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 375764

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

1. Operator Name and Address	2. OGRID Number
XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	373075
	3. API Number 30-015-55688

4. Property Code	5. Property Name	6. Well No.
336438	REMUDA NORTH 25 ST	162H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
L	25	23S	29E		2374	S	645	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
C	24	23S	29E	C	280	N	1650	W	Eddy

9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220

Additional Well Information

11. Work Type	12. Well Type	13. Cable/Rotary	14. Lease Type	15. Ground Level Elevation
New Well	GAS		State	3066
16. Multiple	**17. Proposed Depth**	**18. Formation**	**19. Contractor**	**20. Spud Date**
N	19211	Wolfcamp		1/1/2025
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ **We will be using a closed-loop system in lieu of lined pits**

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	275	280	0
Int1	12.25	9.625	40	3277	1470	0
Int2	8.75	7.625	29.7	10345	430	5716
Int2	8.75	7.625	29.7	3377	430	2777
Prod	6.75	5.5	20	19211	600	10745
Prod	6.75	5.5	20	10245	30	9845

Casing/Cement Program: Additional Comments

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Hydril	5272	5272	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. **I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒, if applicable.** Signature:		**OIL CONSERVATION DIVISION**	
Printed Name:	Electronically filed by Tiffany Yancey	Approved By:	Ward Rikala
Title:	Production Analyst	Title:	Petroleum Specialist Supervisor
Email Address:	tiffany.yancey@exxonmobil.com	Approved Date:	11/7/2024 Expiration Date: 11/7/2026
Date:	10/25/2024 Phone: 432-215-8939	Conditions of Approval Attached	

C-102

Submit Electronically
Via OCD Permitting

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION

Revised July 9, 2024

Submittal Type:
- ☒ Initial Submittal
- ☐ Amended Report
- ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015 -55688	98220	PURPLE SAGE, WOLFCAMP (GAS)

Property Code	Property Name	Well Number
336438	REMUDA NORTH 25 ST	162H

ORGID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC	3,066'

Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	25	23 S	29 E		2,374' FSL	645' FWL	32.275123	-103.944657	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	24	23 S	29 E		280' FNL	1,650' FWL	32.297022	-103.941471	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
480	INFILL	30-015-44313	N	

Order Numbers.

Well setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
K	25	23 S	29 E		2,286' FSL	1,655' FWL	32.274872	-103.941391	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
F	25	23 S	29 E		2,310' FNL	1,650' FWL	32.276841	-103.941398	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	24	23 S	29 E		330' FNL	1,650' FWL	32.296885	-103.941470	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ 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.

Signature: Adrian Baker Date: 10/23/24

Printed Name: Adrian baker

Email Address: adrian.baker@exxonmobil.com

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.

22 Oct 2024

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

TIM C. PAPPAS NEW MEXICO 21209 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

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.

FSC INC SURVEYORS+ENGINEERS
2821 West 7th Street., Ste 200 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	10-22-2024	PROJECT NO:	2024090425
DRAWN BY:	LM	SCALE:	
CHECKED BY:	CH	SHEET:	1 OF 2
FIELD CREW:	IR	REVISION:	NO

ACREAGE DEDICATION PLATS

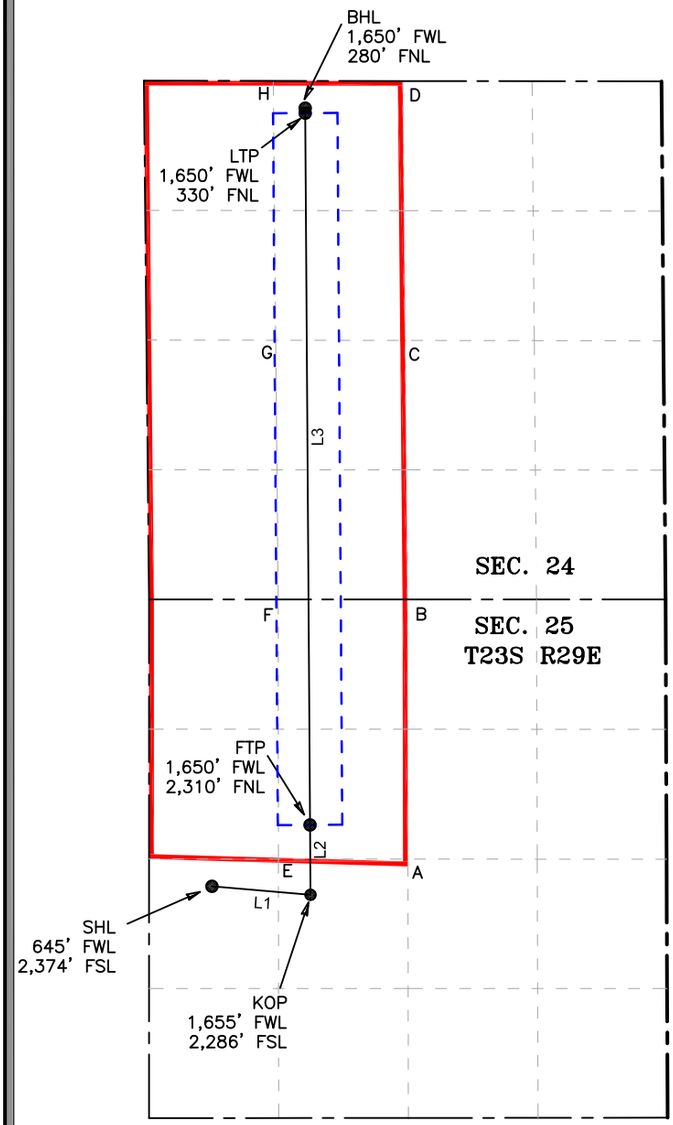
This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the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

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

LEGEND

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	94° 57'07"	1,013.45'
L2	359° 37'16"	716.13'
L3	359° 36'52"	7,341.79'



COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	464,040.2	N	Y =	471,960.5	N
X =	661,461.9	E	X =	662,417.9	E
LAT. =	32.275123	°N	LAT. =	32.296885	°N
LONG. =	103.944657	°W	LONG. =	103.941470	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	463,952.8	N	Y =	472,010.5	N
X =	662,471.6	E	X =	662,417.4	E
LAT. =	32.274872	°N	LAT. =	32.297022	°N
LONG. =	103.941391	°W	LONG. =	103.941471	°W
FTP (NAD 83 NME)					
Y =	464,668.9	N			
X =	662,466.8	E			
LAT. =	32.276841	°N			
LONG. =	103.941398	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	463,980.3	N	Y =	471,900.4	N
X =	620,279.1	E	X =	621,235.4	E
LAT. =	32.274999	°N	LAT. =	32.296761	°N
LONG. =	103.944165	°W	LONG. =	103.940977	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	463,892.9	N	Y =	471,950.4	N
X =	621,288.8	E	X =	621,234.9	E
LAT. =	32.274749	°N	LAT. =	32.296899	°N
LONG. =	103.940899	°W	LONG. =	103.940978	°W
FTP (NAD 27 NME)					
Y =	464,609.0	N			
X =	621,284.0	E			
LAT. =	32.276717	°N			
LONG. =	103.940906	°W			

CORNER COORDINATES (NAD83 NME)					
A - Y =	464,319.1	N	A - X =	663,469.2	E
B - Y =	466,979.3	N	B - X =	663,464.2	E
C - Y =	469,631.9	N	C - X =	663,440.1	E
D - Y =	472,289.1	N	D - X =	663,415.9	E
E - Y =	464,319.7	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 =	464,259.2	N	A - X =	622,286.4	E
B - Y =	466,919.3	N	B - X =	622,281.5	E
C - Y =	469,571.9	N	C - X =	622,257.5	E
D - Y =	472,229.0	N	D - X =	622,233.4	E
E - Y =	464,259.8	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

FSC INC SURVEYORS+ENGINEERS
2821 West 7th Street, Suite 200
Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

DATE:	10-22-2024	PROJECT NO:	2024090425
DRAWN BY:	LM	SCALE:	1" = 2,500'
CHECKED BY:	CH	SHEET:	2 OF 2
FIELD CREW:	IR	REVISION:	NO

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form APD Comments

Permit 375764

PERMIT COMMENTS

Operator Name and Address:	API Number:
XTO PERMIAN OPERATING LLC. [373075] 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	30-015-55688
	Well: REMUDA NORTH 25 ST #162H

Created By	Comment	Comment Date
vrajan	A variance is requested to allow use of a flex hose, to be able to batch drill, wild well control plan and to utilize a spudder rig.	10/25/2024

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

Form APD Conditions

Permit 375764

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:	API Number:
XTO PERMIAN OPERATING LLC. [373075] 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	30-015-55688
	Well: REMUDA NORTH 25 ST #162H

OCD Reviewer	Condition
ward.rikala	Notify the OCD 24 hours prior to casing & cement.
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.
ward.rikala	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.
ward.rikala	A [C-103] Sub. Drilling (C-103N) is required within (10) days of spud.

State of New Mexico
Energy, Minerals and Natural Resources Department

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 ga thering 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.

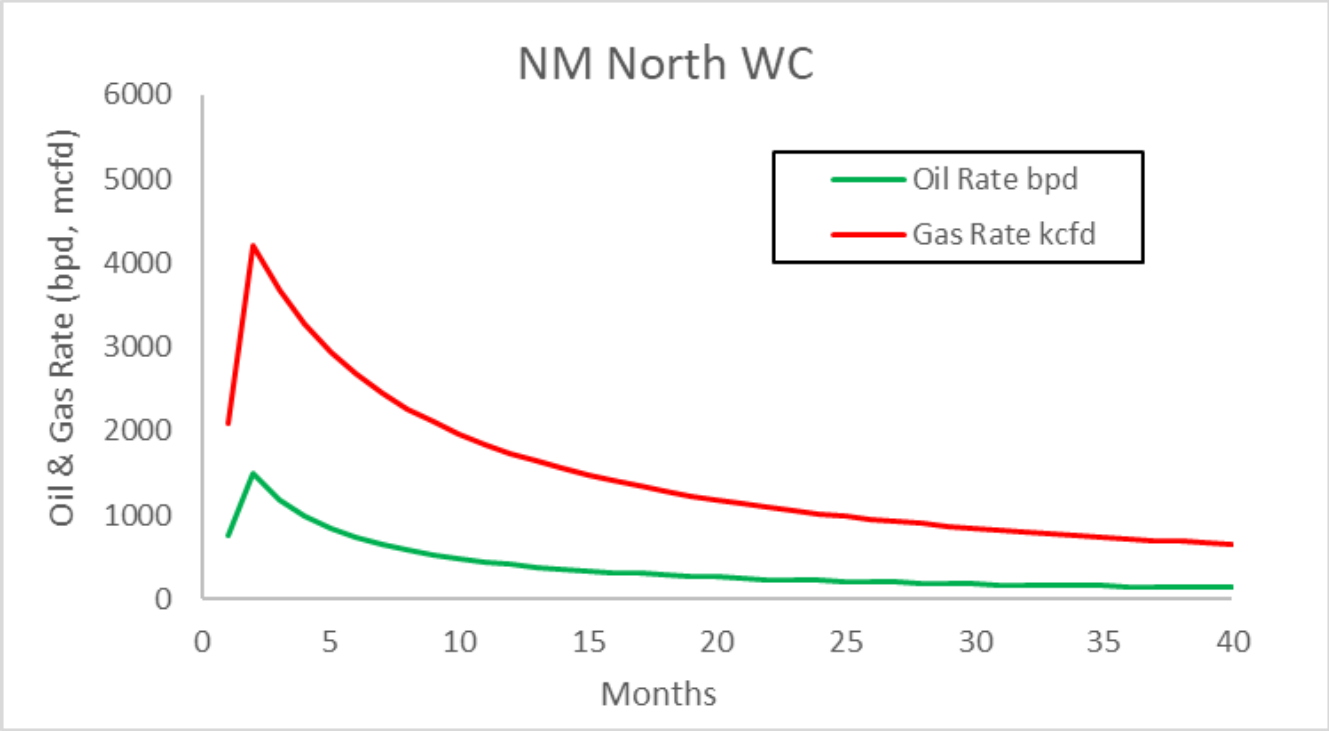
2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

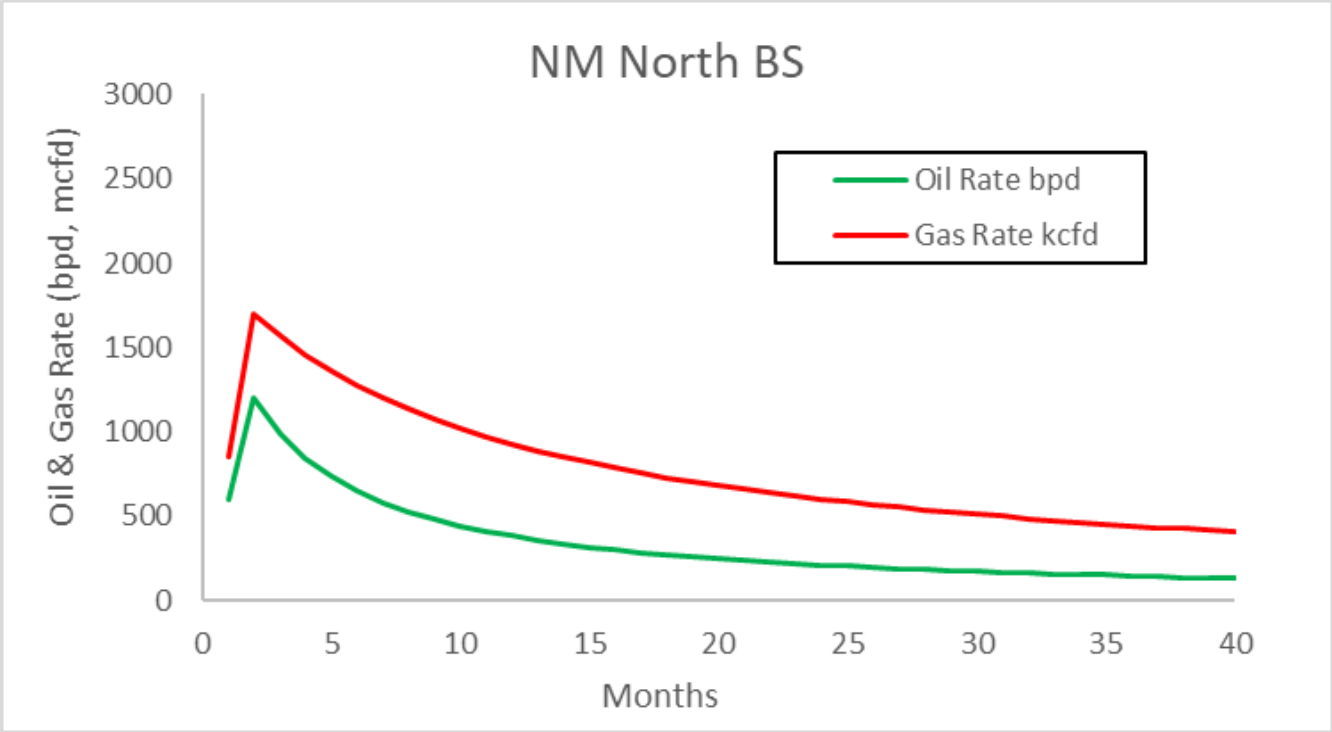
I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

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:	


NM North WC
Oil & Gas Rate (bpd, mcfd)
6000
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
Months
Oil Rate bpd
Gas Rate kcfd


NM North BS
Oil & Gas Rate (bpd, mcfd)
3000
2500
2000
1500
1000
500
0
0
5
10
15
20
25
30
35
40
Months
Oil Rate bpd
Gas Rate kcfd

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 LLCwill 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.

☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015	98220	PURPLE SAGE, WOLFCAMP (GAS)

Property Code	Property Name	Well Number
	REMUDA NORTH 25 ST	162H

ORGID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC	3,066'

Surface Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Mineral Owner: ☒ State ☐ Fee ☐ Tribal ☐ Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
L	25	23 S	29 E		2,374' FSL	645' FWL	32.275123	-103.944657	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	24	23 S	29 E		280' FNL	1,650' FWL	32.297022	-103.941471	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
480	INFILL	30-015-44313	N	

Order Numbers.

Well setbacks are under Common Ownership: ☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
K	25	23 S	29 E		2,286' FSL	1,655' FWL	32.274872	-103.941391	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
F	25	23 S	29 E		2,310' FNL	1,650' FWL	32.276841	-103.941398	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	24	23 S	29 E		330' FNL	1,650' FWL	32.296885	-103.941470	EDDY

Unitized Area or Area of Uniform Interest	Spacing Unit Type	Ground Floor Elevation:
	☒ Horizontal ☐ Vertical	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.

Signature: Adrian Baker Date: 10/23/24

Printed Name: Adrian baker

Email Address: adrian.baker@exxonmobil.com

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.

22 Oct 2024

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

Signature and Seal of Professional Surveyor

Certificate Number	Date of Survey
TIM C. PAPPAS 21209	10/22/2024

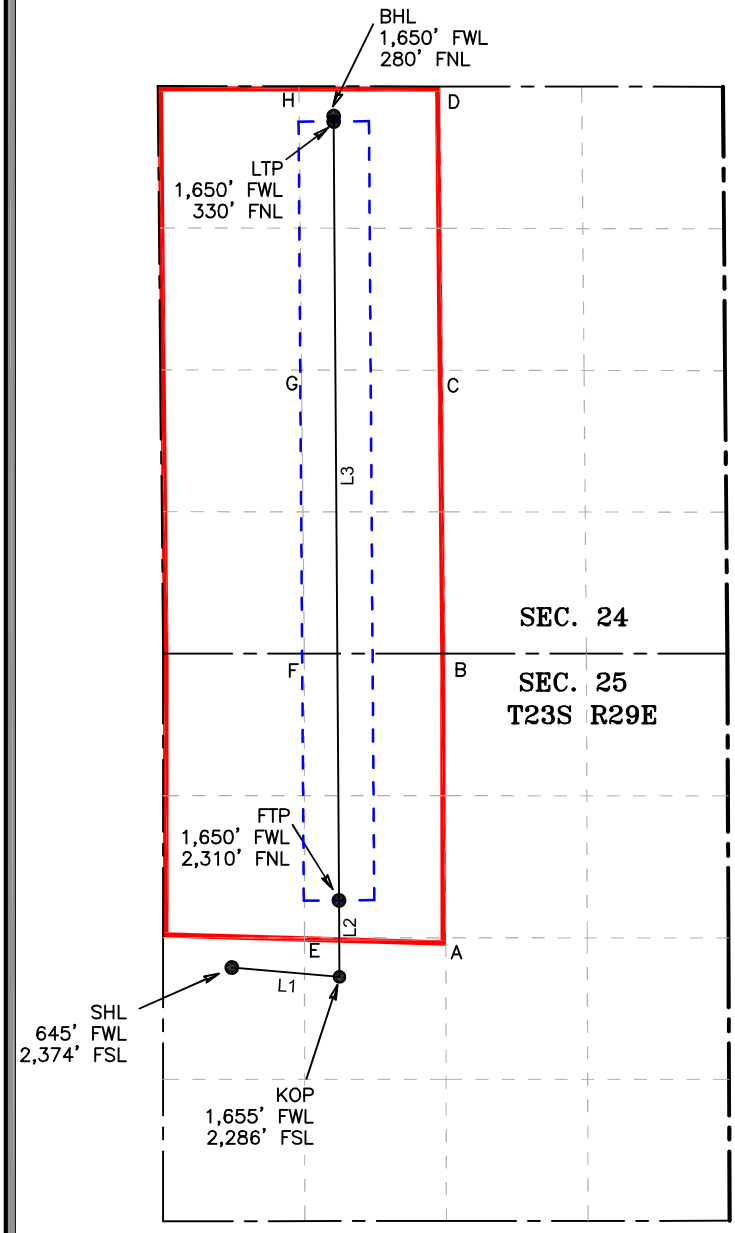
Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

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

LEGEND

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	94° 57'07"	1,013.45'
L2	359° 37'16"	716.13'
L3	359° 36'52"	7,341.79'



COORDINATE TABLE					
SHL (NAD 83 NME)			LTP (NAD 83 NME)		
Y =	464,040.2	N	Y =	471,960.5	N
X =	661,461.9	E	X =	662,417.9	E
LAT. =	32.275123	°N	LAT. =	32.296885	°N
LONG. =	103.944657	°W	LONG. =	103.941470	°W
KOP (NAD 83 NME)			BHL (NAD 83 NME)		
Y =	463,952.8	N	Y =	472,010.5	N
X =	662,471.6	E	X =	662,417.4	E
LAT. =	32.274872	°N	LAT. =	32.297022	°N
LONG. =	103.941391	°W	LONG. =	103.941471	°W
FTP (NAD 83 NME)					
Y =	464,668.9	N			
X =	662,466.8	E			
LAT. =	32.276841	°N			
LONG. =	103.941398	°W			
SHL (NAD 27 NME)			LTP (NAD 27 NME)		
Y =	463,980.3	N	Y =	471,900.4	N
X =	620,279.1	E	X =	621,235.4	E
LAT. =	32.274999	°N	LAT. =	32.296761	°N
LONG. =	103.944165	°W	LONG. =	103.940977	°W
KOP (NAD 27 NME)			BHL (NAD 27 NME)		
Y =	463,892.9	N	Y =	471,950.4	N
X =	621,288.8	E	X =	621,234.9	E
LAT. =	32.274749	°N	LAT. =	32.296899	°N
LONG. =	103.940899	°W	LONG. =	103.940978	°W
FTP (NAD 27 NME)					
Y =	464,609.0	N			
X =	621,284.0	E			
LAT. =	32.276717	°N			
LONG. =	103.940906	°W			

CORNER COORDINATES (NAD83 NME)					
A - Y =	464,319.1	N	A - X =	663,469.2	E
B - Y =	466,979.3	N	B - X =	663,464.2	E
C - Y =	469,631.9	N	C - X =	663,440.1	E
D - Y =	472,289.1	N	D - X =	663,415.9	E
E - Y =	464,319.7	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 =	464,259.2	N	A - X =	622,286.4	E
B - Y =	466,919.3	N	B - X =	622,281.5	E
C - Y =	469,571.9	N	C - X =	622,257.5	E
D - Y =	472,229.0	N	D - X =	622,233.4	E
E - Y =	464,259.8	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 - 162H
Projected TD: 19211.21' MD / 12261' TVD
SHL: 2374' FSL & 645' FWL , Section 25, T23S, R29E
BHL: 280' FNL & 1650' 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	180'	Water
Top of Salt	300'	Water
MB 126	1548'	Water
Base of Salt	3052'	Water
Delaware	3278'	Water/Oil/Gas
Brushy Canyon	5716'	Water
Bone Spring	6978'	Water/Oil/Gas
1st Bone Spring Ss	7974'	Water/Oil/Gas
2nd Bone Spring Ss	8485'	Water/Oil/Gas
Wolfcamp X	10319'	Water/Oil/Gas
Wolfcamp Y	10396'	Water/Oil/Gas
Wolfcamp A	10426'	Water/Oil/Gas
Wolfcamp B	10734'	Water/Oil/Gas
Wolfcamp D	11086'	Water/Oil/Gas
Target/Land Curve	11261'	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 @ 275' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3277' 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 10344.8' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19211.21 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9844.8 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' – 275'	13.375	54.5	J-55	BTC	New	2.79	9.30	60.65
12.25	0' – 3277'	9.625	40	J-55	BTC	New	1.27	2.76	4.81
8.75	0' – 3377'	7.625	29.7	RY P-110	Flush Joint	New	1.79	3.05	1.82
8.75	3377' – 10344.8'	7.625	29.7	HC L-80	Flush Joint	New	1.30	2.41	1.96
6.75	0' – 10244.8'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	1.67	2.22
6.75	10244.8' - 19211.21'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	1.39	7.64

· 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 +/- 275'

Tail: 280 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 +/- 3277'

Lead: 1340 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 +/- 10344.8'
1st Stage
Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 5716
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 2777
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 (5716') 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 +/- 19211.21'

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9844.8 feet
Tail: 600 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10744.65 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 5272 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' - 275'	17.5	FW/Native	8.5-9	35-40	NC	Fresh water or native water
275' - 3277'	12.25	Brine	10-10.5	30-32	NC	Fully Saturated salt across salado
3277' to 10344.8'	8.75	BDE/OBM	10-10.5	30-32	NC	N/A
10344.8' to 19211.21'	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 185 to 205 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 7970 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	–

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.

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

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. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
3. Uniaxial bend rating shown is structural only.
4. 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.).
5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
6. Coupling must meet minimum mechanical properties of the pipe.

U. S. Steel Tubular Products
460 Wildwood Forest Drive, Suite 300S
Spring, Texas 77380

1-877-893-9461
connections@uss.com
www.usstubular.com

BLACK GOLD®

GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX. 77086

PHONE: +1 (281) 602-4100
FAX: +1 (281) 602-4147
EMAIL: gesna.quality@gates.com
WEB: www.gates.com/oilandgas

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. OSUNOS

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

H3-15716

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company:	Nabors Industries Inc.
Production description:	74621/66-1531
Sales order #:	529480
Customer reference:	FG1213

TEST OBJECT

Serial number:	H3-012524-1
Lot number:	
Description:	74621/66-1531
Hose ID:	3" 16C CK
Part number:	

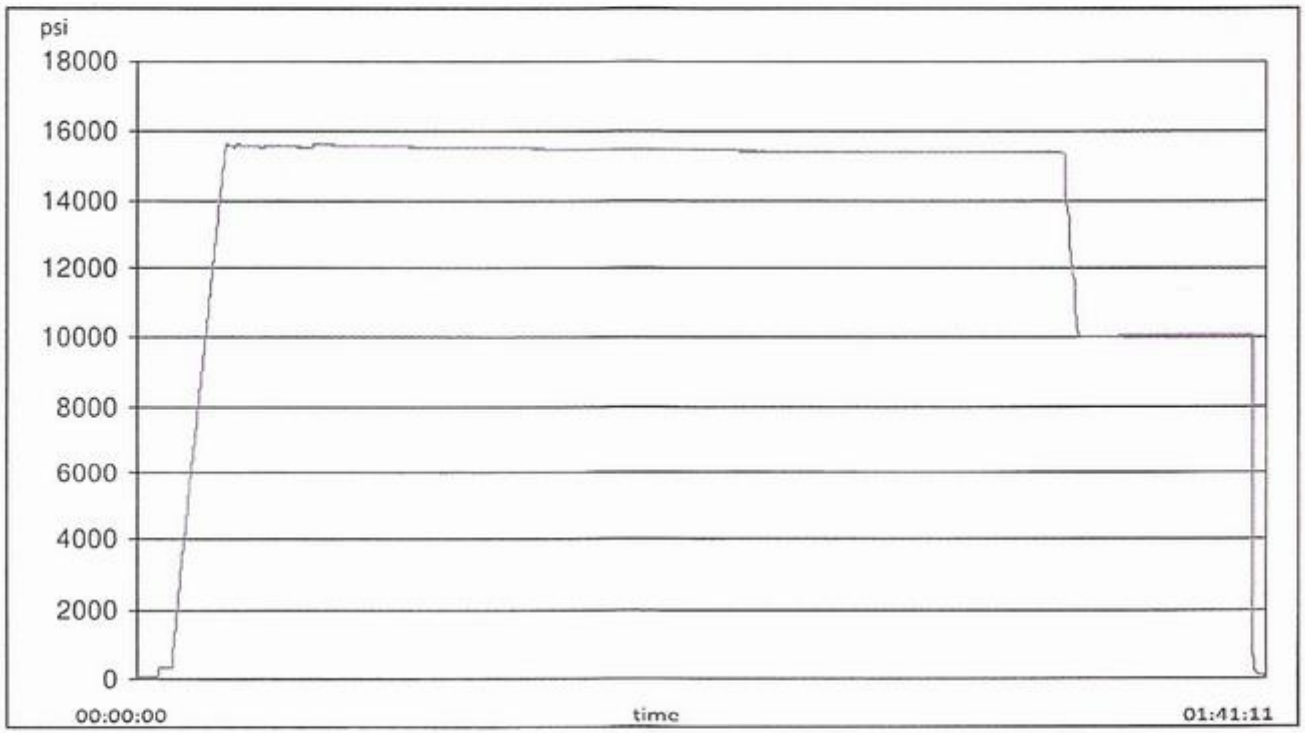
TEST INFORMATION

Test procedure:	GTS-04-053	
Test pressure:	15000.00	psi
Test pressure hold:	3600.00	sec
Work pressure:	10000.00	psi
Work pressure hold:	900.00	sec
Length difference:	0.00	%
Length difference:	0.00	inch

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

Visual check:		
Pressure test result:	PASS	
Length measurement result:		
Length:	45	feet

Test operator: Travis



H3-15/16

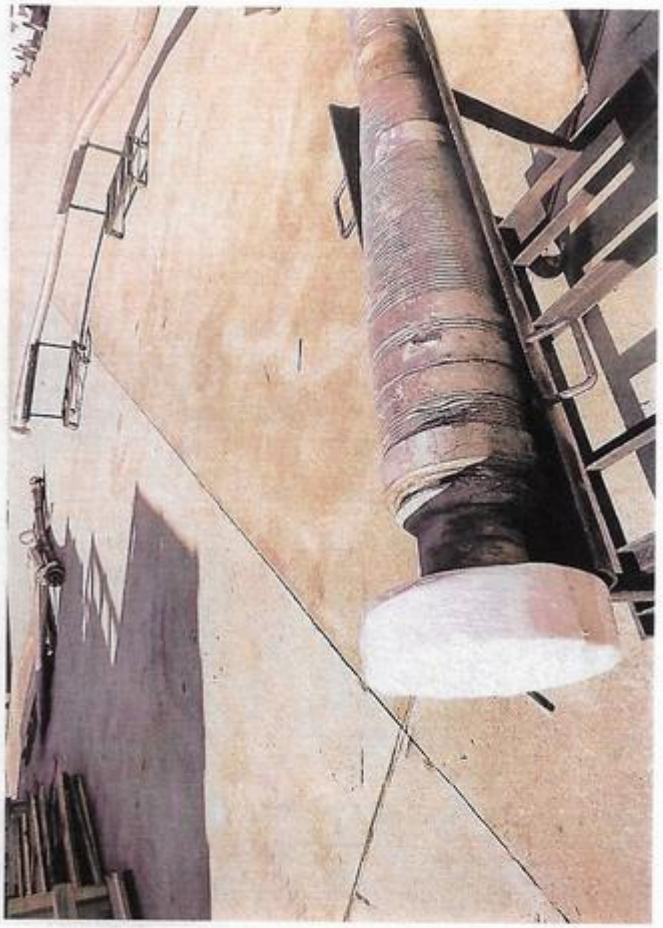
1/25/2024 11:48:06 AM

TEST REPORT

GAUGE TRACEABILITY

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

Comment



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

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
    a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
    b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
    a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled 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.

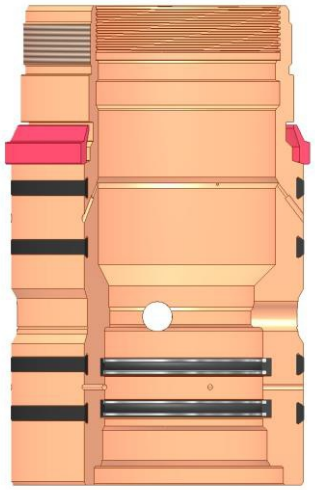
1. Cement Program

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

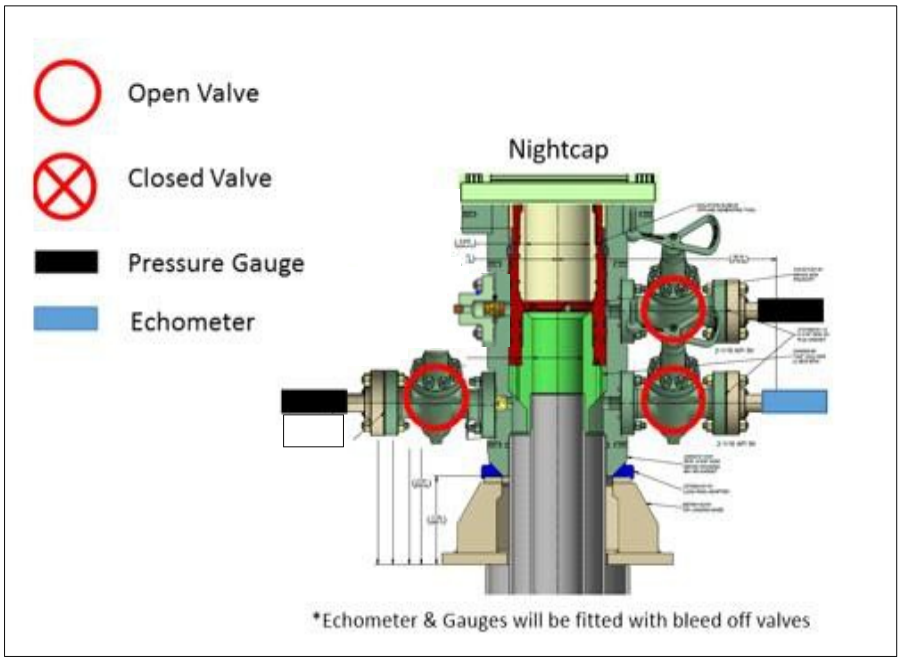
2. Offline Cementing Procedure

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 nippled 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.



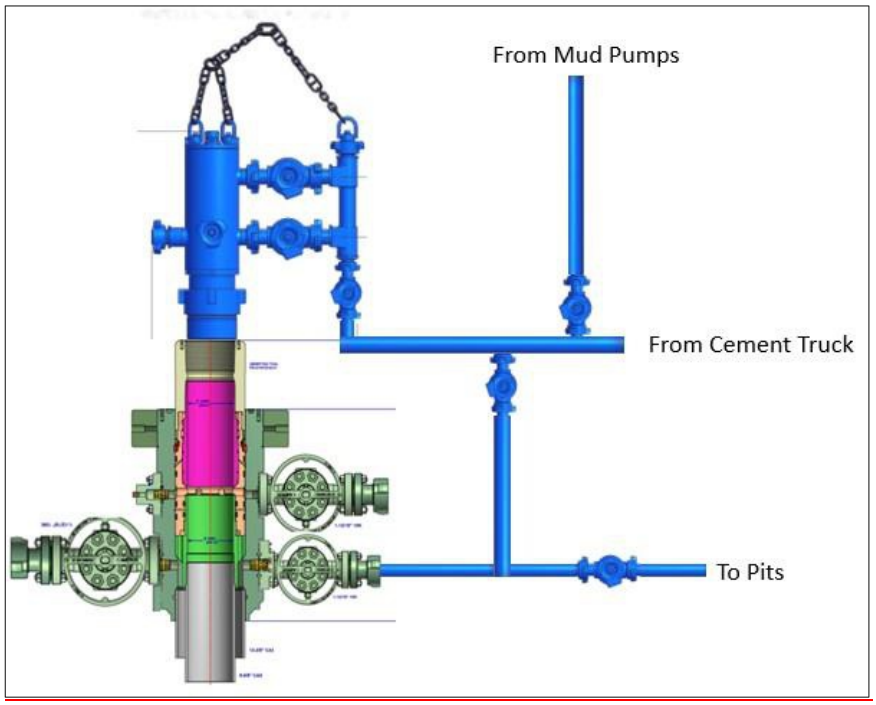
Annular packoff with both external and internal seals



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 nippling up for further remediation.
    a. Well Control Plan
        i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
        ii. Rig pumps or a 3rd party pump will be tied into the upper casing valve to pump down the casing ID
        iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
        iv. Once influx is circulated out of the hole, kill weight mud will be circulated
        v. Well will be confirmed static
        vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
8. Install offline cement tool
9. Rig up cement equipment

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

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

10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

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

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

VBR = Variable Bore Ram

2. Well Control Procedures

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

<u>General Procedure While Drilling</u>

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 162H

Measured Depth:	19211.21 ft	**Site:**	A
TVD RKB:	11261.00 ft	**Slot:**	Remuda North 25 ST 162H
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	463980.30 ft		
Easting:	620279.10 ft		
RKB:	3098.00 ft		
Ground Level:	472181.70 ft		
North Reference:	Grid		
Convergence Angle:	0.21 Deg		

Plan Sections Remuda North 25 ST 162H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	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	
4574.36	29.49	94.95	4510.13	-32.03	369.70	2.00	0.00	2.00	
5125.49	29.49	94.95	4989.87	-55.45	639.97	0.00	0.00	0.00	
6599.84	0.00	0.00	6400.00	-87.48	1009.67	-2.00	0.00	2.00	
10744.65	0.00	0.00	10544.80	-87.48	1009.67	0.00	0.00	0.00	
11869.65	90.00	359.62	11261.00	628.70	1004.90	8.00	0.00	8.00	FTP 3
19161.21	90.00	359.62	11261.00	7920.10	956.30	0.00	0.00	0.00	LTP 3
19211.21	90.00	359.62	11261.00	7970.10	955.97	0.00	0.00	0.00	BHL 3

Position Uncertainty Remuda North 25 ST 162H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool

Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (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	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	94.952	3199.980	11.759	0.000	12.019	-0.000	4.257	0.000	0.000	12.344	11.423	131.963	MWD+IFR1+MS
3300.000	4.000	94.952	3299.838	12.289	0.000	12.359	-0.000	4.353	0.000	0.000	12.701	11.961	-41.839	MWD+IFR1+MS
3400.000	6.000	94.952	3399.452	12.792	0.000	12.703	-0.000	4.451	0.000	0.000	13.081	12.461	-33.352	MWD+IFR1+MS
3500.000	8.000	94.952	3498.702	13.269	0.000	13.048	-0.000	4.554	0.000	0.000	13.490	12.918	-23.248	MWD+IFR1+MS
3600.000	10.000	94.952	3597.465	13.723	0.000	13.395	-0.000	4.664	0.000	0.000	13.929	13.334	-13.635	MWD+IFR1+MS
3700.000	12.000	94.952	3695.623	14.153	0.000	13.745	-0.000	4.780	0.000	0.000	14.386	13.720	-6.113	MWD+IFR1+MS
3800.000	14.000	94.952	3793.055	14.561	0.000	14.099	-0.000	4.905	0.000	0.000	14.849	14.091	-0.725	MWD+IFR1+MS
3900.000	16.000	94.952	3889.643	14.948	0.000	14.455	-0.000	5.040	0.000	0.000	15.312	14.454	3.113	MWD+IFR1+MS
4000.000	18.000	94.952	3985.268	15.314	0.000	14.817	-0.000	5.186	0.000	0.000	15.768	14.816	5.936	MWD+IFR1+MS
4100.000	20.000	94.952	4079.816	15.661	0.000	15.183	-0.000	5.345	0.000	0.000	16.218	15.180	8.105	MWD+IFR1+MS
4200.000	22.000	94.952	4173.169	15.989	0.000	15.557	-0.000	5.517	0.000	0.000	16.659	15.549	9.854	MWD+IFR1+MS
4300.000	24.000	94.952	4265.215	16.300	0.000	15.939	-0.000	5.703	0.000	0.000	17.092	15.924	11.340	MWD+IFR1+MS
4400.000	26.000	94.952	4355.841	16.594	0.000	16.330	-0.000	5.906	0.000	0.000	17.517	16.308	12.675	MWD+IFR1+MS
4500.000	28.000	94.952	4444.937	16.872	0.000	16.733	-0.000	6.125	0.000	0.000	17.933	16.702	13.947	MWD+IFR1+MS
4574.359	29.487	94.952	4510.132	17.017	0.000	17.038	-0.000	6.265	0.000	0.000	18.198	17.003	14.668	MWD+IFR1+MS
4600.000	29.487	94.952	4532.451	17.101	0.000	17.143	-0.000	6.301	0.000	0.000	18.273	17.107	14.839	MWD+IFR1+MS
4700.000	29.487	94.952	4619.498	17.431	0.000	17.565	-0.000	6.460	0.000	0.000	18.563	17.527	15.846	MWD+IFR1+MS
4800.000	29.487	94.952	4706.544	17.775	0.000	18.005	-0.000	6.631	0.000	0.000	18.867	17.961	17.489	MWD+IFR1+MS
4900.000	29.487	94.952	4793.591	18.126	0.000	18.454	-0.000	6.809	0.000	0.000	19.178	18.403	19.704	MWD+IFR1+MS
5000.000	29.487	94.952	4880.638	18.484	0.000	18.912	-0.000	6.994	0.000	0.000	19.498	18.850	22.838	MWD+IFR1+MS
5100.000	29.487	94.952	4967.684	18.848	0.000	19.378	-0.000	7.186	0.000	0.000	19.828	19.300	27.502	MWD+IFR1+MS
5125.485	29.487	94.952	4989.868	18.940	0.000	19.496	-0.000	7.234	0.000	0.000	19.911	19.413	28.860	MWD+IFR1+MS
5200.000	27.997	94.952	5055.200	19.377	0.000	19.841	-0.000	7.387	0.000	0.000	20.170	19.742	33.589	MWD+IFR1+MS
5300.000	25.997	94.952	5144.299	20.033	0.000	20.307	-0.000	7.638	0.000	0.000	20.599	20.179	38.362	MWD+IFR1+MS
5400.000	23.997	94.952	5234.927	20.695	0.000	20.770	-0.000	7.892	0.000	0.000	21.058	20.614	41.103	MWD+IFR1+MS
5500.000	21.997	94.952	5326.975	21.328	0.000	21.223	-0.000	8.129	0.000	0.000	21.520	21.044	42.682	MWD+IFR1+MS
5600.000	19.997	94.952	5420.331	21.929	0.000	21.667	-0.000	8.351	0.000	0.000	21.981	21.469	43.289	MWD+IFR1+MS
5700.000	17.997	94.952	5514.879	22.499	0.000	22.100	-0.000	8.557	0.000	0.000	22.438	21.888	43.133	MWD+IFR1+MS
5800.000	15.997	94.952	5610.507	23.037	0.000	22.521	-0.000	8.750	0.000	0.000	22.891	22.301	42.408	MWD+IFR1+MS
5900.000	13.997	94.952	5707.096	23.541	0.000	22.930	-0.000	8.930	0.000	0.000	23.339	22.705	41.283	MWD+IFR1+MS
6000.000	11.997	94.952	5804.529	24.011	0.000	23.326	-0.000	9.099	0.000	0.000	23.782	23.099	39.905	MWD+IFR1+MS
6100.000	9.997	94.952	5902.688	24.446	0.000	23.710	-0.000	9.258	0.000	0.000	24.219	23.484	38.395	MWD+IFR1+MS

6200.000	7.997	94.952	6001.452	24.847	0.000	24.081	-0.000	9.409	0.000	0.000	24.650	23.857	36.853	MWD+IFR1+MS
6300.000	5.997	94.952	6100.703	25.212	0.000	24.441	-0.000	9.552	0.000	0.000	25.075	24.219	35.353	MWD+IFR1+MS
6400.000	3.997	94.952	6200.318	25.542	0.000	24.789	-0.000	9.690	0.000	0.000	25.493	24.569	33.944	MWD+IFR1+MS
6500.000	1.997	94.952	6300.176	25.836	0.000	25.126	-0.000	9.823	0.000	0.000	25.903	24.908	32.659	MWD+IFR1+MS
6599.845	0.000	0.000	6400.000	25.534	0.000	25.957	0.000	9.953	0.000	0.000	26.214	25.270	31.697	MWD+IFR1+MS
6700.000	0.000	0.000	6500.155	25.896	0.000	26.262	0.000	10.083	0.000	0.000	26.515	25.637	32.700	MWD+IFR1+MS
6800.000	0.000	0.000	6600.155	26.224	0.000	26.568	0.000	10.215	0.000	0.000	26.817	25.969	33.023	MWD+IFR1+MS
6900.000	0.000	0.000	6700.155	26.552	0.000	26.875	0.000	10.351	0.000	0.000	27.120	26.302	33.363	MWD+IFR1+MS
7000.000	0.000	0.000	6800.155	26.881	0.000	27.184	0.000	10.489	0.000	0.000	27.424	26.635	33.719	MWD+IFR1+MS
7100.000	0.000	0.000	6900.155	27.211	0.000	27.493	0.000	10.630	0.000	0.000	27.730	26.970	34.093	MWD+IFR1+MS
7200.000	0.000	0.000	7000.155	27.541	0.000	27.804	0.000	10.775	0.000	0.000	28.037	27.304	34.487	MWD+IFR1+MS
7300.000	0.000	0.000	7100.155	27.872	0.000	28.116	0.000	10.922	0.000	0.000	28.345	27.639	34.901	MWD+IFR1+MS
7400.000	0.000	0.000	7200.155	28.204	0.000	28.429	0.000	11.072	0.000	0.000	28.655	27.975	35.338	MWD+IFR1+MS
7500.000	0.000	0.000	7300.155	28.537	0.000	28.743	0.000	11.226	0.000	0.000	28.966	28.311	35.798	MWD+IFR1+MS
7600.000	0.000	0.000	7400.155	28.870	0.000	29.059	0.000	11.382	0.000	0.000	29.278	28.648	36.283	MWD+IFR1+MS
7700.000	0.000	0.000	7500.155	29.204	0.000	29.375	0.000	11.542	0.000	0.000	29.591	28.985	36.796	MWD+IFR1+MS
7800.000	0.000	0.000	7600.155	29.538	0.000	29.692	0.000	11.705	0.000	0.000	29.905	29.322	37.337	MWD+IFR1+MS
7900.000	0.000	0.000	7700.155	29.873	0.000	30.010	0.000	11.870	0.000	0.000	30.220	29.660	37.911	MWD+IFR1+MS
8000.000	0.000	0.000	7800.155	30.208	0.000	30.329	0.000	12.039	0.000	0.000	30.537	29.998	38.518	MWD+IFR1+MS
8100.000	0.000	0.000	7900.155	30.544	0.000	30.649	0.000	12.211	0.000	0.000	30.854	30.337	39.161	MWD+IFR1+MS
8200.000	0.000	0.000	8000.155	30.881	0.000	30.970	0.000	12.387	0.000	0.000	31.173	30.676	39.843	MWD+IFR1+MS
8300.000	0.000	0.000	8100.155	31.218	0.000	31.291	0.000	12.565	0.000	0.000	31.492	31.015	40.567	MWD+IFR1+MS
8400.000	0.000	0.000	8200.155	31.555	0.000	31.613	0.000	12.747	0.000	0.000	31.813	31.354	41.336	MWD+IFR1+MS
8500.000	0.000	0.000	8300.155	31.893	0.000	31.937	0.000	12.931	0.000	0.000	32.134	31.694	42.152	MWD+IFR1+MS
8600.000	0.000	0.000	8400.155	32.231	0.000	32.260	0.000	13.119	0.000	0.000	32.456	32.034	43.018	MWD+IFR1+MS
8700.000	0.000	0.000	8500.155	32.570	0.000	32.585	0.000	13.310	0.000	0.000	32.780	32.374	43.939	MWD+IFR1+MS
8800.000	0.000	0.000	8600.155	32.909	0.000	32.910	0.000	13.505	0.000	0.000	33.104	32.714	44.916	MWD+IFR1+MS
8900.000	0.000	0.000	8700.155	33.249	0.000	33.236	0.000	13.703	0.000	0.000	33.429	33.054	45.953	MWD+IFR1+MS
9000.000	0.000	0.000	8800.155	33.589	0.000	33.563	0.000	13.903	0.000	0.000	33.755	33.395	47.053	MWD+IFR1+MS
9100.000	0.000	0.000	8900.155	33.929	0.000	33.890	0.000	14.107	0.000	0.000	34.083	33.735	48.218	MWD+IFR1+MS
9200.000	0.000	0.000	9000.155	34.270	0.000	34.218	0.000	14.315	0.000	0.000	34.411	34.076	49.449	MWD+IFR1+MS
9300.000	0.000	0.000	9100.155	34.611	0.000	34.546	0.000	14.525	0.000	0.000	34.740	34.417	50.747	MWD+IFR1+MS
9400.000	0.000	0.000	9200.155	34.952	0.000	34.875	0.000	14.739	0.000	0.000	35.069	34.757	52.113	MWD+IFR1+MS

9500.000	0.000	0.000	9300.155	35.294	0.000	35.205	0.000	14.956	0.000	0.000	35.400	35.098	53.545	MWD+IFR1+MS
9600.000	0.000	0.000	9400.155	35.636	0.000	35.535	0.000	15.177	0.000	0.000	35.732	35.439	55.041	MWD+IFR1+MS
9700.000	0.000	0.000	9500.155	35.978	0.000	35.866	0.000	15.400	0.000	0.000	36.064	35.779	56.595	MWD+IFR1+MS
9800.000	0.000	0.000	9600.155	36.321	0.000	36.197	0.000	15.627	0.000	0.000	36.398	36.120	58.203	MWD+IFR1+MS
9900.000	0.000	0.000	9700.155	36.664	0.000	36.529	0.000	15.857	0.000	0.000	36.732	36.460	59.855	MWD+IFR1+MS
10000.000	0.000	0.000	9800.155	37.007	0.000	36.861	0.000	16.091	0.000	0.000	37.068	36.800	61.543	MWD+IFR1+MS
10100.000	0.000	0.000	9900.155	37.351	0.000	37.194	0.000	16.327	0.000	0.000	37.404	37.141	63.255	MWD+IFR1+MS
10200.000	0.000	0.000	10000.155	37.695	0.000	37.527	0.000	16.567	0.000	0.000	37.741	37.481	64.980	MWD+IFR1+MS
10300.000	0.000	0.000	10100.155	38.039	0.000	37.861	0.000	16.811	0.000	0.000	38.079	37.820	66.706	MWD+IFR1+MS
10400.000	0.000	0.000	10200.155	38.383	0.000	38.195	0.000	17.057	0.000	0.000	38.418	38.160	68.420	MWD+IFR1+MS
10500.000	0.000	0.000	10300.155	38.728	0.000	38.530	0.000	17.307	0.000	0.000	38.758	38.500	70.109	MWD+IFR1+MS
10600.000	0.000	0.000	10400.155	39.073	0.000	38.865	0.000	17.560	0.000	0.000	39.098	38.839	71.764	MWD+IFR1+MS
10700.000	0.000	0.000	10500.155	39.418	0.000	39.200	0.000	17.816	0.000	0.000	39.439	39.179	73.374	MWD+IFR1+MS
10744.647	0.000	0.000	10544.803	39.571	0.000	39.349	0.000	17.932	0.000	0.000	39.591	39.328	73.787	MWD+IFR1+MS
10800.000	4.428	359.618	10600.100	39.660	0.000	39.530	0.000	18.076	0.000	0.000	39.803	39.515	76.267	MWD+IFR1+MS
10900.000	12.428	359.618	10698.940	39.950	0.000	39.854	0.000	18.373	0.000	0.000	40.749	39.854	88.424	MWD+IFR1+MS
11000.000	20.428	359.618	10794.780	40.069	0.000	40.166	0.000	18.811	0.000	0.000	42.021	40.164	91.260	MWD+IFR1+MS
11100.000	28.428	359.618	10885.754	39.627	0.000	40.460	0.000	19.439	0.000	0.000	43.143	40.454	92.184	MWD+IFR1+MS
11200.000	36.428	359.618	10970.092	38.693	0.000	40.733	0.000	20.295	0.000	0.000	44.094	40.723	92.690	MWD+IFR1+MS
11300.000	44.428	359.618	11046.152	37.363	0.000	40.983	0.000	21.386	0.000	0.000	44.861	40.968	93.029	MWD+IFR1+MS
11400.000	52.428	359.618	11112.454	35.764	0.000	41.209	0.000	22.692	0.000	0.000	45.445	41.190	93.269	MWD+IFR1+MS
11500.000	60.428	359.618	11167.707	34.058	0.000	41.410	0.000	24.174	0.000	0.000	45.855	41.389	93.423	MWD+IFR1+MS
11600.000	68.428	359.618	11210.836	32.443	0.000	41.586	0.000	25.780	0.000	0.000	46.113	41.565	93.478	MWD+IFR1+MS
11700.000	76.428	359.618	11241.001	31.144	0.000	41.737	0.000	27.452	0.000	0.000	46.247	41.717	93.402	MWD+IFR1+MS
11800.000	84.428	359.618	11257.616	30.388	0.000	41.863	0.000	29.133	0.000	0.000	46.296	41.845	93.147	MWD+IFR1+MS
11869.647	90.000	359.618	11261.000	29.781	0.000	41.932	0.000	29.781	0.000	0.000	46.301	41.918	92.823	MWD+IFR1+MS
11900.000	90.000	359.618	11261.000	29.858	0.000	41.959	0.000	29.858	0.000	0.000	46.302	41.946	92.658	MWD+IFR1+MS
12000.000	90.000	359.618	11261.000	30.071	0.000	42.065	0.000	30.071	0.000	0.000	46.304	42.057	92.110	MWD+IFR1+MS
12100.000	90.000	359.618	11261.000	30.306	0.000	42.192	0.000	30.306	0.000	0.000	46.307	42.187	91.545	MWD+IFR1+MS
12200.000	90.000	359.618	11261.000	30.560	0.000	42.336	0.000	30.560	0.000	0.000	46.312	42.334	90.951	MWD+IFR1+MS
12300.000	90.000	359.618	11261.000	30.831	0.000	42.498	0.000	30.831	0.000	0.000	46.318	42.498	90.319	MWD+IFR1+MS
12400.000	90.000	359.618	11261.000	31.120	0.000	42.678	0.000	31.120	0.000	0.000	46.326	42.678	89.636	MWD+IFR1+MS
12500.000	90.000	359.618	11261.000	31.426	0.000	42.876	0.000	31.426	0.000	0.000	46.335	42.875	88.885	MWD+IFR1+MS

12600.000	90.000	359.618	11261.000	31.748	0.000	43.090	0.000	31.748	0.000	0.000	46.347	43.087	88.045	MWD+IFR1+MS
12700.000	90.000	359.618	11261.000	32.087	0.000	43.321	0.000	32.087	0.000	0.000	46.360	43.315	87.087	MWD+IFR1+MS
12800.000	90.000	359.618	11261.000	32.440	0.000	43.569	0.000	32.440	0.000	0.000	46.376	43.557	85.970	MWD+IFR1+MS
12900.000	90.000	359.618	11261.000	32.809	0.000	43.833	0.000	32.809	0.000	0.000	46.396	43.813	84.638	MWD+IFR1+MS
13000.000	90.000	359.618	11261.000	33.192	0.000	44.113	0.000	33.192	0.000	0.000	46.419	44.081	83.006	MWD+IFR1+MS
13100.000	90.000	359.618	11261.000	33.589	0.000	44.408	0.000	33.589	0.000	0.000	46.448	44.360	80.948	MWD+IFR1+MS
13200.000	90.000	359.618	11261.000	34.000	0.000	44.719	0.000	34.000	0.000	0.000	46.484	44.647	78.270	MWD+IFR1+MS
13300.000	90.000	359.618	11261.000	34.424	0.000	45.046	0.000	34.424	0.000	0.000	46.533	44.938	74.671	MWD+IFR1+MS
13400.000	90.000	359.618	11261.000	34.860	0.000	45.386	0.000	34.860	0.000	0.000	46.600	45.225	69.716	MWD+IFR1+MS
13500.000	90.000	359.618	11261.000	35.308	0.000	45.742	0.000	35.308	0.000	0.000	46.698	45.497	62.909	MWD+IFR1+MS
13600.000	90.000	359.618	11261.000	35.768	0.000	46.111	0.000	35.768	0.000	0.000	46.843	45.735	54.144	MWD+IFR1+MS
13700.000	90.000	359.618	11261.000	36.239	0.000	46.494	0.000	36.239	0.000	0.000	47.054	45.923	44.488	MWD+IFR1+MS
13800.000	90.000	359.618	11261.000	36.720	0.000	46.891	0.000	36.720	0.000	0.000	47.330	46.059	35.810	MWD+IFR1+MS
13900.000	90.000	359.618	11261.000	37.212	0.000	47.300	0.000	37.212	0.000	0.000	47.662	46.153	29.114	MWD+IFR1+MS
14000.000	90.000	359.618	11261.000	37.714	0.000	47.723	0.000	37.714	0.000	0.000	48.033	46.221	24.259	MWD+IFR1+MS
14100.000	90.000	359.618	11261.000	38.226	0.000	48.158	0.000	38.226	0.000	0.000	48.433	46.274	20.748	MWD+IFR1+MS
14200.000	90.000	359.618	11261.000	38.746	0.000	48.604	0.000	38.746	0.000	0.000	48.855	46.316	18.150	MWD+IFR1+MS
14300.000	90.000	359.618	11261.000	39.276	0.000	49.063	0.000	39.276	0.000	0.000	49.295	46.353	16.171	MWD+IFR1+MS
14400.000	90.000	359.618	11261.000	39.814	0.000	49.533	0.000	39.814	0.000	0.000	49.751	46.386	14.622	MWD+IFR1+MS
14500.000	90.000	359.618	11261.000	40.359	0.000	50.014	0.000	40.359	0.000	0.000	50.222	46.416	13.379	MWD+IFR1+MS
14600.000	90.000	359.618	11261.000	40.913	0.000	50.506	0.000	40.913	0.000	0.000	50.705	46.445	12.358	MWD+IFR1+MS
14700.000	90.000	359.618	11261.000	41.474	0.000	51.008	0.000	41.474	0.000	0.000	51.200	46.473	11.506	MWD+IFR1+MS
14800.000	90.000	359.618	11261.000	42.043	0.000	51.521	0.000	42.043	0.000	0.000	51.706	46.501	10.782	MWD+IFR1+MS
14900.000	90.000	359.618	11261.000	42.618	0.000	52.043	0.000	42.618	0.000	0.000	52.223	46.528	10.159	MWD+IFR1+MS
15000.000	90.000	359.618	11261.000	43.199	0.000	52.575	0.000	43.199	0.000	0.000	52.751	46.555	9.617	MWD+IFR1+MS
15100.000	90.000	359.618	11261.000	43.788	0.000	53.116	0.000	43.788	0.000	0.000	53.288	46.582	9.139	MWD+IFR1+MS
15200.000	90.000	359.618	11261.000	44.382	0.000	53.666	0.000	44.382	0.000	0.000	53.835	46.609	8.715	MWD+IFR1+MS
15300.000	90.000	359.618	11261.000	44.982	0.000	54.225	0.000	44.982	0.000	0.000	54.391	46.636	8.335	MWD+IFR1+MS
15400.000	90.000	359.618	11261.000	45.587	0.000	54.792	0.000	45.587	0.000	0.000	54.955	46.664	7.993	MWD+IFR1+MS
15500.000	90.000	359.618	11261.000	46.198	0.000	55.368	0.000	46.198	0.000	0.000	55.528	46.691	7.683	MWD+IFR1+MS
15600.000	90.000	359.618	11261.000	46.815	0.000	55.951	0.000	46.815	0.000	0.000	56.109	46.720	7.399	MWD+IFR1+MS
15700.000	90.000	359.618	11261.000	47.436	0.000	56.542	0.000	47.436	0.000	0.000	56.698	46.749	7.140	MWD+IFR1+MS
15800.000	90.000	359.618	11261.000	48.062	0.000	57.141	0.000	48.062	0.000	0.000	57.294	46.778	6.900	MWD+IFR1+MS

15900.000	90.000	359.618	11261.000	48.692	0.000	57.747	0.000	48.692	0.000	0.000	57.898	46.807	6.679	MWD+IFR1+MS
16000.000	90.000	359.618	11261.000	49.327	0.000	58.359	0.000	49.327	0.000	0.000	58.509	46.837	6.473	MWD+IFR1+MS
16100.000	90.000	359.618	11261.000	49.967	0.000	58.979	0.000	49.967	0.000	0.000	59.127	46.868	6.282	MWD+IFR1+MS
16200.000	90.000	359.618	11261.000	50.610	0.000	59.605	0.000	50.610	0.000	0.000	59.752	46.899	6.103	MWD+IFR1+MS
16300.000	90.000	359.618	11261.000	51.257	0.000	60.238	0.000	51.257	0.000	0.000	60.383	46.931	5.935	MWD+IFR1+MS
16400.000	90.000	359.618	11261.000	51.908	0.000	60.876	0.000	51.908	0.000	0.000	61.020	46.963	5.777	MWD+IFR1+MS
16500.000	90.000	359.618	11261.000	52.563	0.000	61.521	0.000	52.563	0.000	0.000	61.663	46.996	5.629	MWD+IFR1+MS
16600.000	90.000	359.618	11261.000	53.221	0.000	62.172	0.000	53.221	0.000	0.000	62.312	47.029	5.489	MWD+IFR1+MS
16700.000	90.000	359.618	11261.000	53.883	0.000	62.828	0.000	53.883	0.000	0.000	62.967	47.063	5.356	MWD+IFR1+MS
16800.000	90.000	359.618	11261.000	54.548	0.000	63.489	0.000	54.548	0.000	0.000	63.627	47.097	5.230	MWD+IFR1+MS
16900.000	90.000	359.618	11261.000	55.216	0.000	64.156	0.000	55.216	0.000	0.000	64.292	47.132	5.110	MWD+IFR1+MS
17000.000	90.000	359.618	11261.000	55.887	0.000	64.828	0.000	55.887	0.000	0.000	64.963	47.167	4.997	MWD+IFR1+MS
17100.000	90.000	359.618	11261.000	56.561	0.000	65.505	0.000	56.561	0.000	0.000	65.638	47.203	4.888	MWD+IFR1+MS
17200.000	90.000	359.618	11261.000	57.238	0.000	66.186	0.000	57.238	0.000	0.000	66.319	47.239	4.785	MWD+IFR1+MS
17300.000	90.000	359.618	11261.000	57.918	0.000	66.872	0.000	57.918	0.000	0.000	67.004	47.276	4.686	MWD+IFR1+MS
17400.000	90.000	359.618	11261.000	58.600	0.000	67.563	0.000	58.600	0.000	0.000	67.693	47.314	4.591	MWD+IFR1+MS
17500.000	90.000	359.618	11261.000	59.285	0.000	68.258	0.000	59.285	0.000	0.000	68.387	47.352	4.501	MWD+IFR1+MS
17600.000	90.000	359.618	11261.000	59.972	0.000	68.958	0.000	59.972	0.000	0.000	69.086	47.391	4.414	MWD+IFR1+MS
17700.000	90.000	359.618	11261.000	60.661	0.000	69.661	0.000	60.661	0.000	0.000	69.788	47.430	4.330	MWD+IFR1+MS
17800.000	90.000	359.618	11261.000	61.353	0.000	70.369	0.000	61.353	0.000	0.000	70.494	47.470	4.250	MWD+IFR1+MS
17900.000	90.000	359.618	11261.000	62.047	0.000	71.080	0.000	62.047	0.000	0.000	71.205	47.510	4.173	MWD+IFR1+MS
18000.000	90.000	359.618	11261.000	62.743	0.000	71.795	0.000	62.743	0.000	0.000	71.919	47.551	4.099	MWD+IFR1+MS
18100.000	90.000	359.618	11261.000	63.442	0.000	72.514	0.000	63.442	0.000	0.000	72.636	47.592	4.027	MWD+IFR1+MS
18200.000	90.000	359.618	11261.000	64.142	0.000	73.236	0.000	64.142	0.000	0.000	73.358	47.634	3.958	MWD+IFR1+MS
18300.000	90.000	359.618	11261.000	64.844	0.000	73.962	0.000	64.844	0.000	0.000	74.082	47.677	3.891	MWD+IFR1+MS
18400.000	90.000	359.618	11261.000	65.548	0.000	74.691	0.000	65.548	0.000	0.000	74.810	47.720	3.826	MWD+IFR1+MS
18500.000	90.000	359.618	11261.000	66.254	0.000	75.423	0.000	66.254	0.000	0.000	75.542	47.764	3.764	MWD+IFR1+MS
18600.000	90.000	359.618	11261.000	66.962	0.000	76.158	0.000	66.962	0.000	0.000	76.276	47.808	3.704	MWD+IFR1+MS
18700.000	90.000	359.618	11261.000	67.671	0.000	76.897	0.000	67.671	0.000	0.000	77.014	47.852	3.645	MWD+IFR1+MS
18800.000	90.000	359.618	11261.000	68.382	0.000	77.638	0.000	68.382	0.000	0.000	77.754	47.898	3.588	MWD+IFR1+MS
18900.000	90.000	359.618	11261.000	69.095	0.000	78.383	0.000	69.095	0.000	0.000	78.497	47.944	3.533	MWD+IFR1+MS
19000.000	90.000	359.618	11261.000	69.809	0.000	79.130	0.000	69.809	0.000	0.000	79.244	47.990	3.480	MWD+IFR1+MS
19100.000	90.000	359.618	11261.000	70.524	0.000	79.880	0.000	70.524	0.000	0.000	79.993	48.037	3.428	MWD+IFR1+MS

19161.209	90.000	359.618	11261.000	70.962	0.000	80.338	0.000	70.962	0.000	0.000	80.451	48.066	3.398	MWD+IFR1+MS
19200.000	90.000	359.618	11261.000	71.240	0.000	80.629	0.000	71.240	0.000	0.000	80.741	48.084	3.379	MWD+IFR1+MS
19211.210	90.000	359.618	11261.000	71.320	0.000	80.713	0.000	71.320	0.000	0.000	80.825	48.089	3.373	MWD+IFR1+MS

Plan Targets Remuda North 25 ST 162H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 3	11869.62	464609.00	621284.00	8163.00	CIRCLE
LTP 3	19161.21	471900.40	621235.40	8163.00	CIRCLE
BHL 3	19211.38	471950.40	621234.90	8163.00	CIRCLE

HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H_2S, 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_2S 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
  - Detection of H_2S, and
  - Measures for protection against the gas,
  - 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_2). 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_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = I	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

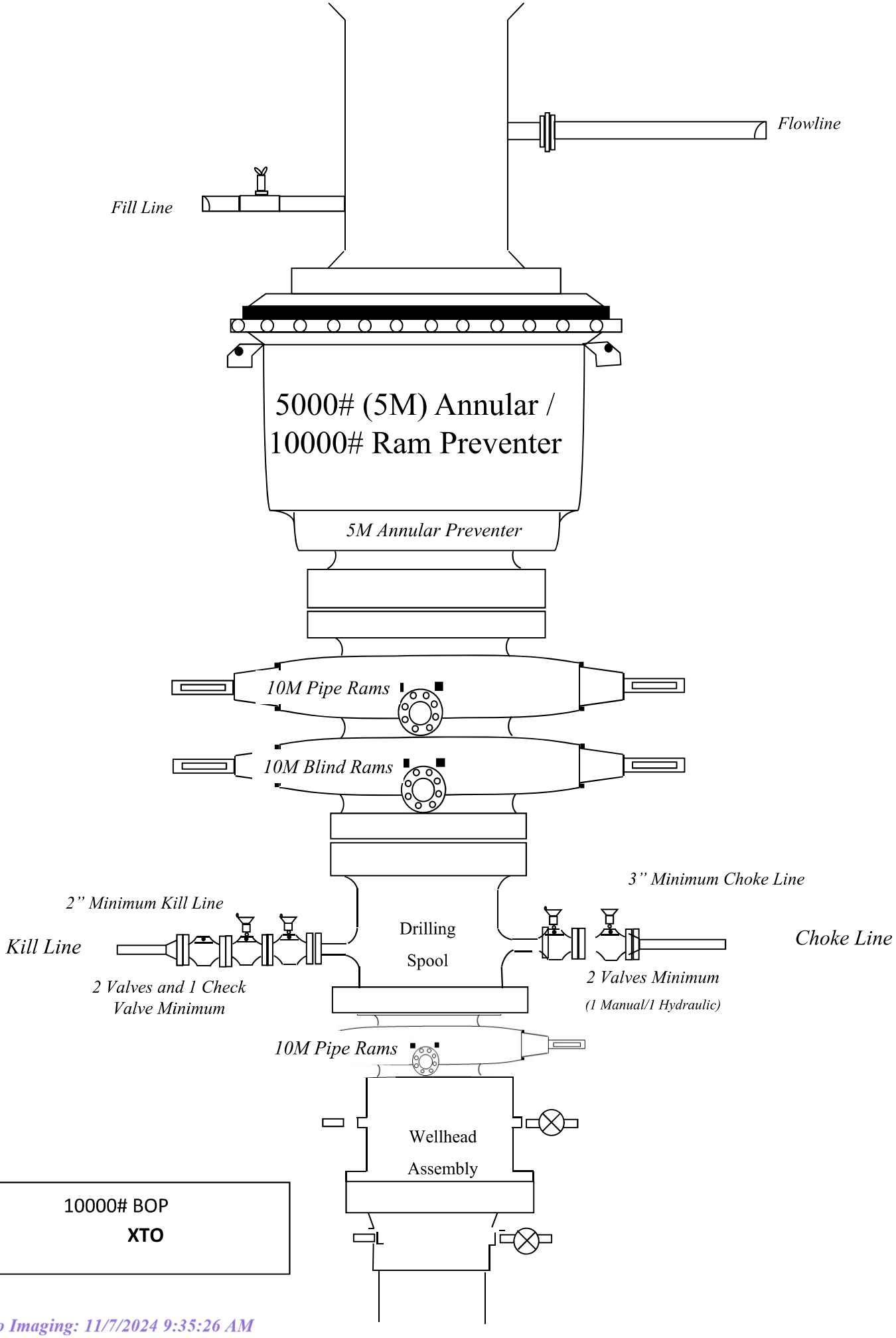
AGENT NOTIFICATIONS:

For Lea County:

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

For Eddy County:

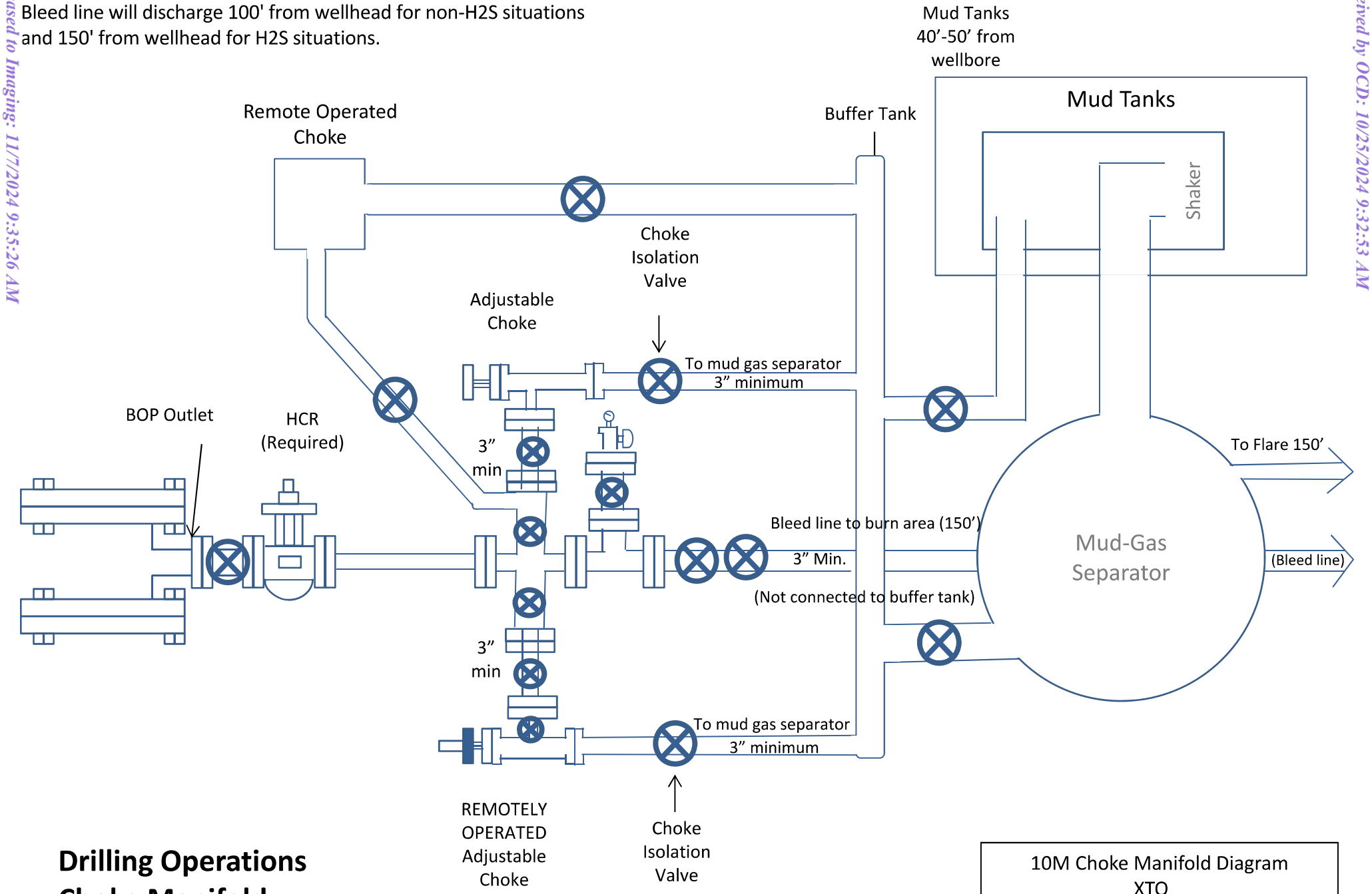
Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283



10000# BOP

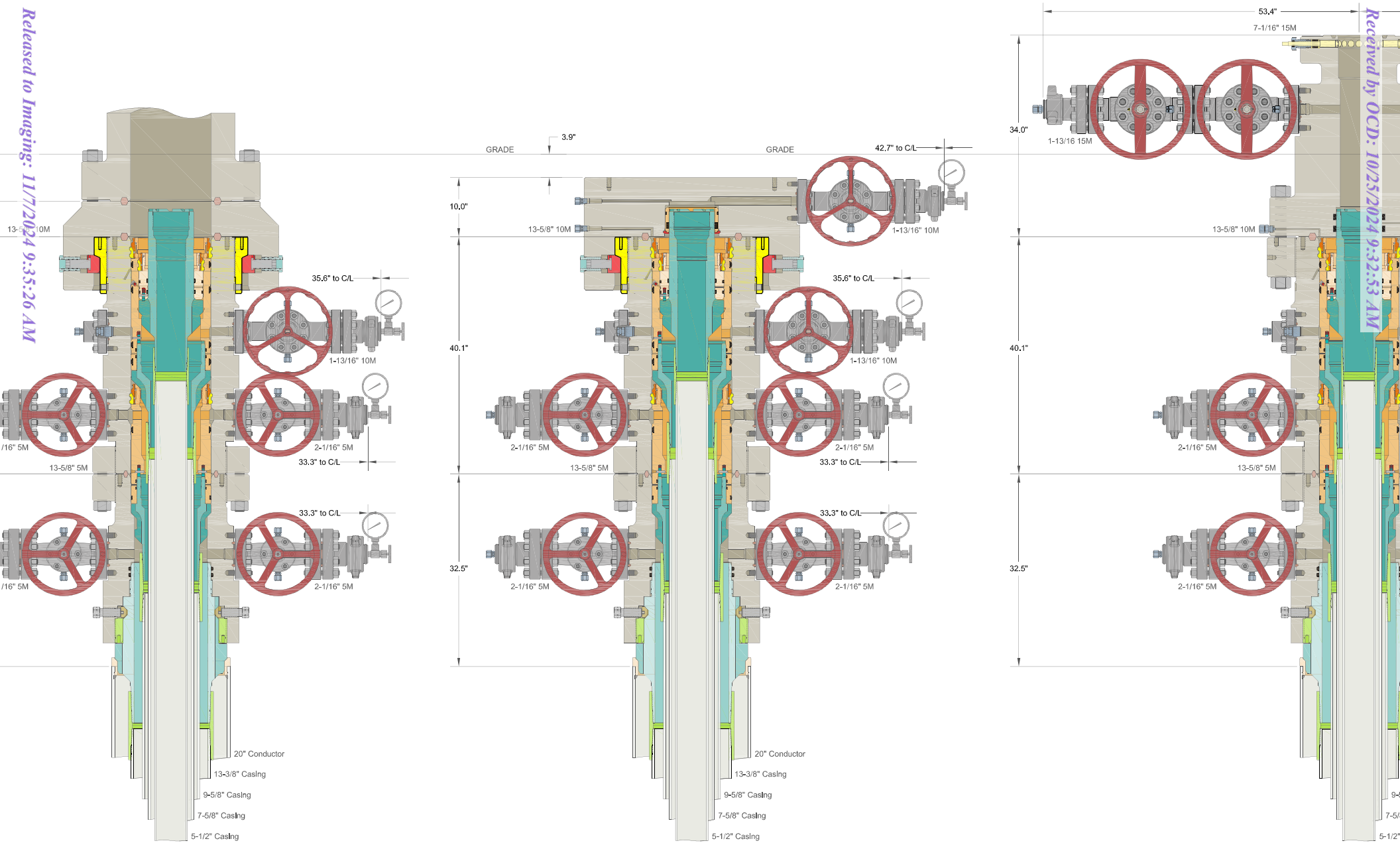
XTO

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

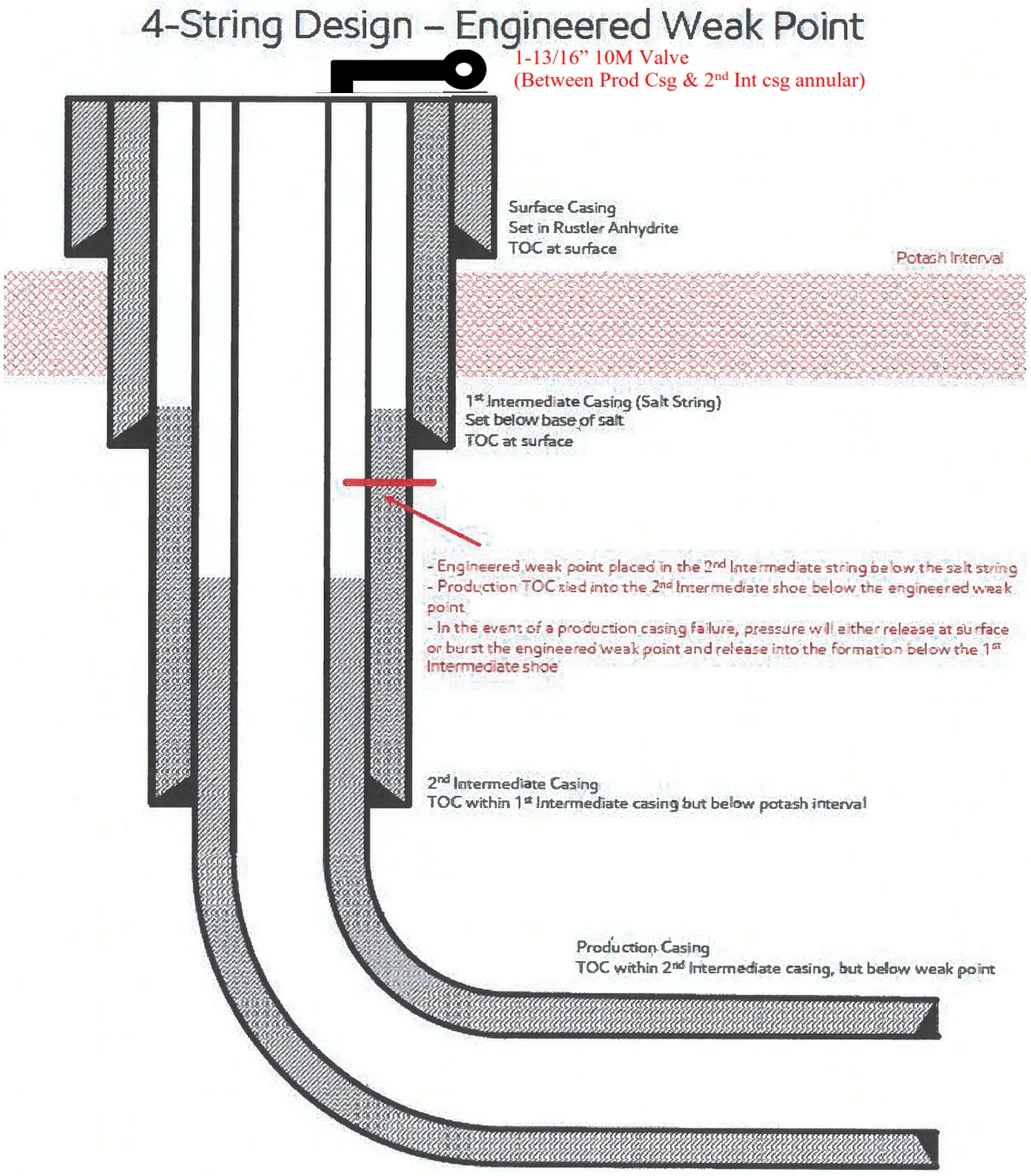


Drilling Operations
Choke Manifold
10M Service

10M Choke Manifold Diagram
XTO



CACTUS WELLHEAD LLC



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

31592723_v1

Update May 2024:
XTO is aware of the R111-Q update and will comply with these requirements including (but not limited to):
1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
3) Bradenhead squeeze to be completed within 180days to tie back TOC to salt string at least 500ft but with top below Marker Bed 126
4) Production cement to be tied back no less than 500ft inside previous casing shoe

State of New Mexico
Energy, Minerals and Natural Resources Department

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 ga thering 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.

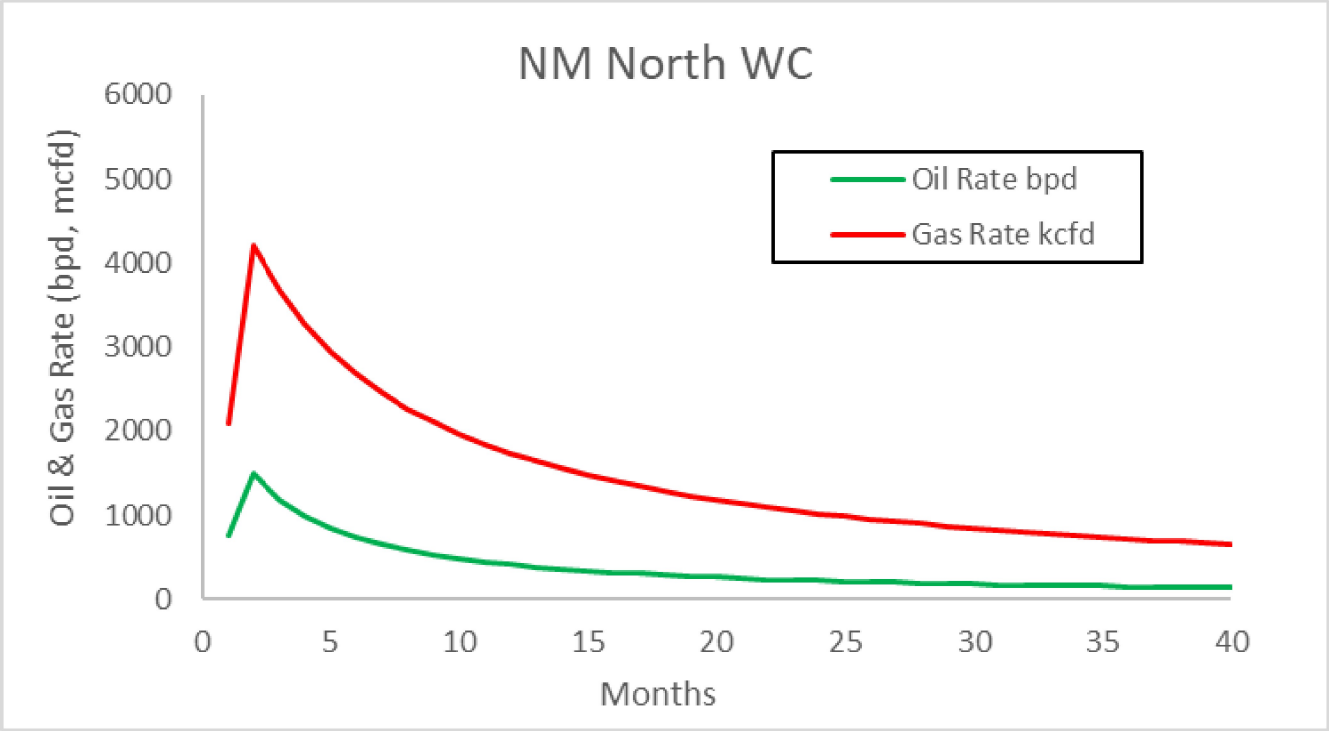
I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

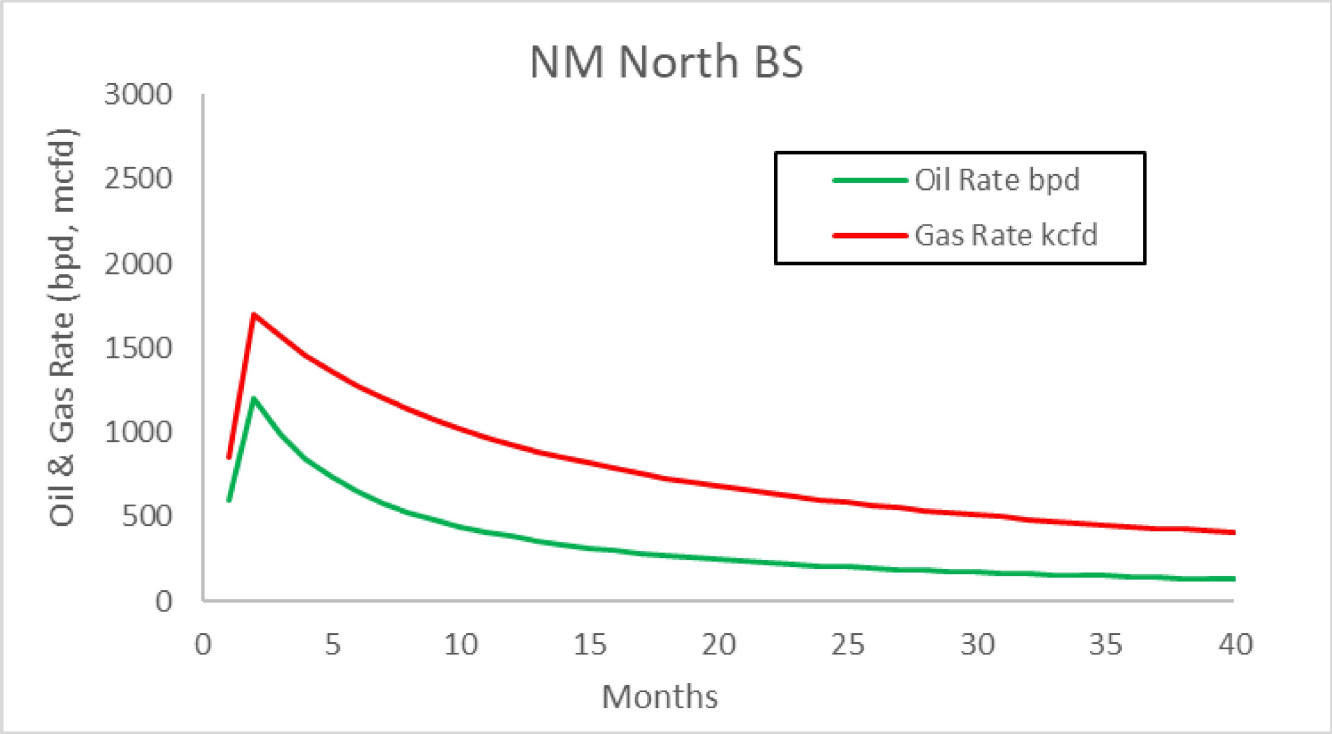
Signature:	
Printed Name:	Adrian Baker
Title:	Regulatory Advisor
E-mail Address:	adrian.baker@exxonmobil.com
Date:	10/10/24
Phone:	4322363808

OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	


NM North WC
Oil & Gas Rate (bpd, mcfd)
6000
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
Months
Oil Rate bpd
Gas Rate kcfd


NM North BS
Oil & Gas Rate (bpd, mcfd)
3000
2500
2000
1500
1000
500
0
0
5
10
15
20
25
30
35
40
Months
Oil Rate bpd
Gas Rate kcfd

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 LLCwill 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.