U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Sundry Print Report

09/19/2023

Well Name: OUTRIDER 28 FED

Well Location: T24S / R32E / SEC 28 / SESW /

County or Parish/State:

Well Number: 703H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM016353Z

Unit or CA Name:

Unit or CA Number:

US Well Number: 3002551709

Well Status: Approved Application for Permit to Drill

Operator: XTO ENERGY INCORPORATED

Notice of Intent

Sundry ID: 2745202

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/09/2023

Time Sundry Submitted: 05:55

Date proposed operation will begin: 08/09/2023

Procedure Description: ** Name Change, First and Last Take Point Changes, Bottomhole Location Change, Drilling Plan Change, Casing/Cement Change XTO Energy Inc. requests permission to make the following changes to the original APD: No Additional Surface Disturbance Name Change: Fr/Outrider 28 Fed 703H to Outrider 28 Fed 405H SHL: fr/419' FSL & 2093' FWL to 420' FSL & 2092' FWL FTP: fr/50'FSL & 1650'FWL to 100'FSL & 2310'FWL, NMNM016353 LTP: fr/50'FNL & 1650'FWL to 100'FNL & 2310'FWL, NMNM016353 BHL: fr/50'FNL & 1650'FWL to 50'FNL & 2310'FWL, Section 21-T24S-R32E NMNM016353 Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan

NOI Attachments

Procedure Description

Outrider_28_Fed_405H_Sundry_Attachments_Updated_20230915142818.pdf

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Conditions of Approval

Additional

Sec_28_24S_32E_NMP_Sundry_2745202_Outrider_28_Fed_405H_COAs_20230915145727.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

Operator Electronic Signature: CASSIE EVANS

Signed on: SEP 15, 2023 02:28 PM

Name: XTO ENERGY INCORPORATED

Title: Regulatory Analyst

Street Address: 6401 Holiday Hill Road, Bldg 5

City: Midland **State:** TX

Phone: (432) 218-3671

Email address: CASSIE.EVANS@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 09/19/2023

Signature: Chris Walls

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-025-	97899	WC-25 G-06 S253206; BONE SPRING

[4] Property Code	[5] Property Name	[6] Well Number
	OUTRIDER 28 FED	405H

[7] OGRID No.	[8] Operator Name	[9] Elevation
005380	XTO ENERGY, INC.	3,528'

[10] Surface Location

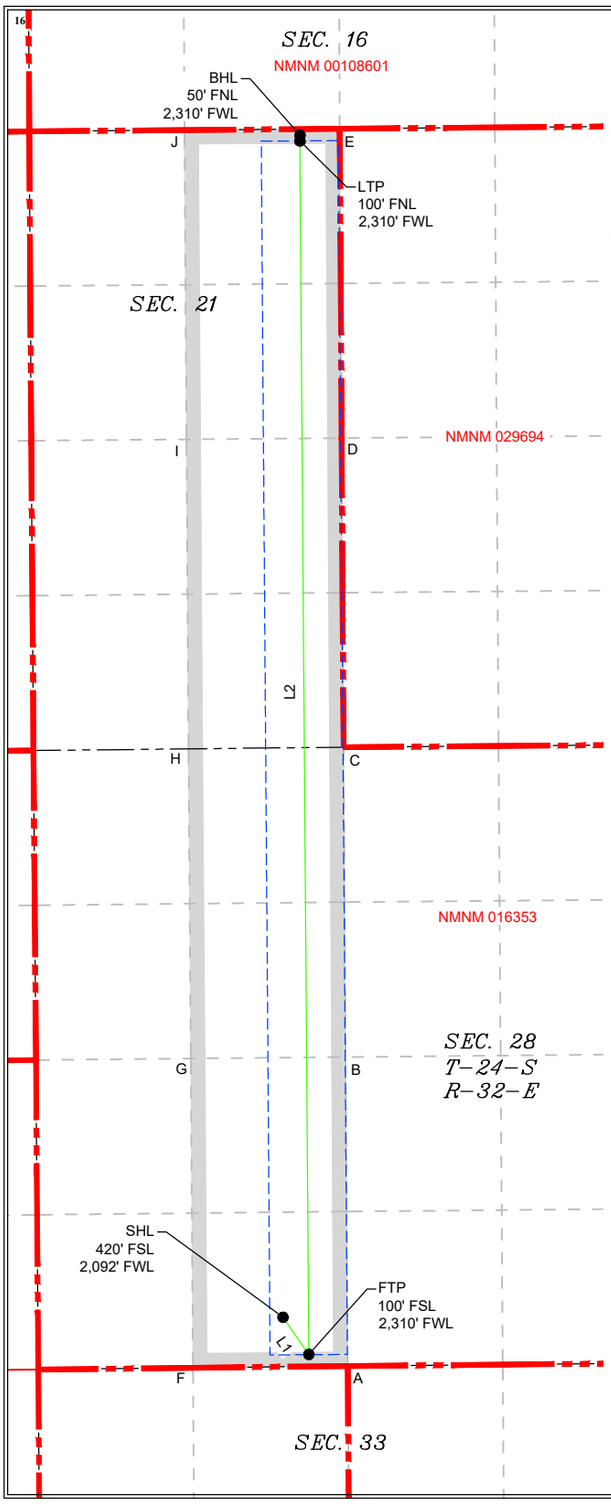
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	28	24S	32E		420	SOUTH	2,092	WEST	LEA

[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	21	24S	32E		50	NORTH	2,310	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
320			

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



LEGEND

SECTION LINE
PROPOSED WELL BORE
NEW MEXICO MINERAL LEASE
330' BUFFER
ALLOCATION AREA

LINE TABLE		
LINE	AZUMITH	LENGTH
L1	145°14'17"	385.89'
L2	359°35'02"	10,409.37'

COORDINATE TABLE

SHL (NAD 83 NME)	SHL (NAD 27 NME)
Y = 430,701.2 N	Y = 430,642.8 N
X = 743,032.6 E	X = 701,848.0 E
LAT. = 32.182395 °N	LAT. = 32.182271 °N
LONG. = 103.681391 °W	LONG. = 103.680912 °W

FTP (NAD 83 NME)	FTP (NAD 27 NME)
Y = 430,384.1 N	Y = 430,325.8 N
X = 743,252.7 E	X = 702,068.0 E
LAT. = 32.181520 °N	LAT. = 32.181396 °N
LONG. = 103.680686 °W	LONG. = 103.680207 °W

LTP (NAD 83 NME)	LTP (NAD 27 NME)
Y = 440,743.2 N	Y = 440,684.6 N
X = 743,177.4 E	X = 701,993.1 E
LAT. = 32.209996 °N	LAT. = 32.209872 °N
LONG. = 103.680726 °W	LONG. = 103.680246 °W

BHL (NAD 83 NME)	BHL (NAD 27 NME)
Y = 440,793.2 N	Y = 440,734.6 N
X = 743,177.1 E	X = 701,992.8 E
LAT. = 32.210133 °N	LAT. = 32.210010 °N
LONG. = 103.680726 °W	LONG. = 103.680246 °W

CORNER COORDINATES (NAD 83 NME)

A - Y =	430,288.0 N	A - X =	743,585.5 E
B - Y =	432,924.0 N	B - X =	743,567.9 E
C - Y =	435,568.6 N	C - X =	743,550.3 E
D - Y =	438,206.4 N	D - X =	743,533.7 E
E - Y =	440,846.0 N	E - X =	743,517.2 E
F - Y =	430,272.5 N	F - X =	742,264.5 E
G - Y =	432,911.3 N	G - X =	742,245.8 E
H - Y =	435,554.2 N	H - X =	742,226.7 E
I - Y =	438,195.2 N	I - X =	742,209.0 E
J - Y =	440,835.2 N	J - X =	742,192.0 E

CORNER COORDINATES (NAD 27 NME)

A - Y =	430,229.7 N	A - X =	702,400.8 E
B - Y =	432,865.6 N	B - X =	702,383.3 E
C - Y =	435,510.2 N	C - X =	702,365.8 E
D - Y =	438,147.8 N	D - X =	702,349.4 E
E - Y =	440,787.4 N	E - X =	702,333.0 E
F - Y =	430,214.1 N	F - X =	701,079.9 E
G - Y =	432,852.9 N	G - X =	701,061.2 E
H - Y =	435,495.7 N	H - X =	701,042.3 E
I - Y =	438,136.7 N	I - X =	701,024.6 E
J - Y =	440,776.6 N	J - X =	701,007.8 E

[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Cassie Evans 8/08/23
Signature Date

Cassie Evans
Printed Name

cassie.evans@exxonmobil.com
E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

07-21-2023
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP
NEW MEXICO
23786
PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

RP 618.013012.00-10

J:\618.013 XTO Energy - NM\012 Outrider Unit - Lea\.00 - Outrider Unit\Wells\-10 - 28 Fed 405H\DWG\28 FED 405H C-102.dwg

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

XTO Energy Inc.
Outrider 28 Fed 405H
Projected TD: 21740' MD / 10818' TVD
SHL: 420' FSL & 2092' FWL , Section 28, T24S, R32E
BHL: 50' FNL & 2310' FWL , Section 21, T24S, R32E
Lea 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	858'	Water
Top of Salt	1169'	Water
Base of Salt	4498'	Water
Delaware	4708'	Water
Brushy Canyon	7194'	Water/Oil/Gas
Bone Spring	8638'	Water
1st Bone Spring	9438'	Water/Oil/Gas
2nd Bone Spring	10013'	Water/Oil/Gas
Target/Land Curve	10818'	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 9.625 inch casing @ 958' (211' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 10005.9' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 21740 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9705.9 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 958'	9.625	40	J-55	BTC	New	1.66	6.57	16.44
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.19	2.92	1.88
8.75	4000' – 10005.9'	7.625	29.7	HC L-80	Flush Joint	New	2.32	2.39	2.28
6.75	0' – 9905.9'	5.5	20	RY P-110	Semi-Premium	New	1.26	2.27	2.14
6.75	9905.9' - 21740'	5.5	20	RY P-110	Semi-Flush	New	1.26	2.08	2.14

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
· XTO requests to not utilize centralizers in the curve and lateral
· 7.625 Collapse analyzed using 50% evacuation based on regional experience.
· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 11” 10M top flange x 9-5/8” bottom

B. Tubing Head: 11” 10M bottom flange x 7-1/16” 15M top flange

- Wellhead will be installed by manufacturer’s representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 958'

Lead: 220 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 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 +/- 10005.9'
1st Stage
Optional Lead: 390 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 260 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 7194
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
Tail: 810 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 0
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (7194') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 21740'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9705.9 feet
Tail: 820 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10205.9 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 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 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2964 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 9.625, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production

hole on each of the wells.

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 958'	12.25	FW/Native	8.4-8.9	35-40	NC
958' - 10005.9'	8.75	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
10005.9' - 21740'	6.75	OBM	9.5-10	50-60	NC - 20

The necessary mud products for weight addition and fluid loss control will be on location at all times.

Spud with fresh water/native mud. Drill out from under 9-5/8" surface casing with brine solution. A 9.7 ppg - 10.2 ppg cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 9.625 casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 170 to 190 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 5344 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.

Long Lead_Well Planning

Lea County
Outrider 28 Fed Pad B
405H

OH

Plan: Plan 1

Standard Planning Report

25 July, 2023

ExxonMobil
Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 405H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3528+30) @ 3558.0usft
Project:	Lea County	**MD Reference:**	RKB(3528+30) @ 3558.0usft
Site:	Outrider 28 Fed Pad B	**North Reference:**	Grid
Well:	405H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project Lea County

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

Site Outrider 28 Fed Pad B

Site Position:		**Northing:**	430,612.60 usft	**Latitude:**	32° 10' 55.878 N
From:	Map	**Easting:**	701,848.20 usft	**Longitude:**	103° 40' 51.282 W
Position Uncertainty:	3.0 usft	**Slot Radius:**	13-3/16 "		

Well 405H

Well Position	**+N/-S**	0.0 usft	**Northing:**	430,642.80 usft	**Latitude:**	32° 10' 56.177 N
	+E/-W	0.0 usft	**Easting:**	701,848.00 usft	**Longitude:**	103° 40' 51.283 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,528.0 usft
Grid Convergence:		0.35 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/18/2023	6.35	59.78	47,239.66561814

Design Plan 1

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	359.59

Plan Survey Tool Program **Date** 7/25/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,740.0	Plan 1 (OH)	XOM_R2OWSG MWD+IFR1+ OWSG MWD + IFR1 + Multi-St	

ExxonMobil
Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 405H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3528+30) @ 3558.0usft
Project:	Lea County	**MD Reference:**	RKB(3528+30) @ 3558.0usft
Site:	Outrider 28 Fed Pad B	**North Reference:**	Grid
Well:	405H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Plan Sections

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,784.1	11.68	167.70	1,780.1	-58.0	12.6	2.00	2.00	0.00	167.70	
6,420.0	11.68	167.70	6,319.9	-975.2	212.5	0.00	0.00	0.00	0.00	
7,004.1	0.00	0.00	6,900.0	-1,033.2	225.2	2.00	-2.00	0.00	180.00	
10,205.9	0.00	0.00	10,101.8	-1,033.2	225.2	0.00	0.00	0.00	0.00	
11,330.9	90.00	359.59	10,818.0	-317.0	220.0	8.00	0.00	0.00	359.59	405H_FTP
21,690.0	90.00	359.59	10,818.0	10,041.8	145.1	0.00	0.00	0.00	0.00	405H_LTP
21,740.0	90.00	359.59	10,818.0	10,091.8	144.7	0.00	0.00	0.00	0.00	405H_BHL

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 405H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3528+30) @ 3558.0usft
Project:	Lea County	**MD Reference:**	RKB(3528+30) @ 3558.0usft
Site:	Outrider 28 Fed Pad B	**North Reference:**	Grid
Well:	405H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
405H_SHL									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	167.70	1,300.0	-1.7	0.4	-1.7	2.00	2.00	0.00
1,400.0	4.00	167.70	1,399.8	-6.8	1.5	-6.8	2.00	2.00	0.00
1,500.0	6.00	167.70	1,499.5	-15.3	3.3	-15.4	2.00	2.00	0.00
1,600.0	8.00	167.70	1,598.7	-27.2	5.9	-27.3	2.00	2.00	0.00
1,700.0	10.00	167.70	1,697.5	-42.5	9.3	-42.6	2.00	2.00	0.00
1,784.1	11.68	167.70	1,780.1	-58.0	12.6	-58.1	2.00	2.00	0.00
1,800.0	11.68	167.70	1,795.6	-61.1	13.3	-61.2	0.00	0.00	0.00
1,900.0	11.68	167.70	1,893.6	-80.9	17.6	-81.0	0.00	0.00	0.00
2,000.0	11.68	167.70	1,991.5	-100.7	21.9	-100.8	0.00	0.00	0.00
2,100.0	11.68	167.70	2,089.4	-120.5	26.3	-120.7	0.00	0.00	0.00
2,200.0	11.68	167.70	2,187.3	-140.3	30.6	-140.5	0.00	0.00	0.00
2,300.0	11.68	167.70	2,285.3	-160.1	34.9	-160.3	0.00	0.00	0.00
2,400.0	11.68	167.70	2,383.2	-179.8	39.2	-180.1	0.00	0.00	0.00
2,500.0	11.68	167.70	2,481.1	-199.6	43.5	-199.9	0.00	0.00	0.00
2,600.0	11.68	167.70	2,579.1	-219.4	47.8	-219.7	0.00	0.00	0.00
2,700.0	11.68	167.70	2,677.0	-239.2	52.1	-239.6	0.00	0.00	0.00
2,800.0	11.68	167.70	2,774.9	-259.0	56.4	-259.4	0.00	0.00	0.00
2,900.0	11.68	167.70	2,872.8	-278.8	60.8	-279.2	0.00	0.00	0.00
3,000.0	11.68	167.70	2,970.8	-298.5	65.1	-299.0	0.00	0.00	0.00
3,100.0	11.68	167.70	3,068.7	-318.3	69.4	-318.8	0.00	0.00	0.00
3,200.0	11.68	167.70	3,166.6	-338.1	73.7	-338.6	0.00	0.00	0.00
3,300.0	11.68	167.70	3,264.6	-357.9	78.0	-358.5	0.00	0.00	0.00
3,400.0	11.68	167.70	3,362.5	-377.7	82.3	-378.3	0.00	0.00	0.00
3,500.0	11.68	167.70	3,460.4	-397.5	86.6	-398.1	0.00	0.00	0.00
3,600.0	11.68	167.70	3,558.3	-417.3	90.9	-417.9	0.00	0.00	0.00
3,700.0	11.68	167.70	3,656.3	-437.0	95.3	-437.7	0.00	0.00	0.00
3,800.0	11.68	167.70	3,754.2	-456.8	99.6	-457.5	0.00	0.00	0.00
3,900.0	11.68	167.70	3,852.1	-476.6	103.9	-477.3	0.00	0.00	0.00
4,000.0	11.68	167.70	3,950.1	-496.4	108.2	-497.2	0.00	0.00	0.00
4,100.0	11.68	167.70	4,048.0	-516.2	112.5	-517.0	0.00	0.00	0.00
4,200.0	11.68	167.70	4,145.9	-536.0	116.8	-536.8	0.00	0.00	0.00
4,300.0	11.68	167.70	4,243.8	-555.8	121.1	-556.6	0.00	0.00	0.00
4,400.0	11.68	167.70	4,341.8	-575.5	125.4	-576.4	0.00	0.00	0.00
4,500.0	11.68	167.70	4,439.7	-595.3	129.7	-596.2	0.00	0.00	0.00
4,600.0	11.68	167.70	4,537.6	-615.1	134.1	-616.1	0.00	0.00	0.00
4,700.0	11.68	167.70	4,635.6	-634.9	138.4	-635.9	0.00	0.00	0.00
4,800.0	11.68	167.70	4,733.5	-654.7	142.7	-655.7	0.00	0.00	0.00
4,900.0	11.68	167.70	4,831.4	-674.5	147.0	-675.5	0.00	0.00	0.00
5,000.0	11.68	167.70	4,929.3	-694.2	151.3	-695.3	0.00	0.00	0.00
5,100.0	11.68	167.70	5,027.3	-714.0	155.6	-715.1	0.00	0.00	0.00
5,200.0	11.68	167.70	5,125.2	-733.8	159.9	-734.9	0.00	0.00	0.00
5,300.0	11.68	167.70	5,223.1	-753.6	164.2	-754.8	0.00	0.00	0.00
5,400.0	11.68	167.70	5,321.1	-773.4	168.6	-774.6	0.00	0.00	0.00
5,500.0	11.68	167.70	5,419.0	-793.2	172.9	-794.4	0.00	0.00	0.00
5,600.0	11.68	167.70	5,516.9	-813.0	177.2	-814.2	0.00	0.00	0.00
5,700.0	11.68	167.70	5,614.8	-832.7	181.5	-834.0	0.00	0.00	0.00
5,800.0	11.68	167.70	5,712.8	-852.5	185.8	-853.8	0.00	0.00	0.00
5,900.0	11.68	167.70	5,810.7	-872.3	190.1	-873.7	0.00	0.00	0.00
6,000.0	11.68	167.70	5,908.6	-892.1	194.4	-893.5	0.00	0.00	0.00
6,100.0	11.68	167.70	6,006.5	-911.9	198.7	-913.3	0.00	0.00	0.00
6,200.0	11.68	167.70	6,104.5	-931.7	203.1	-933.1	0.00	0.00	0.00

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 405H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3528+30) @ 3558.0usft
Project:	Lea County	**MD Reference:**	RKB(3528+30) @ 3558.0usft
Site:	Outrider 28 Fed Pad B	**North Reference:**	Grid
Well:	405H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,300.0	11.68	167.70	6,202.4	-951.5	207.4	-952.9	0.00	0.00	0.00
6,400.0	11.68	167.70	6,300.3	-971.2	211.7	-972.7	0.00	0.00	0.00
6,420.0	11.68	167.70	6,319.9	-975.2	212.5	-976.7	0.00	0.00	0.00
6,500.0	10.08	167.70	6,398.5	-990.0	215.8	-991.5	2.00	-2.00	0.00
6,600.0	8.08	167.70	6,497.2	-1,005.4	219.1	-1,006.9	2.00	-2.00	0.00
6,700.0	6.08	167.70	6,596.5	-1,017.4	221.7	-1,019.0	2.00	-2.00	0.00
6,800.0	4.08	167.70	6,696.1	-1,026.1	223.6	-1,027.7	2.00	-2.00	0.00
6,900.0	2.08	167.70	6,795.9	-1,031.3	224.8	-1,032.9	2.00	-2.00	0.00
7,000.0	0.08	167.70	6,895.9	-1,033.2	225.2	-1,034.8	2.00	-2.00	0.00
7,004.1	0.00	0.00	6,900.0	-1,033.2	225.2	-1,034.8	2.00	-2.00	0.00
10,205.9	0.00	0.00	10,101.8	-1,033.2	225.2	-1,034.8	0.00	0.00	0.00
10,300.0	7.53	359.59	10,195.6	-1,027.0	225.1	-1,028.6	8.00	8.00	0.00
10,400.0	15.53	359.59	10,293.5	-1,007.0	225.0	-1,008.6	8.00	8.00	0.00
10,500.0	23.53	359.59	10,387.7	-973.6	224.7	-975.2	8.00	8.00	0.00
10,600.0	31.53	359.59	10,476.3	-927.5	224.4	-929.1	8.00	8.00	0.00
10,700.0	39.53	359.59	10,557.6	-869.4	224.0	-871.0	8.00	8.00	0.00
10,800.0	47.53	359.59	10,630.1	-800.6	223.5	-802.2	8.00	8.00	0.00
10,900.0	55.53	359.59	10,692.2	-722.4	222.9	-724.0	8.00	8.00	0.00
11,000.0	63.53	359.59	10,742.9	-636.3	222.3	-637.8	8.00	8.00	0.00
11,100.0	71.53	359.59	10,781.1	-543.9	221.6	-545.5	8.00	8.00	0.00
11,200.0	79.53	359.59	10,806.1	-447.2	220.9	-448.8	8.00	8.00	0.00
11,300.0	87.53	359.59	10,817.3	-347.9	220.2	-349.5	8.00	8.00	0.00
11,330.9	90.00	359.59	10,818.0	-317.0	220.0	-318.6	8.00	8.00	0.00
405H_FTP									
11,400.0	90.00	359.59	10,818.0	-247.9	219.5	-249.5	0.00	0.00	0.00
11,500.0	90.00	359.59	10,818.0	-147.9	218.8	-149.5	0.00	0.00	0.00
11,600.0	90.00	359.59	10,818.0	-47.9	218.1	-49.5	0.00	0.00	0.00
11,700.0	90.00	359.59	10,818.0	52.1	217.3	50.5	0.00	0.00	0.00
11,800.0	90.00	359.59	10,818.0	152.1	216.6	150.5	0.00	0.00	0.00
11,900.0	90.00	359.59	10,818.0	252.1	215.9	250.5	0.00	0.00	0.00
12,000.0	90.00	359.59	10,818.0	352.1	215.2	350.5	0.00	0.00	0.00
12,100.0	90.00	359.59	10,818.0	452.1	214.4	450.5	0.00	0.00	0.00
12,200.0	90.00	359.59	10,818.0	552.1	213.7	550.5	0.00	0.00	0.00
12,300.0	90.00	359.59	10,818.0	652.1	213.0	650.5	0.00	0.00	0.00
12,400.0	90.00	359.59	10,818.0	752.1	212.3	750.5	0.00	0.00	0.00
12,500.0	90.00	359.59	10,818.0	852.0	211.5	850.5	0.00	0.00	0.00
12,600.0	90.00	359.59	10,818.0	952.0	210.8	950.5	0.00	0.00	0.00
12,700.0	90.00	359.59	10,818.0	1,052.0	210.1	1,050.5	0.00	0.00	0.00
12,800.0	90.00	359.59	10,818.0	1,152.0	209.4	1,150.5	0.00	0.00	0.00
12,900.0	90.00	359.59	10,818.0	1,252.0	208.7	1,250.5	0.00	0.00	0.00
13,000.0	90.00	359.59	10,818.0	1,352.0	207.9	1,350.5	0.00	0.00	0.00
13,100.0	90.00	359.59	10,818.0	1,452.0	207.2	1,450.5	0.00	0.00	0.00
13,200.0	90.00	359.59	10,818.0	1,552.0	206.5	1,550.5	0.00	0.00	0.00
13,300.0	90.00	359.59	10,818.0	1,652.0	205.8	1,650.5	0.00	0.00	0.00
13,400.0	90.00	359.59	10,818.0	1,752.0	205.0	1,750.5	0.00	0.00	0.00
13,500.0	90.00	359.59	10,818.0	1,852.0	204.3	1,850.5	0.00	0.00	0.00
13,600.0	90.00	359.59	10,818.0	1,952.0	203.6	1,950.5	0.00	0.00	0.00
13,700.0	90.00	359.59	10,818.0	2,052.0	202.9	2,050.5	0.00	0.00	0.00
13,800.0	90.00	359.59	10,818.0	2,152.0	202.1	2,150.5	0.00	0.00	0.00
13,900.0	90.00	359.59	10,818.0	2,252.0	201.4	2,250.5	0.00	0.00	0.00
14,000.0	90.00	359.59	10,818.0	2,352.0	200.7	2,350.5	0.00	0.00	0.00
14,100.0	90.00	359.59	10,818.0	2,452.0	200.0	2,450.5	0.00	0.00	0.00
14,200.0	90.00	359.59	10,818.0	2,552.0	199.3	2,550.5	0.00	0.00	0.00

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 405H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3528+30) @ 3558.0usft
Project:	Lea County	**MD Reference:**	RKB(3528+30) @ 3558.0usft
Site:	Outrider 28 Fed Pad B	**North Reference:**	Grid
Well:	405H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,300.0	90.00	359.59	10,818.0	2,652.0	198.5	2,650.5	0.00	0.00	0.00
14,400.0	90.00	359.59	10,818.0	2,752.0	197.8	2,750.5	0.00	0.00	0.00
14,500.0	90.00	359.59	10,818.0	2,852.0	197.1	2,850.5	0.00	0.00	0.00
14,600.0	90.00	359.59	10,818.0	2,952.0	196.4	2,950.5	0.00	0.00	0.00
14,700.0	90.00	359.59	10,818.0	3,052.0	195.6	3,050.5	0.00	0.00	0.00
14,800.0	90.00	359.59	10,818.0	3,152.0	194.9	3,150.5	0.00	0.00	0.00
14,900.0	90.00	359.59	10,818.0	3,252.0	194.2	3,250.5	0.00	0.00	0.00
15,000.0	90.00	359.59	10,818.0	3,352.0	193.5	3,350.5	0.00	0.00	0.00
15,100.0	90.00	359.59	10,818.0	3,452.0	192.7	3,450.5	0.00	0.00	0.00
15,200.0	90.00	359.59	10,818.0	3,552.0	192.0	3,550.5	0.00	0.00	0.00
15,300.0	90.00	359.59	10,818.0	3,652.0	191.3	3,650.5	0.00	0.00	0.00
15,400.0	90.00	359.59	10,818.0	3,752.0	190.6	3,750.5	0.00	0.00	0.00
15,500.0	90.00	359.59	10,818.0	3,852.0	189.9	3,850.5	0.00	0.00	0.00
15,600.0	90.00	359.59	10,818.0	3,952.0	189.1	3,950.5	0.00	0.00	0.00
15,700.0	90.00	359.59	10,818.0	4,052.0	188.4	4,050.5	0.00	0.00	0.00
15,800.0	90.00	359.59	10,818.0	4,152.0	187.7	4,150.5	0.00	0.00	0.00
15,900.0	90.00	359.59	10,818.0	4,252.0	187.0	4,250.5	0.00	0.00	0.00
16,000.0	90.00	359.59	10,818.0	4,352.0	186.2	4,350.5	0.00	0.00	0.00
16,100.0	90.00	359.59	10,818.0	4,452.0	185.5	4,450.5	0.00	0.00	0.00
16,200.0	90.00	359.59	10,818.0	4,552.0	184.8	4,550.5	0.00	0.00	0.00
16,300.0	90.00	359.59	10,818.0	4,651.9	184.1	4,650.5	0.00	0.00	0.00
16,400.0	90.00	359.59	10,818.0	4,751.9	183.3	4,750.5	0.00	0.00	0.00
16,500.0	90.00	359.59	10,818.0	4,851.9	182.6	4,850.5	0.00	0.00	0.00
16,600.0	90.00	359.59	10,818.0	4,951.9	181.9	4,950.5	0.00	0.00	0.00
16,700.0	90.00	359.59	10,818.0	5,051.9	181.2	5,050.5	0.00	0.00	0.00
16,800.0	90.00	359.59	10,818.0	5,151.9	180.5	5,150.5	0.00	0.00	0.00
16,900.0	90.00	359.59	10,818.0	5,251.9	179.7	5,250.5	0.00	0.00	0.00
17,000.0	90.00	359.59	10,818.0	5,351.9	179.0	5,350.5	0.00	0.00	0.00
17,100.0	90.00	359.59	10,818.0	5,451.9	178.3	5,450.5	0.00	0.00	0.00
17,200.0	90.00	359.59	10,818.0	5,551.9	177.6	5,550.5	0.00	0.00	0.00
17,300.0	90.00	359.59	10,818.0	5,651.9	176.8	5,650.5	0.00	0.00	0.00
17,400.0	90.00	359.59	10,818.0	5,751.9	176.1	5,750.5	0.00	0.00	0.00
17,500.0	90.00	359.59	10,818.0	5,851.9	175.4	5,850.5	0.00	0.00	0.00
17,600.0	90.00	359.59	10,818.0	5,951.9	174.7	5,950.5	0.00	0.00	0.00
17,700.0	90.00	359.59	10,818.0	6,051.9	173.9	6,050.5	0.00	0.00	0.00
17,800.0	90.00	359.59	10,818.0	6,151.9	173.2	6,150.5	0.00	0.00	0.00
17,900.0	90.00	359.59	10,818.0	6,251.9	172.5	6,250.5	0.00	0.00	0.00
18,000.0	90.00	359.59	10,818.0	6,351.9	171.8	6,350.5	0.00	0.00	0.00
18,100.0	90.00	359.59	10,818.0	6,451.9	171.1	6,450.5	0.00	0.00	0.00
18,200.0	90.00	359.59	10,818.0	6,551.9	170.3	6,550.5	0.00	0.00	0.00
18,300.0	90.00	359.59	10,818.0	6,651.9	169.6	6,650.5	0.00	0.00	0.00
18,400.0	90.00	359.59	10,818.0	6,751.9	168.9	6,750.5	0.00	0.00	0.00
18,500.0	90.00	359.59	10,818.0	6,851.9	168.2	6,850.5	0.00	0.00	0.00
18,600.0	90.00	359.59	10,818.0	6,951.9	167.4	6,950.5	0.00	0.00	0.00
18,700.0	90.00	359.59	10,818.0	7,051.9	166.7	7,050.5	0.00	0.00	0.00
18,800.0	90.00	359.59	10,818.0	7,151.9	166.0	7,150.5	0.00	0.00	0.00
18,900.0	90.00	359.59	10,818.0	7,251.9	165.3	7,250.5	0.00	0.00	0.00
19,000.0	90.00	359.59	10,818.0	7,351.9	164.5	7,350.5	0.00	0.00	0.00
19,100.0	90.00	359.59	10,818.0	7,451.9	163.8	7,450.5	0.00	0.00	0.00
19,200.0	90.00	359.59	10,818.0	7,551.9	163.1	7,550.5	0.00	0.00	0.00
19,300.0	90.00	359.59	10,818.0	7,651.9	162.4	7,650.5	0.00	0.00	0.00
19,400.0	90.00	359.59	10,818.0	7,751.9	161.7	7,750.5	0.00	0.00	0.00
19,500.0	90.00	359.59	10,818.0	7,851.9	160.9	7,850.5	0.00	0.00	0.00
19,600.0	90.00	359.59	10,818.0	7,951.9	160.2	7,950.5	0.00	0.00	0.00

ExxonMobil
Planning Report

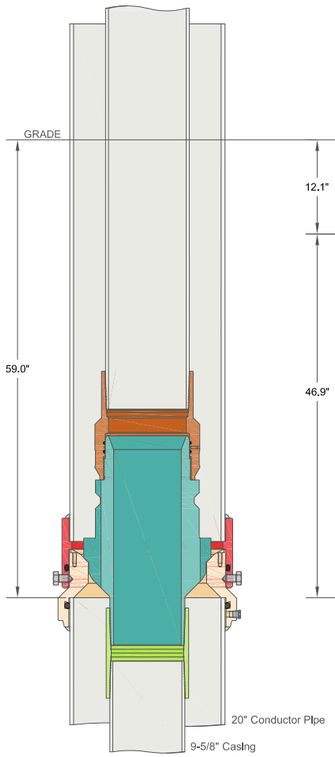
Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 405H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3528+30) @ 3558.0usft
Project:	Lea County	**MD Reference:**	RKB(3528+30) @ 3558.0usft
Site:	Outrider 28 Fed Pad B	**North Reference:**	Grid
Well:	405H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

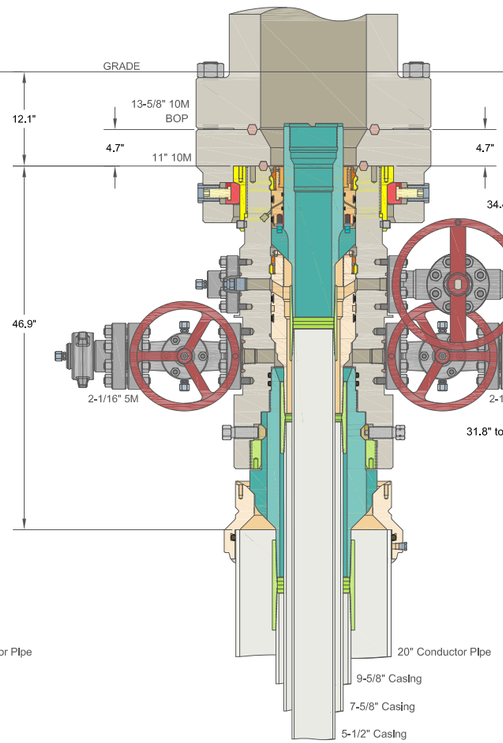
Planned Survey

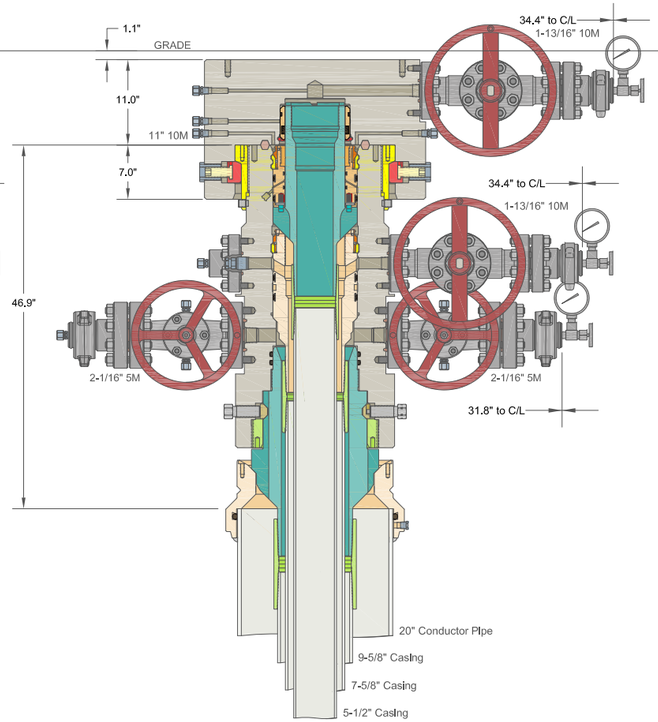
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,700.0	90.00	359.59	10,818.0	8,051.9	159.5	8,050.5	0.00	0.00	0.00
19,800.0	90.00	359.59	10,818.0	8,151.9	158.8	8,150.5	0.00	0.00	0.00
19,900.0	90.00	359.59	10,818.0	8,251.9	158.0	8,250.5	0.00	0.00	0.00
20,000.0	90.00	359.59	10,818.0	8,351.9	157.3	8,350.5	0.00	0.00	0.00
20,100.0	90.00	359.59	10,818.0	8,451.8	156.6	8,450.5	0.00	0.00	0.00
20,200.0	90.00	359.59	10,818.0	8,551.8	155.9	8,550.5	0.00	0.00	0.00
20,300.0	90.00	359.59	10,818.0	8,651.8	155.2	8,650.5	0.00	0.00	0.00
20,400.0	90.00	359.59	10,818.0	8,751.8	154.4	8,750.5	0.00	0.00	0.00
20,500.0	90.00	359.59	10,818.0	8,851.8	153.7	8,850.5	0.00	0.00	0.00
20,600.0	90.00	359.59	10,818.0	8,951.8	153.0	8,950.5	0.00	0.00	0.00
20,700.0	90.00	359.59	10,818.0	9,051.8	152.3	9,050.5	0.00	0.00	0.00
20,800.0	90.00	359.59	10,818.0	9,151.8	151.5	9,150.5	0.00	0.00	0.00
20,900.0	90.00	359.59	10,818.0	9,251.8	150.8	9,250.5	0.00	0.00	0.00
21,000.0	90.00	359.59	10,818.0	9,351.8	150.1	9,350.5	0.00	0.00	0.00
21,100.0	90.00	359.59	10,818.0	9,451.8	149.4	9,450.5	0.00	0.00	0.00
21,200.0	90.00	359.59	10,818.0	9,551.8	148.6	9,550.5	0.00	0.00	0.00
21,300.0	90.00	359.59	10,818.0	9,651.8	147.9	9,650.5	0.00	0.00	0.00
21,400.0	90.00	359.59	10,818.0	9,751.8	147.2	9,750.5	0.00	0.00	0.00
21,500.0	90.00	359.59	10,818.0	9,851.8	146.5	9,850.5	0.00	0.00	0.00
21,600.0	90.00	359.59	10,818.0	9,951.8	145.8	9,950.5	0.00	0.00	0.00
21,690.0	90.00	359.59	10,818.0	10,041.8	145.1	10,040.5	0.00	0.00	0.00
405H_LTP									
21,700.0	90.00	359.59	10,818.0	10,051.8	145.0	10,050.5	0.00	0.00	0.00
21,740.0	90.00	359.59	10,818.0	10,091.8	144.7	10,090.5	0.00	0.00	0.00
405H_BHL									

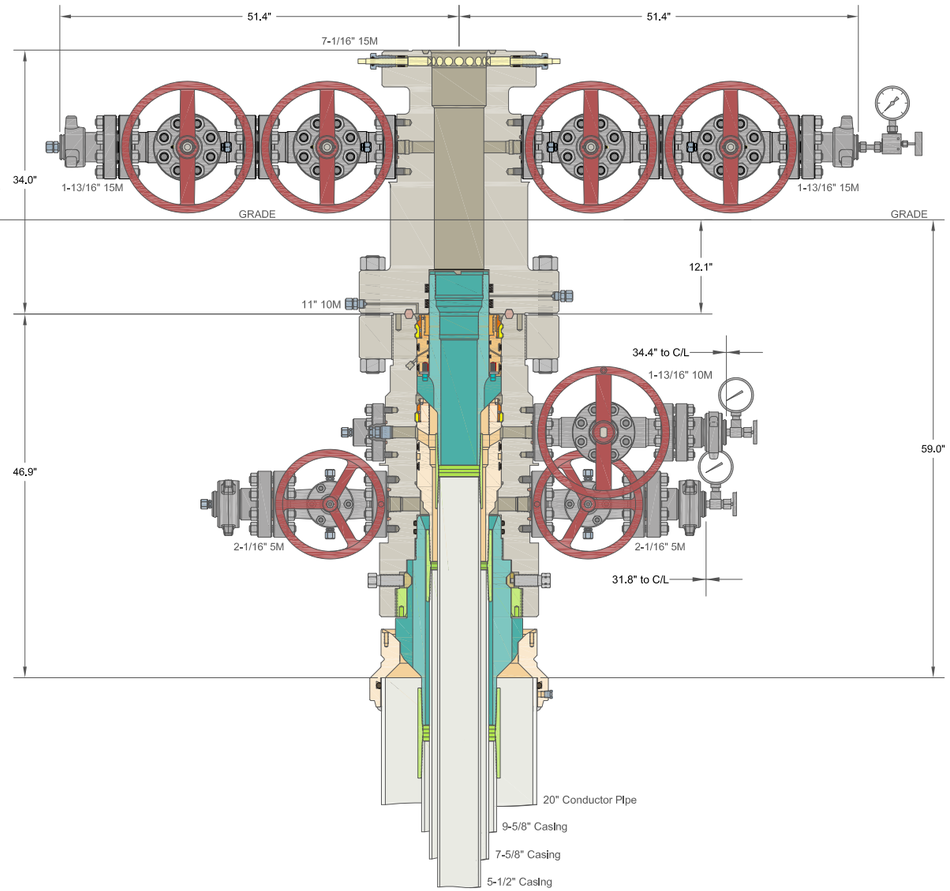
Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
405H_SHL - plan hits target center - Rectangle (sides W20.0 H20.0 D0.0)	0.00	0.00	0.0	0.0	0.0	430,642.80	701,848.00	32° 10' 56.177 N	103° 40' 51.283 W
405H_LTP - plan hits target center - Point	0.00	0.01	10,818.0	10,041.8	145.1	440,684.60	701,993.10	32° 12' 35.540 N	103° 40' 48.885 W
405H_FTP - plan hits target center - Point	0.00	0.00	10,818.0	-317.0	220.0	430,325.80	702,068.00	32° 10' 53.027 N	103° 40' 48.745 W
405H_BHL - plan misses target center by 0.1usft at 21740.0usft MD (10818.0 TVD, 10091.8 N, 144.7 E) - Point	0.00	0.00	10,818.0	10,091.8	144.8	440,734.60	701,992.80	32° 12' 36.035 N	103° 40' 48.885 W









ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead
With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head
And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers

DRAWN	VJK	31MAR22
APPRV		

DRAWING NO. HBE0000479

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Energy Incorporated
WELL NAME & NO.:	Outrider 28 Fed 405H
LOCATION:	Sec 28-24S-32E-NMP
COUNTY:	Lea County, New Mexico

*Previously known as **Outrider 28 Fed 703H.** Changes approved through engineering via **Sundry 2745202** on 09/15/2023. Any previous COAs not addressed within the updated COAs still apply.*

COA

H_2S	○ No	◉ Yes		
Potash / WIPP	◉ None	○ Secretary	○ R-111-P	☐ WIPP
Cave / Karst	◉ Low	○ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☐ Primary Squeeze	☑ Cont. Squeeze	☑ EchoMeter	☐ DV Tool
Special Req	☑ Break Testing	☐ Water Disposal	☐ COM	☐ Unit
Variance	☑ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☑ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ **Batch APD / Sundry**				

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware Mountain Group** formations. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately 958 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of

six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the Choose an item. inch intermediate casing is:

   Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

   a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 7197'**

   b. Second stage:

      - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC.
Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

If cement does not reach surface, the next casing string must come to surface.

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   - Cement should tie-back at least **300 feet** into previous casing string. Operator shall provide method of verification. ***Extra 100' of tieback due to not meeting the 0.422" clearance requirement.***

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
    e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ Eddy County
Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, **BLM_NM_CFO_DrillingNotifications@BLM.GOV**
(575) 361-2822

☒ Lea County
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

   a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
   b. When the operator proposes to set surface casing with Spudder Rig
      - Notify the BLM when moving in and removing the Spudder Rig.
      - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
      - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a

digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

    a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    c. Manufacturer representative shall install the test plug for the initial BOP test.
    d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
    e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after

installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

e. The results of the test shall be reported to the appropriate BLM office.

f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR**

part 3170 Subpart 3172.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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

CONDITIONS

Action 267133

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 267133
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	7/19/2024