	0.000	9.903	0.000	0.000	27.077	26.501	-26.441	MWD+IFR1+MS
7500.000	0.000	0.000	7484.518	26.973	0.000	27.311	0.000	10.085	0.000	0.000	27.429	26.853	-27.014	MWD+IFR1+MS
7600.000	0.000	0.000	7584.518	27.329	0.000	27.659	0.000	10.269	0.000	0.000	27.781	27.205	-27.571	MWD+IFR1+MS
7700.000	0.000	0.000	7684.518	27.686	0.000	28.007	0.000	10.456	0.000	0.000	28.134	27.557	-28.114	MWD+IFR1+MS
7800.000	0.000	0.000	7784.518	28.043	0.000	28.355	0.000	10.646	0.000	0.000	28.487	27.909	-28.642	MWD+IFR1+MS
7900.000	0.000	0.000	7884.518	28.400	0.000	28.704	0.000	10.838	0.000	0.000	28.840	28.262	-29.155	MWD+IFR1+MS
8000.000	0.000	0.000	7984.518	28.757	0.000	29.053	0.000	11.033	0.000	0.000	29.193	28.614	-29.655	MWD+IFR1+MS
8100.000	0.000	0.000	8084.518	29.114	0.000	29.402	0.000	11.231	0.000	0.000	29.547	28.966	-30.140	MWD+IFR1+MS
8200.000	0.000	0.000	8184.518	29.471	0.000	29.751	0.000	11.432	0.000	0.000	29.901	29.319	-30.612	MWD+IFR1+MS
8300.000	0.000	0.000	8284.518	29.828	0.000	30.100	0.000	11.636	0.000	0.000	30.255	29.672	-31.071	MWD+IFR1+MS
8400.000	0.000	0.000	8384.518	30.185	0.000	30.450	0.000	11.842	0.000	0.000	30.609	30.024	-31.517	MWD+IFR1+MS
8500.000	0.000	0.000	8484.518	30.542	0.000	30.800	0.000	12.051	0.000	0.000	30.963	30.377	-31.951	MWD+IFR1+MS
8600.000	0.000	0.000	8584.518	30.899	0.000	31.150	0.000	12.263	0.000	0.000	31.318	30.730	-32.372	MWD+IFR1+MS
8700.000	0.000	0.000	8684.518	31.257	0.000	31.500	0.000	12.478	0.000	0.000	31.672	31.083	-32.781	MWD+IFR1+MS
8800.000	0.000	0.000	8784.518	31.614	0.000	31.851	0.000	12.696	0.000	0.000	32.027	31.436	-33.179	MWD+IFR1+MS
8900.000	0.000	0.000	8884.518	31.971	0.000	32.202	0.000	12.917	0.000	0.000	32.382	31.789	-33.565	MWD+IFR1+MS
9000.000	0.000	0.000	8984.518	32.328	0.000	32.552	0.000	13.140	0.000	0.000	32.737	32.142	-33.941	MWD+IFR1+MS
9100.000	0.000	0.000	9084.518	32.686	0.000	32.903	0.000	13.367	0.000	0.000	33.092	32.495	-34.306	MWD+IFR1+MS
9200.000	0.000	0.000	9184.518	33.043	0.000	33.255	0.000	13.596	0.000	0.000	33.447	32.848	-34.660	MWD+IFR1+MS
9300.000	0.000	0.000	9284.518	33.400	0.000	33.606	0.000	13.828	0.000	0.000	33.803	33.201	-35.005	MWD+IFR1+MS

9400.000	0.000	0.000	9384.518	33.758	0.000	33.957	0.000	14.063	0.000	34.158	33.554	-35.340	MWD+IFR1+MS
9500.000	0.000	0.000	9484.518	34.115	0.000	34.309	0.000	14.301	0.000	34.514	33.908	-35.666	MWD+IFR1+MS
9600.000	0.000	0.000	9584.518	34.472	0.000	34.661	0.000	14.542	0.000	34.869	34.261	-35.983	MWD+IFR1+MS
9700.000	0.000	0.000	9684.518	34.830	0.000	35.013	0.000	14.786	0.000	35.225	34.615	-36.291	MWD+IFR1+MS
9800.000	0.000	0.000	9784.518	35.187	0.000	35.365	0.000	15.033	0.000	35.581	34.968	-36.591	MWD+IFR1+MS
9900.000	0.000	0.000	9884.518	35.545	0.000	35.717	0.000	15.283	0.000	35.937	35.322	-36.883	MWD+IFR1+MS
10000.000	0.000	0.000	9984.518	35.902	0.000	36.069	0.000	15.535	0.000	36.293	35.676	-37.167	MWD+IFR1+MS
10100.000	0.000	0.000	10084.518	36.260	0.000	36.421	0.000	15.791	0.000	36.649	36.030	-37.443	MWD+IFR1+MS
10200.000	0.000	0.000	10184.518	36.617	0.000	36.774	0.000	16.050	0.000	37.005	36.384	-37.712	MWD+IFR1+MS
10300.000	0.000	0.000	10284.518	36.975	0.000	37.126	0.000	16.312	0.000	37.361	36.737	-37.973	MWD+IFR1+MS
10400.000	0.000	0.000	10384.518	37.333	0.000	37.479	0.000	16.576	0.000	37.718	37.091	-38.228	MWD+IFR1+MS
10500.000	0.000	0.000	10484.518	37.690	0.000	37.832	0.000	16.844	0.000	38.074	37.445	-38.476	MWD+IFR1+MS
10530.285	0.000	0.000	10514.803	37.797	0.000	37.938	0.000	16.926	0.000	38.180	37.553	-38.525	MWD+IFR1+MS
10600.000	5.577	359.617	10584.407	37.947	0.000	38.183	0.000	17.115	0.000	38.455	37.834	-41.931	MWD+IFR1+MS
10700.000	13.577	359.617	10682.934	38.378	0.000	38.522	0.000	17.435	0.000	39.370	38.376	112.061	MWD+IFR1+MS
10800.000	21.577	359.617	10778.187	38.537	0.000	38.847	0.000	17.905	0.000	40.617	38.752	102.564	MWD+IFR1+MS
10900.000	29.577	359.617	10868.315	38.146	0.000	39.153	0.000	18.572	0.000	41.738	39.070	99.651	MWD+IFR1+MS
11000.000	37.577	359.617	10951.561	37.272	0.000	39.437	0.000	19.467	0.000	42.685	39.356	98.405	MWD+IFR1+MS
11100.000	45.577	359.617	11026.307	36.008	0.000	39.697	0.000	20.593	0.000	43.445	39.615	97.836	MWD+IFR1+MS
11200.000	53.577	359.617	11091.096	34.477	0.000	39.931	0.000	21.926	0.000	44.020	39.845	97.630	MWD+IFR1+MS
11300.000	61.577	359.617	11144.669	32.840	0.000	40.139	0.000	23.422	0.000	44.420	40.049	97.654	MWD+IFR1+MS
11400.000	69.577	359.617	11185.982	31.291	0.000	40.320	0.000	25.031	0.000	44.669	40.225	97.837	MWD+IFR1+MS
11500.000	77.577	359.617	11214.231	30.053	0.000	40.475	0.000	26.694	0.000	44.798	40.373	98.123	MWD+IFR1+MS
11600.000	85.577	359.617	11228.867	29.348	0.000	40.603	0.000	28.356	0.000	44.847	40.495	98.445	MWD+IFR1+MS
11655.285	90.000	359.617	11231.000	28.706	0.000	40.658	0.000	28.706	0.000	44.855	40.548	98.589	MWD+IFR1+MS
11700.000	90.000	359.617	11231.000	28.790	0.000	40.701	0.000	28.790	0.000	44.860	40.589	98.706	MWD+IFR1+MS
11800.000	90.000	359.617	11231.000	28.940	0.000	40.815	0.000	28.940	0.000	44.871	40.698	99.015	MWD+IFR1+MS
11900.000	90.000	359.617	11231.000	29.114	0.000	40.949	0.000	29.114	0.000	44.883	40.827	99.382	MWD+IFR1+MS
12000.000	90.000	359.617	11231.000	29.307	0.000	41.102	0.000	29.307	0.000	44.897	40.973	99.815	MWD+IFR1+MS
12100.000	90.000	359.617	11231.000	29.520	0.000	41.273	0.000	29.520	0.000	44.912	41.137	100.324	MWD+IFR1+MS
12200.000	90.000	359.617	11231.000	29.752	0.000	41.462	0.000	29.752	0.000	44.929	41.317	100.924	MWD+IFR1+MS
12300.000	90.000	359.617	11231.000	30.003	0.000	41.669	0.000	30.003	0.000	44.948	41.514	101.636	MWD+IFR1+MS
12400.000	90.000	359.617	11231.000	30.273	0.000	41.893	0.000	30.273	0.000	44.970	41.726	102.487	MWD+IFR1+MS

12500.000	90.000	359.617	11231.000	30.560	0.000	42.135	0.000	30.560	0.000	44.995	41.953	103.513	MWD+IFR1+MS
12600.000	90.000	359.617	11231.000	30.864	0.000	42.393	0.000	30.864	0.000	45.024	42.194	104.763	MWD+IFR1+MS
12700.000	90.000	359.617	11231.000	31.185	0.000	42.668	0.000	31.185	0.000	45.058	42.447	106.304	MWD+IFR1+MS
12800.000	90.000	359.617	11231.000	31.523	0.000	42.959	0.000	31.523	0.000	45.099	42.710	108.231	MWD+IFR1+MS
12900.000	90.000	359.617	11231.000	31.876	0.000	43.267	0.000	31.876	0.000	45.148	42.981	110.674	MWD+IFR1+MS
13000.000	90.000	359.617	11231.000	32.244	0.000	43.590	0.000	32.244	0.000	45.210	43.255	113.807	MWD+IFR1+MS
13100.000	90.000	359.617	11231.000	32.627	0.000	43.928	0.000	32.627	0.000	45.290	43.528	117.838	MWD+IFR1+MS
13200.000	90.000	359.617	11231.000	33.024	0.000	44.281	0.000	33.024	0.000	45.396	43.789	122.962	MWD+IFR1+MS
13300.000	90.000	359.617	11231.000	33.435	0.000	44.649	0.000	33.435	0.000	45.539	44.030	129.203	MWD+IFR1+MS
13400.000	90.000	359.617	11231.000	33.860	0.000	45.031	0.000	33.860	0.000	45.729	44.238	-43.802	MWD+IFR1+MS
13500.000	90.000	359.617	11231.000	34.297	0.000	45.427	0.000	34.297	0.000	45.972	44.407	-36.810	MWD+IFR1+MS
13600.000	90.000	359.617	11231.000	34.746	0.000	45.836	0.000	34.746	0.000	46.267	44.540	-30.577	MWD+IFR1+MS
13700.000	90.000	359.617	11231.000	35.207	0.000	46.258	0.000	35.207	0.000	46.605	44.642	-25.459	MWD+IFR1+MS
13800.000	90.000	359.617	11231.000	35.679	0.000	46.694	0.000	35.679	0.000	46.979	44.722	-21.429	MWD+IFR1+MS
13900.000	90.000	359.617	11231.000	36.162	0.000	47.141	0.000	36.162	0.000	47.381	44.787	-18.293	MWD+IFR1+MS
14000.000	90.000	359.617	11231.000	36.656	0.000	47.601	0.000	36.656	0.000	47.806	44.841	-15.839	MWD+IFR1+MS
14100.000	90.000	359.617	11231.000	37.159	0.000	48.073	0.000	37.159	0.000	48.250	44.889	-13.897	MWD+IFR1+MS
14200.000	90.000	359.617	11231.000	37.672	0.000	48.555	0.000	37.672	0.000	48.712	44.931	-12.335	MWD+IFR1+MS
14300.000	90.000	359.617	11231.000	38.195	0.000	49.049	0.000	38.195	0.000	49.188	44.970	-11.061	MWD+IFR1+MS
14400.000	90.000	359.617	11231.000	38.726	0.000	49.554	0.000	38.726	0.000	49.679	45.007	-10.006	MWD+IFR1+MS
14500.000	90.000	359.617	11231.000	39.266	0.000	50.069	0.000	39.266	0.000	50.182	45.041	-9.121	MWD+IFR1+MS
14600.000	90.000	359.617	11231.000	39.814	0.000	50.594	0.000	39.814	0.000	50.697	45.075	-8.370	MWD+IFR1+MS
14700.000	90.000	359.617	11231.000	40.369	0.000	51.129	0.000	40.369	0.000	51.223	45.107	-7.726	MWD+IFR1+MS
14800.000	90.000	359.617	11231.000	40.933	0.000	51.674	0.000	40.933	0.000	51.760	45.140	-7.169	MWD+IFR1+MS
14900.000	90.000	359.617	11231.000	41.503	0.000	52.227	0.000	41.503	0.000	52.307	45.171	-6.683	MWD+IFR1+MS
15000.000	90.000	359.617	11231.000	42.080	0.000	52.790	0.000	42.080	0.000	52.864	45.203	-6.255	MWD+IFR1+MS
15100.000	90.000	359.617	11231.000	42.664	0.000	53.361	0.000	42.664	0.000	53.430	45.235	-5.876	MWD+IFR1+MS
15200.000	90.000	359.617	11231.000	43.255	0.000	53.940	0.000	43.255	0.000	54.005	45.266	-5.539	MWD+IFR1+MS
15300.000	90.000	359.617	11231.000	43.851	0.000	54.528	0.000	43.851	0.000	54.588	45.298	-5.236	MWD+IFR1+MS
15400.000	90.000	359.617	11231.000	44.453	0.000	55.123	0.000	44.453	0.000	55.180	45.330	-4.964	MWD+IFR1+MS
15500.000	90.000	359.617	11231.000	45.061	0.000	55.726	0.000	45.061	0.000	55.780	45.362	-4.718	MWD+IFR1+MS
15600.000	90.000	359.617	11231.000	45.674	0.000	56.336	0.000	45.674	0.000	56.387	45.394	-4.494	MWD+IFR1+MS
15700.000	90.000	359.617	11231.000	46.293	0.000	56.953	0.000	46.293	0.000	57.001	45.427	-4.290	MWD+IFR1+MS

15800.000	90.000	359.617	11231.000	46.916	0.000	57.577	0.000	46.916	0.000	57.623	45.460	-4.104	MWD+IFR1+MS
15900.000	90.000	359.617	11231.000	47.545	0.000	58.208	0.000	47.545	0.000	58.251	45.494	-3.933	MWD+IFR1+MS
16000.000	90.000	359.617	11231.000	48.177	0.000	58.845	0.000	48.177	0.000	58.886	45.528	-3.775	MWD+IFR1+MS
16100.000	90.000	359.617	11231.000	48.815	0.000	59.488	0.000	48.815	0.000	59.528	45.562	-3.629	MWD+IFR1+MS
16200.000	90.000	359.617	11231.000	49.456	0.000	60.138	0.000	49.456	0.000	60.175	45.597	-3.494	MWD+IFR1+MS
16300.000	90.000	359.617	11231.000	50.102	0.000	60.793	0.000	50.102	0.000	60.829	45.633	-3.369	MWD+IFR1+MS
16400.000	90.000	359.617	11231.000	50.751	0.000	61.454	0.000	50.751	0.000	61.488	45.668	-3.252	MWD+IFR1+MS
16500.000	90.000	359.617	11231.000	51.404	0.000	62.120	0.000	51.404	0.000	62.153	45.705	-3.143	MWD+IFR1+MS
16600.000	90.000	359.617	11231.000	52.061	0.000	62.791	0.000	52.061	0.000	62.823	45.741	-3.041	MWD+IFR1+MS
16700.000	90.000	359.617	11231.000	52.722	0.000	63.468	0.000	52.722	0.000	63.498	45.779	-2.946	MWD+IFR1+MS
16800.000	90.000	359.617	11231.000	53.385	0.000	64.150	0.000	53.385	0.000	64.179	45.816	-2.857	MWD+IFR1+MS
16900.000	90.000	359.617	11231.000	54.052	0.000	64.836	0.000	54.052	0.000	64.864	45.855	-2.773	MWD+IFR1+MS
17000.000	90.000	359.617	11231.000	54.722	0.000	65.527	0.000	54.722	0.000	65.554	45.893	-2.694	MWD+IFR1+MS
17100.000	90.000	359.617	11231.000	55.395	0.000	66.223	0.000	55.395	0.000	66.249	45.933	-2.620	MWD+IFR1+MS
17200.000	90.000	359.617	11231.000	56.071	0.000	66.922	0.000	56.071	0.000	66.948	45.972	-2.549	MWD+IFR1+MS
17300.000	90.000	359.617	11231.000	56.750	0.000	67.627	0.000	56.750	0.000	67.651	46.013	-2.483	MWD+IFR1+MS
17400.000	90.000	359.617	11231.000	57.432	0.000	68.335	0.000	57.432	0.000	68.358	46.054	-2.420	MWD+IFR1+MS
17500.000	90.000	359.617	11231.000	58.116	0.000	69.047	0.000	58.116	0.000	69.070	46.095	-2.360	MWD+IFR1+MS
17600.000	90.000	359.617	11231.000	58.803	0.000	69.763	0.000	58.803	0.000	69.785	46.137	-2.304	MWD+IFR1+MS
17700.000	90.000	359.617	11231.000	59.492	0.000	70.483	0.000	59.492	0.000	70.504	46.179	-2.250	MWD+IFR1+MS
17800.000	90.000	359.617	11231.000	60.183	0.000	71.206	0.000	60.183	0.000	71.227	46.222	-2.199	MWD+IFR1+MS
17900.000	90.000	359.617	11231.000	60.877	0.000	71.933	0.000	60.877	0.000	71.953	46.266	-2.150	MWD+IFR1+MS
18000.000	90.000	359.617	11231.000	61.573	0.000	72.663	0.000	61.573	0.000	72.683	46.310	-2.104	MWD+IFR1+MS
18100.000	90.000	359.617	11231.000	62.271	0.000	73.397	0.000	62.271	0.000	73.416	46.354	-2.060	MWD+IFR1+MS
18200.000	90.000	359.617	11231.000	62.971	0.000	74.134	0.000	62.971	0.000	74.152	46.400	-2.017	MWD+IFR1+MS
18300.000	90.000	359.617	11231.000	63.673	0.000	74.873	0.000	63.673	0.000	74.891	46.445	-1.977	MWD+IFR1+MS
18400.000	90.000	359.617	11231.000	64.377	0.000	75.616	0.000	64.377	0.000	75.634	46.491	-1.938	MWD+IFR1+MS
18500.000	90.000	359.617	11231.000	65.082	0.000	76.362	0.000	65.082	0.000	76.379	46.538	-1.901	MWD+IFR1+MS
18600.000	90.000	359.617	11231.000	65.790	0.000	77.111	0.000	65.790	0.000	77.127	46.585	-1.866	MWD+IFR1+MS
18700.000	90.000	359.617	11231.000	66.499	0.000	77.862	0.000	66.499	0.000	77.878	46.633	-1.832	MWD+IFR1+MS
18800.000	90.000	359.617	11231.000	67.210	0.000	78.616	0.000	67.210	0.000	78.632	46.681	-1.799	MWD+IFR1+MS
18900.000	90.000	359.617	11231.000	67.923	0.000	79.373	0.000	67.923	0.000	79.388	46.730	-1.768	MWD+IFR1+MS
18949.248	90.000	359.617	11231.000	68.273	0.000	79.745	0.000	68.273	0.000	79.760	46.754	-1.753	MWD+IFR1+MS

18999.255 90.000 359.617 11231.000 68.630 0.000 80.123 0.000 68.630 0.000 0.000 80.138 46.779 -1.738 MWD+IFR1+MS

Plan Targets

Remuda North 25 ST 161H

Target Name

FTP 5  
LTP 5  
BHL 5

Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
11655.27	464608.50	619964.00	8133.00	CIRCLE
18949.25	471902.30	619915.30	8133.00	CIRCLE
18999.25	471952.30	619914.80	8133.00	CIRCLE



## HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

### Assumed 100 ppm ROE = 3000'

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

#### **Emergency Procedures**

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H<sub>2</sub>S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - o Detection of H<sub>2</sub>S, and
  - o Measures for protection against the gas,
  - o Equipment used for protection and emergency response.

#### **Ignition of Gas source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

#### **Characteristics of H<sub>2</sub>S and SO<sub>2</sub>**

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

#### **Contacting Authorities**

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

**CARLSBAD OFFICE – EDDY & LEA COUNTIES**

3104 E. Greene St., Carlsbad, NM 88220  
Carlsbad, NM

575-887-7329

**XTO PERSONNEL:**

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

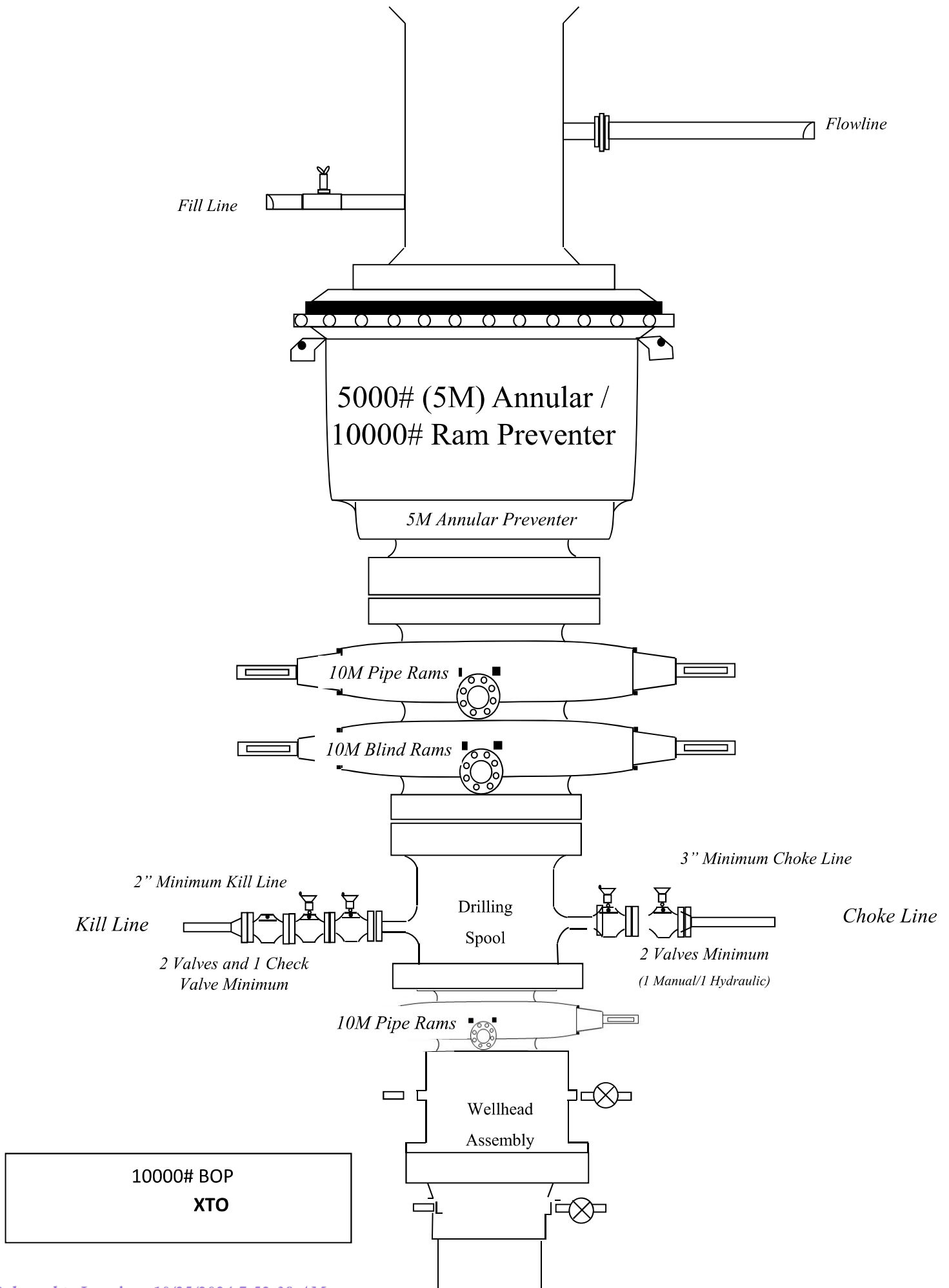
**AGENT NOTIFICATIONS:****For Lea County:**

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

**For Eddy County:**

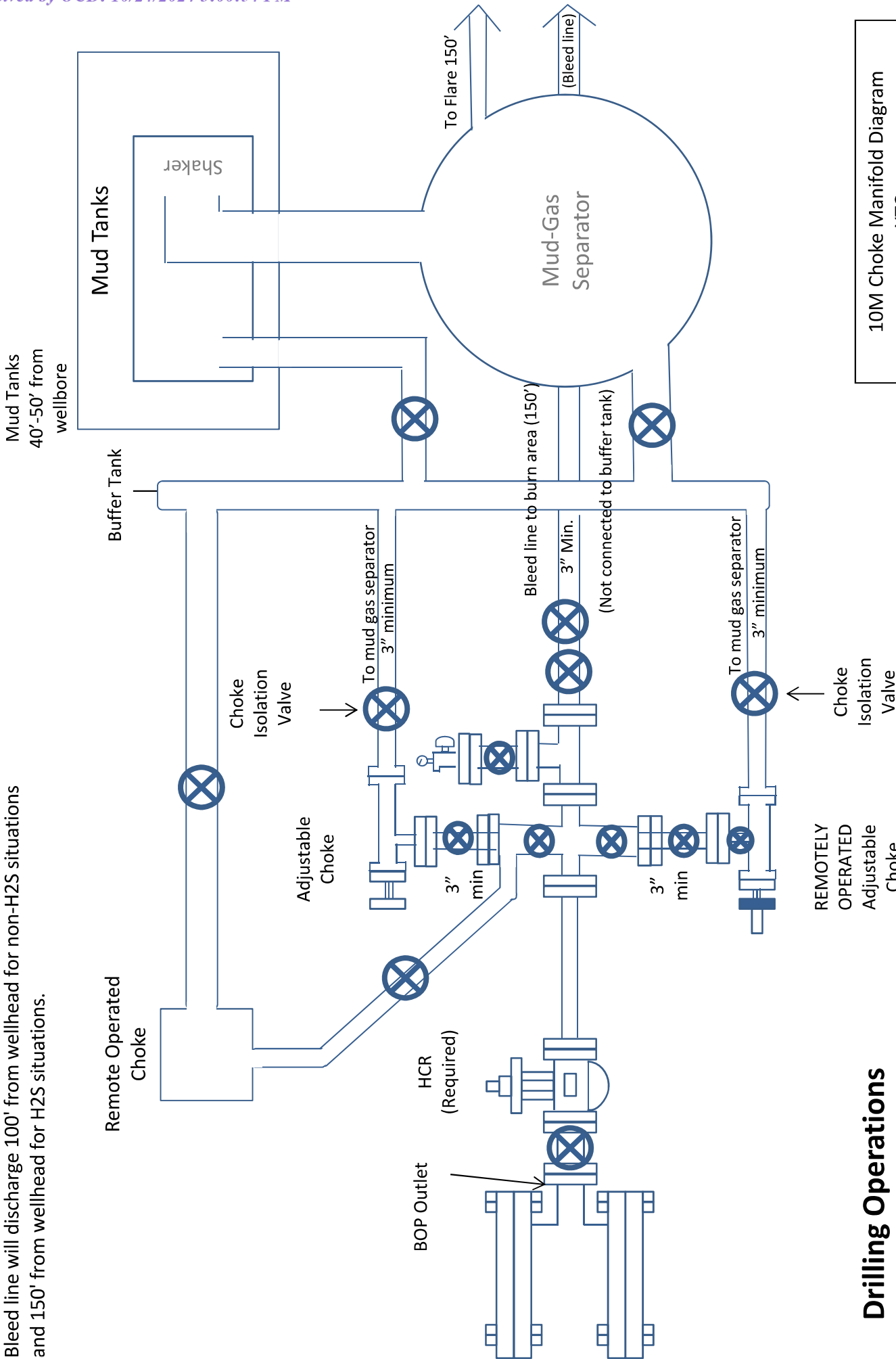
Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283





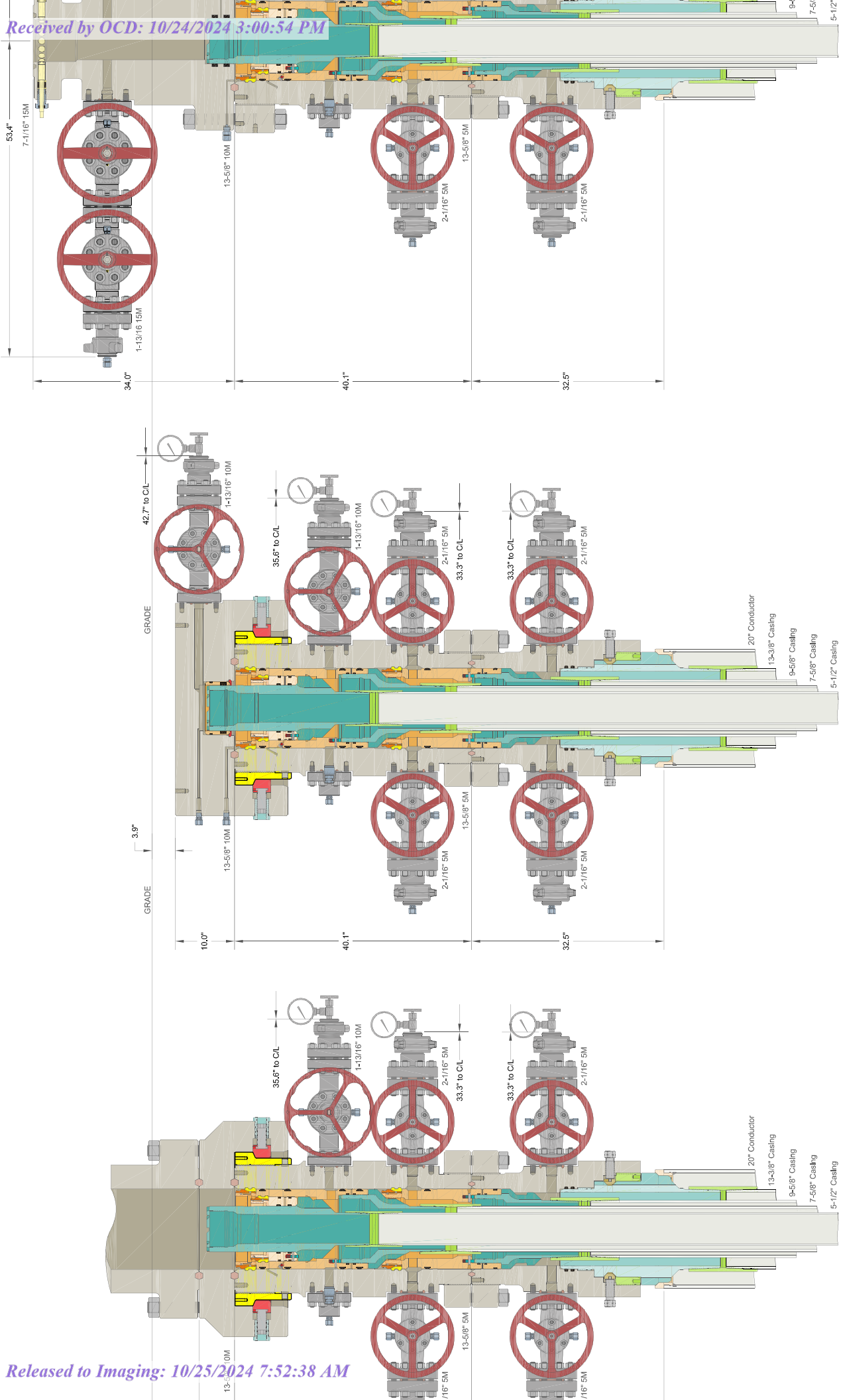


Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



**Drilling Operations  
Choke Manifold  
10M Service**

10M Choke Manifold Diagram  
XTO



State of New Mexico  
Energy, Minerals and Natural Resources Department

Submit Electronically  
Via E-permitting

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

**Effective May 25, 2021**

**I. Operator:** XTO 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

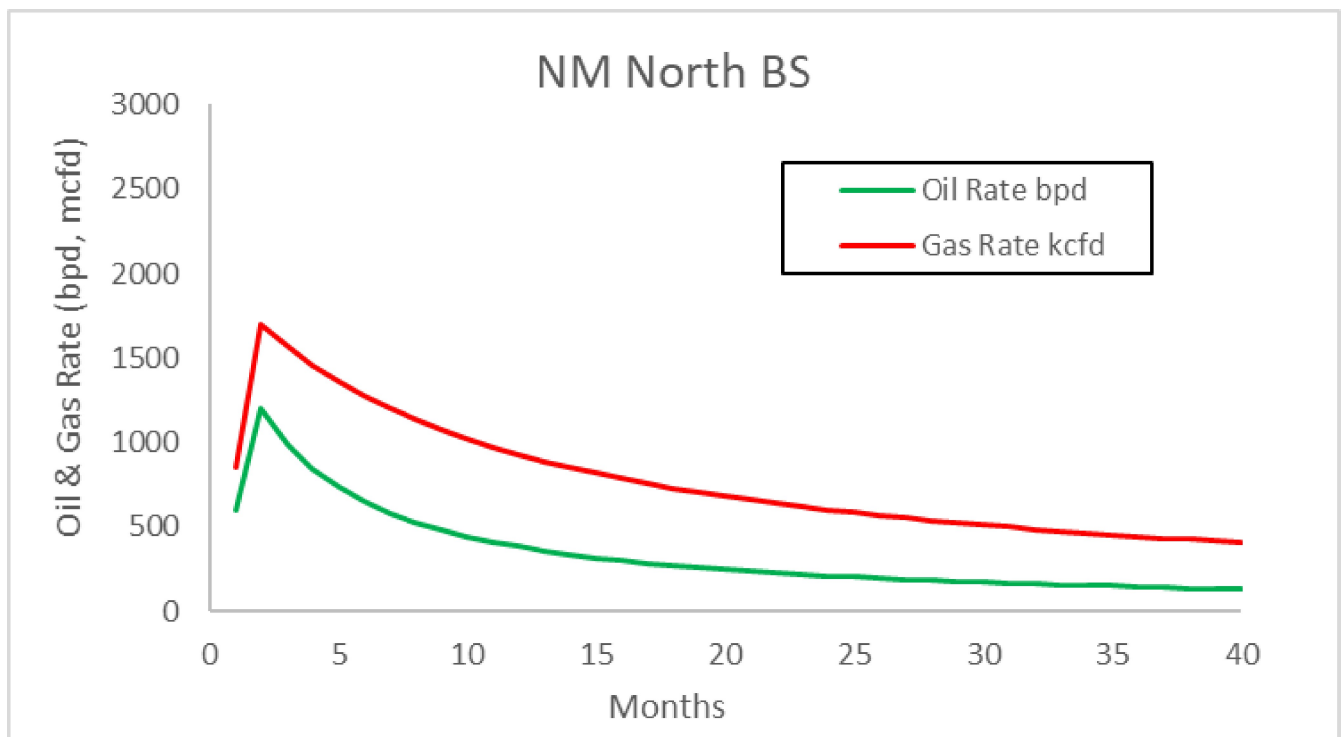
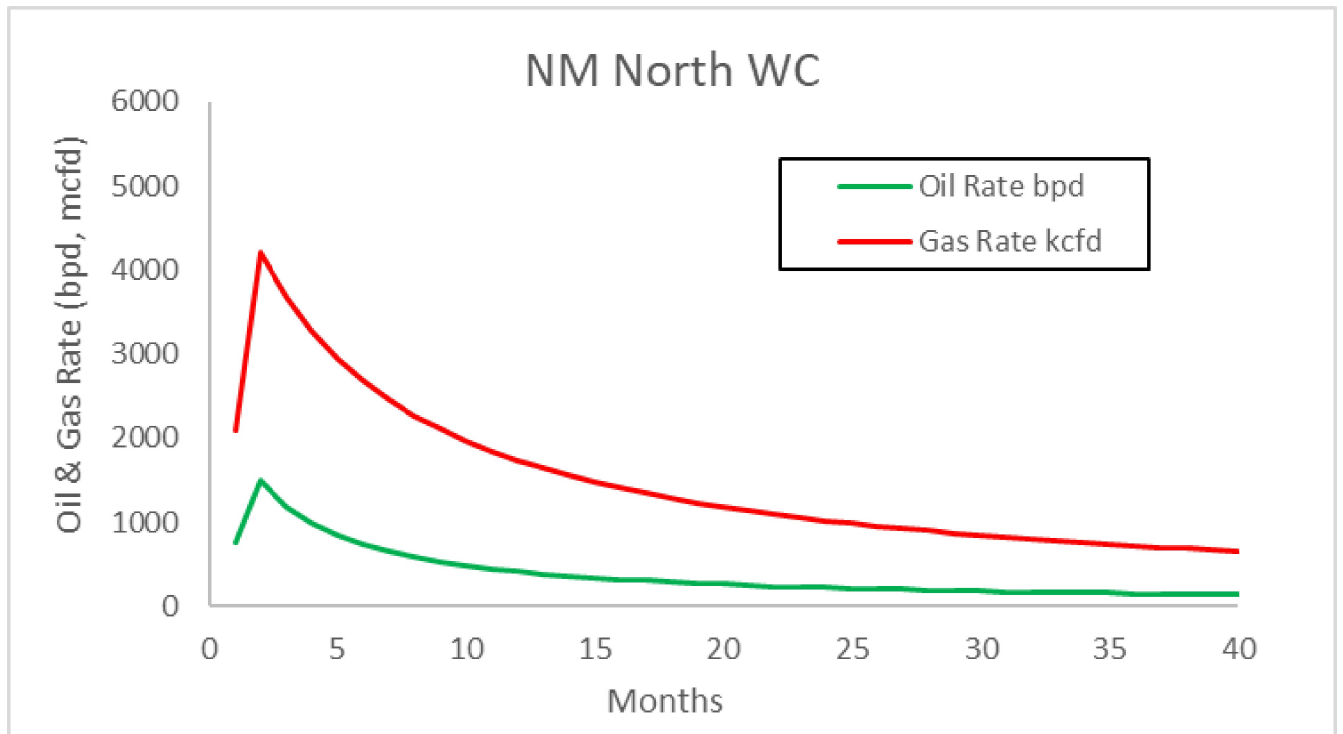
**OIL CONSERVATION DIVISION****(Only applicable when submitted as a standalone form)**

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 Plan Report - Remuda North 25 ST 161H

Measured Depth: 18999.26 ft

TVD RKB: 11231.00 ft

Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 463981.30 ft

Easting: 620219.10 ft

RKB: 3098.00 ft

Ground Level: 472181.70 ft

North Reference: Grid

Convergence Angle: 0.21 Deg

Site: A

Slot: Remuda North 25 ST 161H

Plan Sections

Remuda North 25 ST 161H

Measured				TVD			Build	Turn	Dogleg		
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target		
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)			
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
3100.00	0.00	0.00	3100.00	0.00	0.00	0.00	0.00	0.00			
3452.71	7.05	250.43	3451.82	-7.26	-20.43	2.00	0.00	2.00			
5262.77	7.05	250.43	5248.18	-81.72	-229.89	0.00	0.00	0.00			
5615.48	0.00	0.00	5600.00	-88.98	-250.32	-2.00	0.00	2.00			
10530.29	0.00	0.00	10514.80	-88.98	-250.32	0.00	0.00	0.00			
11655.29	90.00	359.62	11231.00	627.20	-255.10	8.00	0.00	8.00	FTP 5		
18949.25	90.00	359.62	11231.00	7921.00	-303.80	0.00	0.00	0.00	LTP 5		
18999.26	90.00	359.62	11231.00	7971.01	-304.13	0.00	0.00	0.00	BHL 5		

Position Uncertainty

Remuda North 25 ST 161H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.309	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.346	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.372	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.404	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.440	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.481	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.526	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.575	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.628	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.779	0.000	4.589	0.000	2.683	0.000	0.000	5.119	4.207	128.954	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.140	0.000	4.950	0.000	2.742	0.000	0.000	5.484	4.565	129.034	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.500	0.000	5.311	0.000	2.804	0.000	0.000	5.849	4.924	129.102	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.860	0.000	5.672	0.000	2.869	0.000	0.000	6.213	5.282	129.161	MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	6.219	0.000	6.032	0.000	2.936	0.000	0.000	6.577	5.640	129.212	MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.579	0.000	6.392	0.000	3.005	0.000	0.000	6.939	5.999	129.257	MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.938	0.000	6.752	0.000	3.077	0.000	0.000	7.302	6.357	129.297	MWD+IFR1+MS
1900.000	0.000	0.000	1900.000	7.298	0.000	7.112	0.000	3.150	0.000	0.000	7.664	6.715	129.333	MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.657	0.000	7.471	0.000	3.226	0.000	0.000	8.026	7.074	129.365	MWD+IFR1+MS
2100.000	0.000	0.000	2100.000	8.016	0.000	7.831	0.000	3.303	0.000	0.000	8.387	7.432	129.394	MWD+IFR1+MS
2200.000	0.000	0.000	2200.000	8.375	0.000	8.190	0.000	3.382	0.000	0.000	8.748	7.791	129.420	MWD+IFR1+MS
2300.000	0.000	0.000	2300.000	8.734	0.000	8.550	0.000	3.462	0.000	0.000	9.109	8.149	129.444	MWD+IFR1+MS
2400.000	0.000	0.000	2400.000	9.093	0.000	8.909	0.000	3.545	0.000	0.000	9.470	8.507	129.466	MWD+IFR1+MS
2500.000	0.000	0.000	2500.000	9.452	0.000	9.268	0.000	3.629	0.000	0.000	9.831	8.866	129.486	MWD+IFR1+MS
2600.000	0.000	0.000	2600.000	9.811	0.000	9.627	0.000	3.714	0.000	0.000	10.191	9.224	129.505	MWD+IFR1+MS
2700.000	0.000	0.000	2700.000	10.170	0.000	9.986	0.000	3.801	0.000	0.000	10.552	9.583	129.522	MWD+IFR1+MS
2800.000	0.000	0.000	2800.000	10.529	0.000	10.345	0.000	3.889	0.000	0.000	10.912	9.941	129.538	MWD+IFR1+MS
2900.000	0.000	0.000	2900.000	10.888	0.000	10.705	0.000	3.979	0.000	0.000	11.272	10.299	129.552	MWD+IFR1+MS
3000.000	0.000	0.000	3000.000	11.247	0.000	11.063	0.000	4.070	0.000	0.000	11.632	10.658	129.566	MWD+IFR1+MS

3100.000	0.000	0.000	3100.000	11.606	0.000	11.422	0.000	4.163	0.000	0.000	11.992	11.016	129.579	MWD+IFR1+MS
3200.000	2.000	250.431	3199.980	12.086	-0.000	11.632	0.000	4.257	0.000	0.000	12.319	11.392	130.293	MWD+IFR1+MS
3300.000	4.000	250.431	3299.838	12.597	-0.000	11.979	0.000	4.353	0.000	0.000	12.760	11.833	-42.584	MWD+IFR1+MS
3400.000	6.000	250.431	3399.452	13.083	-0.000	12.327	0.000	4.451	0.000	0.000	13.218	12.243	-36.368	MWD+IFR1+MS
3452.713	7.054	250.431	3451.823	13.254	-0.000	12.506	0.000	4.501	0.000	0.000	13.405	12.430	-35.565	MWD+IFR1+MS
3500.000	7.054	250.431	3498.752	13.404	-0.000	12.666	0.000	4.547	0.000	0.000	13.553	12.591	-35.541	MWD+IFR1+MS
3600.000	7.054	250.431	3597.995	13.720	-0.000	13.012	0.000	4.648	0.000	0.000	13.864	12.940	-35.470	MWD+IFR1+MS
3700.000	7.054	250.431	3697.238	14.045	-0.000	13.365	0.000	4.751	0.000	0.000	14.180	13.300	-35.065	MWD+IFR1+MS
3800.000	7.054	250.431	3796.481	14.372	-0.000	13.719	0.000	4.856	0.000	0.000	14.499	13.661	-34.637	MWD+IFR1+MS
3900.000	7.054	250.431	3895.724	14.701	-0.000	14.074	0.000	4.962	0.000	0.000	14.820	14.022	-34.183	MWD+IFR1+MS
4000.000	7.054	250.431	3994.967	15.032	-0.000	14.430	0.000	5.071	0.000	0.000	15.142	14.384	-33.701	MWD+IFR1+MS
4100.000	7.054	250.431	4094.210	15.364	-0.000	14.787	0.000	5.181	0.000	0.000	15.467	14.746	-33.188	MWD+IFR1+MS
4200.000	7.054	250.431	4193.453	15.698	-0.000	15.144	0.000	5.293	0.000	0.000	15.794	15.109	-32.641	MWD+IFR1+MS
4300.000	7.054	250.431	4292.696	16.034	-0.000	15.503	0.000	5.407	0.000	0.000	16.123	15.472	-32.056	MWD+IFR1+MS
4400.000	7.054	250.431	4391.939	16.371	-0.000	15.862	0.000	5.523	0.000	0.000	16.453	15.835	-31.429	MWD+IFR1+MS
4500.000	7.054	250.431	4491.182	16.709	-0.000	16.221	0.000	5.641	0.000	0.000	16.785	16.199	-30.755	MWD+IFR1+MS
4600.000	7.054	250.431	4590.425	17.049	-0.000	16.582	0.000	5.761	0.000	0.000	17.118	16.563	-30.029	MWD+IFR1+MS
4700.000	7.054	250.431	4689.668	17.390	-0.000	16.942	0.000	5.883	0.000	0.000	17.453	16.927	-29.246	MWD+IFR1+MS
4800.000	7.054	250.431	4788.911	17.732	-0.000	17.304	0.000	6.007	0.000	0.000	17.790	17.292	-28.399	MWD+IFR1+MS
4900.000	7.054	250.431	4888.154	18.075	-0.000	17.666	0.000	6.133	0.000	0.000	18.127	17.657	-27.480	MWD+IFR1+MS
5000.000	7.054	250.431	4987.397	18.419	-0.000	18.028	0.000	6.261	0.000	0.000	18.466	18.021	-26.482	MWD+IFR1+MS
5100.000	7.054	250.431	5086.640	18.764	-0.000	18.390	0.000	6.391	0.000	0.000	18.807	18.386	-25.395	MWD+IFR1+MS
5200.000	7.054	250.431	5185.883	19.110	-0.000	18.754	0.000	6.523	0.000	0.000	19.148	18.751	-24.211	MWD+IFR1+MS
5262.769	7.054	250.431	5248.177	19.324	-0.000	18.978	0.000	6.607	0.000	0.000	19.361	18.976	-23.918	MWD+IFR1+MS
5300.000	6.310	250.431	5285.155	19.467	-0.000	19.110	0.000	6.657	0.000	0.000	19.487	19.108	-23.840	MWD+IFR1+MS
5400.000	4.310	250.431	5384.721	19.896	-0.000	19.466	0.000	6.795	0.000	0.000	19.884	19.466	-21.013	MWD+IFR1+MS
5500.000	2.310	250.431	5484.549	20.371	-0.000	19.824	0.000	6.934	0.000	0.000	20.352	19.823	-16.875	MWD+IFR1+MS
5600.000	0.310	250.431	5584.518	20.817	-0.000	20.178	0.000	7.071	0.000	0.000	20.818	20.172	-14.319	MWD+IFR1+MS
5615.482	0.000	0.000	5600.000	20.265	0.000	20.831	0.000	7.092	0.000	0.000	20.870	20.226	-14.302	MWD+IFR1+MS
5700.000	0.000	0.000	5684.518	20.562	0.000	21.112	0.000	7.208	0.000	0.000	21.152	20.521	-14.610	MWD+IFR1+MS
5800.000	0.000	0.000	5784.518	20.916	0.000	21.452	0.000	7.347	0.000	0.000	21.494	20.872	-15.305	MWD+IFR1+MS
5900.000	0.000	0.000	5884.518	21.272	0.000	21.793	0.000	7.489	0.000	0.000	21.839	21.224	-16.095	MWD+IFR1+MS
6000.000	0.000	0.000	5984.518	21.627	0.000	22.134	0.000	7.632	0.000	0.000	22.185	21.575	-16.875	MWD+IFR1+MS

6100.000	0.000	0.000	6084.518	21.983	0.000	22.477	0.000	7.779	0.000	0.000	22.531	21.927	-17.646	MWD+IFR1+MS
6200.000	0.000	0.000	6184.518	22.339	0.000	22.819	0.000	7.927	0.000	0.000	22.878	22.279	-18.405	MWD+IFR1+MS
6300.000	0.000	0.000	6284.518	22.695	0.000	23.162	0.000	8.078	0.000	0.000	23.226	22.630	-19.152	MWD+IFR1+MS
6400.000	0.000	0.000	6384.518	23.051	0.000	23.506	0.000	8.231	0.000	0.000	23.574	22.982	-19.886	MWD+IFR1+MS
6500.000	0.000	0.000	6484.518	23.407	0.000	23.850	0.000	8.387	0.000	0.000	23.922	23.334	-20.608	MWD+IFR1+MS
6600.000	0.000	0.000	6584.518	23.764	0.000	24.194	0.000	8.545	0.000	0.000	24.271	23.686	-21.315	MWD+IFR1+MS
6700.000	0.000	0.000	6684.518	24.120	0.000	24.539	0.000	8.706	0.000	0.000	24.620	24.037	-22.008	MWD+IFR1+MS
6800.000	0.000	0.000	6784.518	24.476	0.000	24.885	0.000	8.869	0.000	0.000	24.970	24.389	-22.687	MWD+IFR1+MS
6900.000	0.000	0.000	6884.518	24.833	0.000	25.230	0.000	9.035	0.000	0.000	25.320	24.741	-23.351	MWD+IFR1+MS
7000.000	0.000	0.000	6984.518	25.189	0.000	25.576	0.000	9.204	0.000	0.000	25.671	25.093	-23.999	MWD+IFR1+MS
7100.000	0.000	0.000	7084.518	25.546	0.000	25.922	0.000	9.375	0.000	0.000	26.022	25.445	-24.633	MWD+IFR1+MS
7200.000	0.000	0.000	7184.518	25.902	0.000	26.269	0.000	9.548	0.000	0.000	26.373	25.797	-25.251	MWD+IFR1+MS
7300.000	0.000	0.000	7284.518	26.259	0.000	26.616	0.000	9.724	0.000	0.000	26.725	26.149	-25.854	MWD+IFR1+MS
7400.000	0.000	0.000	7384.518	26.616	0.000	26.963	0.000	9.903	0.000	0.000	27.077	26.501	-26.441	MWD+IFR1+MS
7500.000	0.000	0.000	7484.518	26.973	0.000	27.311	0.000	10.085	0.000	0.000	27.429	26.853	-27.014	MWD+IFR1+MS
7600.000	0.000	0.000	7584.518	27.329	0.000	27.659	0.000	10.269	0.000	0.000	27.781	27.205	-27.571	MWD+IFR1+MS
7700.000	0.000	0.000	7684.518	27.686	0.000	28.007	0.000	10.456	0.000	0.000	28.134	27.557	-28.114	MWD+IFR1+MS
7800.000	0.000	0.000	7784.518	28.043	0.000	28.355	0.000	10.646	0.000	0.000	28.487	27.909	-28.642	MWD+IFR1+MS
7900.000	0.000	0.000	7884.518	28.400	0.000	28.704	0.000	10.838	0.000	0.000	28.840	28.262	-29.155	MWD+IFR1+MS
8000.000	0.000	0.000	7984.518	28.757	0.000	29.053	0.000	11.033	0.000	0.000	29.193	28.614	-29.655	MWD+IFR1+MS
8100.000	0.000	0.000	8084.518	29.114	0.000	29.402	0.000	11.231	0.000	0.000	29.547	28.966	-30.140	MWD+IFR1+MS
8200.000	0.000	0.000	8184.518	29.471	0.000	29.751	0.000	11.432	0.000	0.000	29.901	29.319	-30.612	MWD+IFR1+MS
8300.000	0.000	0.000	8284.518	29.828	0.000	30.100	0.000	11.636	0.000	0.000	30.255	29.672	-31.071	MWD+IFR1+MS
8400.000	0.000	0.000	8384.518	30.185	0.000	30.450	0.000	11.842	0.000	0.000	30.609	30.024	-31.517	MWD+IFR1+MS
8500.000	0.000	0.000	8484.518	30.542	0.000	30.800	0.000	12.051	0.000	0.000	30.963	30.377	-31.951	MWD+IFR1+MS
8600.000	0.000	0.000	8584.518	30.899	0.000	31.150	0.000	12.263	0.000	0.000	31.318	30.730	-32.372	MWD+IFR1+MS
8700.000	0.000	0.000	8684.518	31.257	0.000	31.500	0.000	12.478	0.000	0.000	31.672	31.083	-32.781	MWD+IFR1+MS
8800.000	0.000	0.000	8784.518	31.614	0.000	31.851	0.000	12.696	0.000	0.000	32.027	31.436	-33.179	MWD+IFR1+MS
8900.000	0.000	0.000	8884.518	31.971	0.000	32.202	0.000	12.917	0.000	0.000	32.382	31.789	-33.565	MWD+IFR1+MS
9000.000	0.000	0.000	8984.518	32.328	0.000	32.552	0.000	13.140	0.000	0.000	32.737	32.142	-33.941	MWD+IFR1+MS
9100.000	0.000	0.000	9084.518	32.686	0.000	32.903	0.000	13.367	0.000	0.000	33.092	32.495	-34.306	MWD+IFR1+MS
9200.000	0.000	0.000	9184.518	33.043	0.000	33.255	0.000	13.596	0.000	0.000	33.447	32.848	-34.660	MWD+IFR1+MS
9300.000	0.000	0.000	9284.518	33.400	0.000	33.606	0.000	13.828	0.000	0.000	33.803	33.201	-35.005	MWD+IFR1+MS

9400.000	0.000	0.000	9384.518	33.758	0.000	33.957	0.000	14.063	0.000	0.000	34.158	33.554	-35.340	MWD+IFR1+MS
9500.000	0.000	0.000	9484.518	34.115	0.000	34.309	0.000	14.301	0.000	0.000	34.514	33.908	-35.666	MWD+IFR1+MS
9600.000	0.000	0.000	9584.518	34.472	0.000	34.661	0.000	14.542	0.000	0.000	34.869	34.261	-35.983	MWD+IFR1+MS
9700.000	0.000	0.000	9684.518	34.830	0.000	35.013	0.000	14.786	0.000	0.000	35.225	34.615	-36.291	MWD+IFR1+MS
9800.000	0.000	0.000	9784.518	35.187	0.000	35.365	0.000	15.033	0.000	0.000	35.581	34.968	-36.591	MWD+IFR1+MS
9900.000	0.000	0.000	9884.518	35.545	0.000	35.717	0.000	15.283	0.000	0.000	35.937	35.322	-36.883	MWD+IFR1+MS
10000.000	0.000	0.000	9984.518	35.902	0.000	36.069	0.000	15.535	0.000	0.000	36.293	35.676	-37.167	MWD+IFR1+MS
10100.000	0.000	0.000	10084.518	36.260	0.000	36.421	0.000	15.791	0.000	0.000	36.649	36.030	-37.443	MWD+IFR1+MS
10200.000	0.000	0.000	10184.518	36.617	0.000	36.774	0.000	16.050	0.000	0.000	37.005	36.384	-37.712	MWD+IFR1+MS
10300.000	0.000	0.000	10284.518	36.975	0.000	37.126	0.000	16.312	0.000	0.000	37.361	36.737	-37.973	MWD+IFR1+MS
10400.000	0.000	0.000	10384.518	37.333	0.000	37.479	0.000	16.576	0.000	0.000	37.718	37.091	-38.228	MWD+IFR1+MS
10500.000	0.000	0.000	10484.518	37.690	0.000	37.832	0.000	16.844	0.000	0.000	38.074	37.445	-38.476	MWD+IFR1+MS
10530.285	0.000	0.000	10514.803	37.797	0.000	37.938	0.000	16.926	0.000	0.000	38.180	37.553	-38.525	MWD+IFR1+MS
10600.000	5.577	359.617	10584.407	37.947	0.000	38.183	0.000	17.115	0.000	0.000	38.455	37.834	-41.931	MWD+IFR1+MS
10700.000	13.577	359.617	10682.934	38.378	0.000	38.522	0.000	17.435	0.000	0.000	39.370	38.376	112.061	MWD+IFR1+MS
10800.000	21.577	359.617	10778.187	38.537	0.000	38.847	0.000	17.905	0.000	0.000	40.617	38.752	102.564	MWD+IFR1+MS
10900.000	29.577	359.617	10868.315	38.146	0.000	39.153	0.000	18.572	0.000	0.000	41.738	39.070	99.651	MWD+IFR1+MS
11000.000	37.577	359.617	10951.561	37.272	0.000	39.437	0.000	19.467	0.000	0.000	42.685	39.356	98.405	MWD+IFR1+MS
11100.000	45.577	359.617	11026.307	36.008	0.000	39.697	0.000	20.593	0.000	0.000	43.445	39.615	97.836	MWD+IFR1+MS
11200.000	53.577	359.617	11091.096	34.477	0.000	39.931	0.000	21.926	0.000	0.000	44.020	39.845	97.630	MWD+IFR1+MS
11300.000	61.577	359.617	11144.669	32.840	0.000	40.139	0.000	23.422	0.000	0.000	44.420	40.049	97.654	MWD+IFR1+MS
11400.000	69.577	359.617	11185.982	31.291	0.000	40.320	0.000	25.031	0.000	0.000	44.669	40.225	97.837	MWD+IFR1+MS
11500.000	77.577	359.617	11214.231	30.053	0.000	40.475	0.000	26.694	0.000	0.000	44.798	40.373	98.123	MWD+IFR1+MS
11600.000	85.577	359.617	11228.867	29.348	0.000	40.603	0.000	28.356	0.000	0.000	44.847	40.495	98.445	MWD+IFR1+MS
11655.285	90.000	359.617	11231.000	28.706	0.000	40.658	0.000	28.706	0.000	0.000	44.855	40.548	98.589	MWD+IFR1+MS
11700.000	90.000	359.617	11231.000	28.790	0.000	40.701	0.000	28.790	0.000	0.000	44.860	40.589	98.706	MWD+IFR1+MS
11800.000	90.000	359.617	11231.000	28.940	0.000	40.815	0.000	28.940	0.000	0.000	44.871	40.698	99.015	MWD+IFR1+MS
11900.000	90.000	359.617	11231.000	29.114	0.000	40.949	0.000	29.114	0.000	0.000	44.883	40.827	99.382	MWD+IFR1+MS
12000.000	90.000	359.617	11231.000	29.307	0.000	41.102	0.000	29.307	0.000	0.000	44.897	40.973	99.815	MWD+IFR1+MS
12100.000	90.000	359.617	11231.000	29.520	0.000	41.273	0.000	29.520	0.000	0.000	44.912	41.137	100.324	MWD+IFR1+MS
12200.000	90.000	359.617	11231.000	29.752	0.000	41.462	0.000	29.752	0.000	0.000	44.929	41.317	100.924	MWD+IFR1+MS
12300.000	90.000	359.617	11231.000	30.003	0.000	41.669	0.000	30.003	0.000	0.000	44.948	41.514	101.636	MWD+IFR1+MS
12400.000	90.000	359.617	11231.000	30.273	0.000	41.893	0.000	30.273	0.000	0.000	44.970	41.726	102.487	MWD+IFR1+MS



12500.000	90.000	359.617	11231.000	30.560	0.000	42.135	0.000	30.560	0.000	0.000	44.995	41.953	103.513	MWD+IFR1+MS
12600.000	90.000	359.617	11231.000	30.864	0.000	42.393	0.000	30.864	0.000	0.000	45.024	42.194	104.763	MWD+IFR1+MS
12700.000	90.000	359.617	11231.000	31.185	0.000	42.668	0.000	31.185	0.000	0.000	45.058	42.447	106.304	MWD+IFR1+MS
12800.000	90.000	359.617	11231.000	31.523	0.000	42.959	0.000	31.523	0.000	0.000	45.099	42.710	108.231	MWD+IFR1+MS
12900.000	90.000	359.617	11231.000	31.876	0.000	43.267	0.000	31.876	0.000	0.000	45.148	42.981	110.674	MWD+IFR1+MS
13000.000	90.000	359.617	11231.000	32.244	0.000	43.590	0.000	32.244	0.000	0.000	45.210	43.255	113.807	MWD+IFR1+MS
13100.000	90.000	359.617	11231.000	32.627	0.000	43.928	0.000	32.627	0.000	0.000	45.290	43.528	117.838	MWD+IFR1+MS
13200.000	90.000	359.617	11231.000	33.024	0.000	44.281	0.000	33.024	0.000	0.000	45.396	43.789	122.962	MWD+IFR1+MS
13300.000	90.000	359.617	11231.000	33.435	0.000	44.649	0.000	33.435	0.000	0.000	45.539	44.030	129.203	MWD+IFR1+MS
13400.000	90.000	359.617	11231.000	33.860	0.000	45.031	0.000	33.860	0.000	0.000	45.729	44.238	-43.802	MWD+IFR1+MS
13500.000	90.000	359.617	11231.000	34.297	0.000	45.427	0.000	34.297	0.000	0.000	45.972	44.407	-36.810	MWD+IFR1+MS
13600.000	90.000	359.617	11231.000	34.746	0.000	45.836	0.000	34.746	0.000	0.000	46.267	44.540	-30.577	MWD+IFR1+MS
13700.000	90.000	359.617	11231.000	35.207	0.000	46.258	0.000	35.207	0.000	0.000	46.605	44.642	-25.459	MWD+IFR1+MS
13800.000	90.000	359.617	11231.000	35.679	0.000	46.694	0.000	35.679	0.000	0.000	46.979	44.722	-21.429	MWD+IFR1+MS
13900.000	90.000	359.617	11231.000	36.162	0.000	47.141	0.000	36.162	0.000	0.000	47.381	44.787	-18.293	MWD+IFR1+MS
14000.000	90.000	359.617	11231.000	36.656	0.000	47.601	0.000	36.656	0.000	0.000	47.806	44.841	-15.839	MWD+IFR1+MS
14100.000	90.000	359.617	11231.000	37.159	0.000	48.073	0.000	37.159	0.000	0.000	48.250	44.889	-13.897	MWD+IFR1+MS
14200.000	90.000	359.617	11231.000	37.672	0.000	48.555	0.000	37.672	0.000	0.000	48.712	44.931	-12.335	MWD+IFR1+MS
14300.000	90.000	359.617	11231.000	38.195	0.000	49.049	0.000	38.195	0.000	0.000	49.188	44.970	-11.061	MWD+IFR1+MS
14400.000	90.000	359.617	11231.000	38.726	0.000	49.554	0.000	38.726	0.000	0.000	49.679	45.007	-10.006	MWD+IFR1+MS
14500.000	90.000	359.617	11231.000	39.266	0.000	50.069	0.000	39.266	0.000	0.000	50.182	45.041	-9.121	MWD+IFR1+MS
14600.000	90.000	359.617	11231.000	39.814	0.000	50.594	0.000	39.814	0.000	0.000	50.697	45.075	-8.370	MWD+IFR1+MS
14700.000	90.000	359.617	11231.000	40.369	0.000	51.129	0.000	40.369	0.000	0.000	51.223	45.107	-7.726	MWD+IFR1+MS
14800.000	90.000	359.617	11231.000	40.933	0.000	51.674	0.000	40.933	0.000	0.000	51.760	45.140	-7.169	MWD+IFR1+MS
14900.000	90.000	359.617	11231.000	41.503	0.000	52.227	0.000	41.503	0.000	0.000	52.307	45.171	-6.683	MWD+IFR1+MS
15000.000	90.000	359.617	11231.000	42.080	0.000	52.790	0.000	42.080	0.000	0.000	52.864	45.203	-6.255	MWD+IFR1+MS
15100.000	90.000	359.617	11231.000	42.664	0.000	53.361	0.000	42.664	0.000	0.000	53.430	45.235	-5.876	MWD+IFR1+MS
15200.000	90.000	359.617	11231.000	43.255	0.000	53.940	0.000	43.255	0.000	0.000	54.005	45.266	-5.539	MWD+IFR1+MS
15300.000	90.000	359.617	11231.000	43.851	0.000	54.528	0.000	43.851	0.000	0.000	54.588	45.298	-5.236	MWD+IFR1+MS
15400.000	90.000	359.617	11231.000	44.453	0.000	55.123	0.000	44.453	0.000	0.000	55.180	45.330	-4.964	MWD+IFR1+MS
15500.000	90.000	359.617	11231.000	45.061	0.000	55.726	0.000	45.061	0.000	0.000	55.780	45.362	-4.718	MWD+IFR1+MS
15600.000	90.000	359.617	11231.000	45.674	0.000	56.336	0.000	45.674	0.000	0.000	56.387	45.394	-4.494	MWD+IFR1+MS
15700.000	90.000	359.617	11231.000	46.293	0.000	56.953	0.000	46.293	0.000	0.000	57.001	45.427	-4.290	MWD+IFR1+MS

15800.000	90.000	359.617	11231.000	46.916	0.000	57.577	0.000	46.916	0.000	0.000	57.623	45.460	-4.104	MWD+IFR1+MS
15900.000	90.000	359.617	11231.000	47.545	0.000	58.208	0.000	47.545	0.000	0.000	58.251	45.494	-3.933	MWD+IFR1+MS
16000.000	90.000	359.617	11231.000	48.177	0.000	58.845	0.000	48.177	0.000	0.000	58.886	45.528	-3.775	MWD+IFR1+MS
16100.000	90.000	359.617	11231.000	48.815	0.000	59.488	0.000	48.815	0.000	0.000	59.528	45.562	-3.629	MWD+IFR1+MS
16200.000	90.000	359.617	11231.000	49.456	0.000	60.138	0.000	49.456	0.000	0.000	60.175	45.597	-3.494	MWD+IFR1+MS
16300.000	90.000	359.617	11231.000	50.102	0.000	60.793	0.000	50.102	0.000	0.000	60.829	45.633	-3.369	MWD+IFR1+MS
16400.000	90.000	359.617	11231.000	50.751	0.000	61.454	0.000	50.751	0.000	0.000	61.488	45.668	-3.252	MWD+IFR1+MS
16500.000	90.000	359.617	11231.000	51.404	0.000	62.120	0.000	51.404	0.000	0.000	62.153	45.705	-3.143	MWD+IFR1+MS
16600.000	90.000	359.617	11231.000	52.061	0.000	62.791	0.000	52.061	0.000	0.000	62.823	45.741	-3.041	MWD+IFR1+MS
16700.000	90.000	359.617	11231.000	52.722	0.000	63.468	0.000	52.722	0.000	0.000	63.498	45.779	-2.946	MWD+IFR1+MS
16800.000	90.000	359.617	11231.000	53.385	0.000	64.150	0.000	53.385	0.000	0.000	64.179	45.816	-2.857	MWD+IFR1+MS
16900.000	90.000	359.617	11231.000	54.052	0.000	64.836	0.000	54.052	0.000	0.000	64.864	45.855	-2.773	MWD+IFR1+MS
17000.000	90.000	359.617	11231.000	54.722	0.000	65.527	0.000	54.722	0.000	0.000	65.554	45.893	-2.694	MWD+IFR1+MS
17100.000	90.000	359.617	11231.000	55.395	0.000	66.223	0.000	55.395	0.000	0.000	66.249	45.933	-2.620	MWD+IFR1+MS
17200.000	90.000	359.617	11231.000	56.071	0.000	66.922	0.000	56.071	0.000	0.000	66.948	45.972	-2.549	MWD+IFR1+MS
17300.000	90.000	359.617	11231.000	56.750	0.000	67.627	0.000	56.750	0.000	0.000	67.651	46.013	-2.483	MWD+IFR1+MS
17400.000	90.000	359.617	11231.000	57.432	0.000	68.335	0.000	57.432	0.000	0.000	68.358	46.054	-2.420	MWD+IFR1+MS
17500.000	90.000	359.617	11231.000	58.116	0.000	69.047	0.000	58.116	0.000	0.000	69.070	46.095	-2.360	MWD+IFR1+MS
17600.000	90.000	359.617	11231.000	58.803	0.000	69.763	0.000	58.803	0.000	0.000	69.785	46.137	-2.304	MWD+IFR1+MS
17700.000	90.000	359.617	11231.000	59.492	0.000	70.483	0.000	59.492	0.000	0.000	70.504	46.179	-2.250	MWD+IFR1+MS
17800.000	90.000	359.617	11231.000	60.183	0.000	71.206	0.000	60.183	0.000	0.000	71.227	46.222	-2.199	MWD+IFR1+MS
17900.000	90.000	359.617	11231.000	60.877	0.000	71.933	0.000	60.877	0.000	0.000	71.953	46.266	-2.150	MWD+IFR1+MS
18000.000	90.000	359.617	11231.000	61.573	0.000	72.663	0.000	61.573	0.000	0.000	72.683	46.310	-2.104	MWD+IFR1+MS
18100.000	90.000	359.617	11231.000	62.271	0.000	73.397	0.000	62.271	0.000	0.000	73.416	46.354	-2.060	MWD+IFR1+MS
18200.000	90.000	359.617	11231.000	62.971	0.000	74.134	0.000	62.971	0.000	0.000	74.152	46.400	-2.017	MWD+IFR1+MS
18300.000	90.000	359.617	11231.000	63.673	0.000	74.873	0.000	63.673	0.000	0.000	74.891	46.445	-1.977	MWD+IFR1+MS
18400.000	90.000	359.617	11231.000	64.377	0.000	75.616	0.000	64.377	0.000	0.000	75.634	46.491	-1.938	MWD+IFR1+MS
18500.000	90.000	359.617	11231.000	65.082	0.000	76.362	0.000	65.082	0.000	0.000	76.379	46.538	-1.901	MWD+IFR1+MS
18600.000	90.000	359.617	11231.000	65.790	0.000	77.111	0.000	65.790	0.000	0.000	77.127	46.585	-1.866	MWD+IFR1+MS
18700.000	90.000	359.617	11231.000	66.499	0.000	77.862	0.000	66.499	0.000	0.000	77.878	46.633	-1.832	MWD+IFR1+MS
18800.000	90.000	359.617	11231.000	67.210	0.000	78.616	0.000	67.210	0.000	0.000	78.632	46.681	-1.799	MWD+IFR1+MS
18900.000	90.000	359.617	11231.000	67.923	0.000	79.373	0.000	67.923	0.000	0.000	79.388	46.730	-1.768	MWD+IFR1+MS
18949.248	90.000	359.617	11231.000	68.273	0.000	79.745	0.000	68.273	0.000	0.000	79.760	46.754	-1.753	MWD+IFR1+MS

18999.255      90.000    359.617    11231.000      68.630    0.000    80.123    0.000      68.630    0.000      0.000      80.138      46.779      -1.738    MWD+IFR1+MS

Plan Targets

Remuda North 25 ST 161H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 5	11655.27	464608.50	619964.00	8133.00	CIRCLE
LTP 5	18949.25	471902.30	619915.30	8133.00	CIRCLE
BHL 5	18999.25	471952.30	619914.80	8133.00	CIRCLE



## HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN

### Assumed 100 ppm ROE = 3000'

100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.

#### **Emergency Procedures**

In the event of a release of gas containing H<sub>2</sub>S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H<sub>2</sub>S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
  - o Detection of H<sub>2</sub>S, and
  - o Measures for protection against the gas,
  - o Equipment used for protection and emergency response.

#### **Ignition of Gas source**

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

#### **Characteristics of H<sub>2</sub>S and SO<sub>2</sub>**

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21 Air = 1	2 ppm	N/A	1000 ppm

#### **Contacting Authorities**

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

**CARLSBAD OFFICE – EDDY & LEA COUNTIES**

3104 E. Greene St., Carlsbad, NM 88220  
Carlsbad, NM

575-887-7329

**XTO PERSONNEL:**

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