

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Report

Well Name: POKER LAKE UNIT 13-1 Well Location: T24S / R29E / SEC 13 / County or Parish/State: /

SENE /

Well Number: 107H Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

Lease Number: NMNM005912 Unit or CA Name: Unit or CA Number:

NMNM71016X

US Well Number: 3001553565 Well Status: Drilling Well Operator: XTO PERMIAN

**OPERATING LLC** 

#### **Notice of Intent**

**Sundry ID:** 2743989

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/02/2023 Time Sundry Submitted: 05:39

Date proposed operation will begin: 09/08/2023

**Procedure Description:** XTO Permian Operating, LCC. requests permission to make the following changes to the original APD: No Additional Surface Disturbance SHL: fr/2315′FNL & 530′FEL to 2270′FNL & 425′FEL, NMNM05912 FTP: fr/2540′FNL & 990′FEL to 2020′FNL & 669′FEL, NMNM05912 LTP: fr/330′FNL & 990′FEL to 100′FSL & 669′FEL, NMLC0696005 BHL: fr/200′FNL & 990′FEL to 50′FSL & 669′FEL, Section 24-T24S-R29E NMLC0696005 Additionally, XTO Permian Operating, LLC. respectfully requests permission to downsize the surface, intermediate and production hole, casing, and cement based on the attached drilling program. Due to the downsize in these strings, the wellhead configuration has also changed based on the attached drilling program. Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program MBS Directional Plan

## **NOI Attachments**

## **Procedure Description**

PLU\_13\_1\_PC\_107H\_Sundry\_Attachment\_20230802053909.pdf

Page 1 of 2

eived by OCD: 10/19/2023 1:46:23 PM Well Name: POKER LAKE UNIT 13-1

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SENE /

PC

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**Unit or CA Name:** 

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County or Parish/State: /

Page 2 of

**Unit or CA Number:** 

NMNM71016X

**US Well Number: 3001553565 Operator: XTO PERMIAN** Well Status: Drilling Well

OPERATING LLC

# **Conditions of Approval**

## **Additional**

Sec\_13\_24S\_29E\_NMP\_Sundry\_2743989\_Poker\_Lake\_Unit\_13\_1\_PC\_107H\_COAs\_20230915105146.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 20, 2023 04:47 PM

Name: XTO PERMIAN OPERATING LLC

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: 10/17/2023

Signature: Chris Walls

Page 2 of 2

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

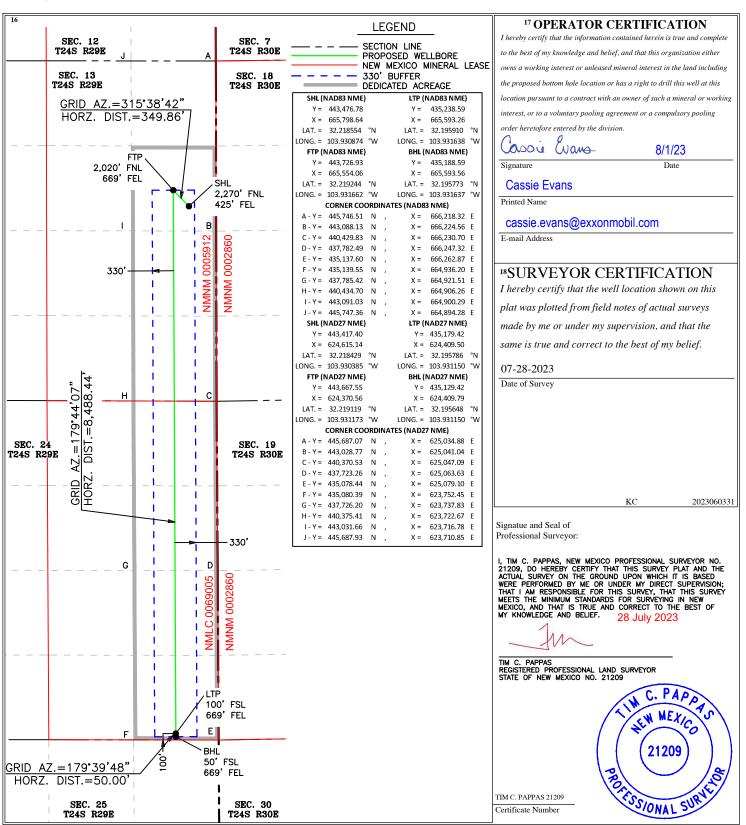
1	API Number	•		<sup>2</sup> Pool Code		<sup>3</sup> Pool Name					
	30-015		98	220		Purple Sage; Wolfcamp					
<sup>4</sup> Property C	Code	<sup>5</sup> Property Name							<sup>6</sup> Well Number		
		POKER LAKE UNIT 13-1 PC							107H		
7 OGRID N	No.				<sup>8</sup> Operator	Name			<sup>9</sup> Elevation		
373075	5		XTO PERMIAN OPERATING, LLC						3,121'		
	<sup>10</sup> Surface Location							•			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	East/West lin	e	County		

# Feet from the

G	13	24 S	29 E		2,270	NORTH	425	EAST	EDDY
	<sup>11</sup> 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
P	24	24 S	29 E		50	SOUTH	669	EAST	EDDY

12 Dedicated Acres <sup>13</sup> Joint or Infill <sup>14</sup> Consolidation Code <sup>15</sup> Order No. 560

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



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

XTO Energy Inc.
Poker Lake Unit 13-1 PC 107H
Projected TD: 19730' MD / 10465' TVD
SHL: 2270' FNL & 425' FEL , Section 13, T24S, R29E
BHL: 50' FSL & 669' FEL , Section 24, T24S, 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	284'	Water
Top of Salt	583'	Water
Base of Salt	3151'	Water
Delaware	3360'	Water
Brushy Canyon	5827'	Water/Oil/Gas
Bone Spring	7114'	Water
1st Bone Spring	7976'	Water/Oil/Gas
2nd Bone Spring	8443'	Water/Oil/Gas
3rd Bone Spring	9244'	Water/Oil/Gas
Wolfcamp	10408'	Water/Oil/Gas
Wolfcamp X	10440'	Water/Oil/Gas
Wolfcamp Y	10505'	Water/Oil/Gas
Wolfcamp A	1	Water/Oil/Gas
Target/Land Curve	10465'	Water/Oil/Gas
		•

<sup>\*\*\*</sup> Hydrocarbons @ Brushy Canyon

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 @ 384' (199' 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 9666' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19730 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9366 feet).

#### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' - 384'	9.625	40	J-55	BTC	New	1.32	16.40	41.02
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.57	2.52	1.94
8.75	4000' – 9666'	7.625	29.7	HC L-80	Flush Joint	New	1.87	1.90	2.41
6.75	0' – 9566'	5.5	20	RY P-110	Semi-Premium	New	1.26	2.03	2.28
6.75	9566' - 19730'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.85	2.28

- · 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
- $\cdot$  XTO requests the option to use 5" BTC Float equipment for the the production casing

<sup>\*\*\*</sup> Groundwater depth 40' (per NM State Engineers Office).

#### 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
  - $\cdot \ \text{Wellhead Manufacturer representative will not be present for BOP test plug installation}$

#### 4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 384'

Tail: 170 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 +/- 9666'

st Stage

Optional Lead: 310 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 350 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 5827

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: 660 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 (5827') 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 +/- 19730'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9366 feet
Tail: 700 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9866 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 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3684 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, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M 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

INITED\/AI	TERVAL Hole Size		MW	Viscosity	Fluid Loss
INTERVAL	Fiole Size	Mud Type	(ppg)	(sec/qt)	(cc)
0' - 384'	12.25	FW/Native	8.4-8.9	35-40	NC
384' - 9666'	8.75	FW / Cut Brine / Direct Emulsion	10.2-10.7	30-32	NC
9666' - 19730'	6.75	ОВМ	11-11.5	50-60	NC - 20

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

Spud with fresh water/native mud. Drill out from under 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 5986 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

EDDY PLU 13-24 & 13-1 Pierce Canyon 107H

OH

Plan: Plan 1

# **Standard Planning Report**

18 July, 2023

#### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: EDDY

Site: PLU 13-24 & 13-1 Pierce Canyon

Well: 107H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 107H

RKB(3121+30) @ 3151.0usft RKB(3121+30) @ 3151.0usft

Grid

Minimum Curvature

Project EDDY

Map System:US State Plane 1927 (Exact solution)Geo Datum:NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001

System Datum:

Mean Sea Level

Site PLU 13-24 & 13-1 Pierce Canyon

 Site Position:
 Northing:
 443,417.40 usft
 Latitude:
 32° 13' 6.345 N

 From:
 Map
 Easting:
 624,615.14 usft
 Longitude:
 103° 55' 49.387 W

Position Uncertainty: 3.0 usft Slot Radius: 13-3/16 "

Well 107H

0.0 usft **Well Position** +N/-S Northing: 443,417.40 usft Latitude: 32° 13' 6.345 N +E/-W 0.0 usft Easting: 624,615.14 usft Longitude: 103° 55' 49.387 W **Position Uncertainty** 0.0 usft Wellhead Elevation: usft **Ground Level:** 3,121.0 usft

Grid Convergence: 0.21 °

Wellbore OH

 Magnetics
 Model Name
 Sample Date (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2020
 7/18/2023
 6.47
 59.77
 47,238.78298757

Design Plan 1

Audit Notes:

Version:Phase:PLANTie On Depth:0.0

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

 0.0
 0.0
 0.0
 179.74

Plan Survey Tool Program Date 7/18/2023

Depth From Depth To

(usft) (usft) Survey (Wellbore) Tool Name Remarks

1 0.0 19,729.9 Plan 1 (OH) XOM\_R2OWSG MWD+IFR1+

OWSG MWD + IFR1 + Multi-St

#### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: EDDY

Site: PLU 13-24 & 13-1 Pierce Canyon

Well: 107H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 107H

RKB(3121+30) @ 3151.0usft RKB(3121+30) @ 3151.0usft

Grid

lan 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	
1,916.2	14.32	345.61	1,908.8	86.3	-22.1	2.00	2.00	0.00	345.61	
5,228.7	14.32	345.61	5,118.2	880.1	-225.7	0.00	0.00	0.00	0.00	
5,944.8	0.00	0.00	5,827.0	966.3	-247.9	2.00	-2.00	0.00	180.00	
9,866.7	0.00	0.00	9,748.8	966.3	-247.9	0.00	0.00	0.00	0.00	
10,991.7	90.00	179.74	10,465.0	250.1	-244.6	8.00	0.00	0.00	179.74	107H_FTP
14,286.3	90.00	179.74	10,465.0	-3,044.4	-229.5	0.00	0.00	0.00	0.00	107H_PP1
19,479.9	90.00	179.74	10,465.0	-8,238.0	-205.6	0.00	0.00	0.00	0.00	107H_LTP
19,729.9	90.00	179.74	10,465.0	-8,488.0	-204.5	0.00	0.00	0.00	0.00	107H_BHL

#### Planning Report

LMRKPROD3 Database: Company:

Long Lead\_Well Planning

Project: **EDDY** 

PLU 13-24 & 13-1 Pierce Canyon Site:

Well: 107H ОН Wellbore: Design: Plan 1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well 107H

RKB(3121+30) @ 3151.0usft RKB(3121+30) @ 3151.0usft

nned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
107H_SHL									
1,200.0		0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	345.61	1,300.0	1.7	-0.4	-1.7	2.00	2.00	0.00
1,400.0	4.00	345.61	1,399.8	6.8	-1.7	-6.8	2.00	2.00	0.00
1,500.0	6.00	345.61	1,499.5	15.2	-3.9	-15.2	2.00	2.00	0.00
1,600.0	8.00	345.61	1,598.7	27.0	-6.9	-27.0	2.00	2.00	0.00
1,700.0		345.61	1,697.5	42.2	-10.8	-42.2	2.00	2.00	0.00
1,800.0	12.00	345.61	1,795.6	60.6	-15.6	-60.7	2.00	2.00	0.00
1,900.0		345.61	1,893.1	82.4	-21.1	-82.5	2.00	2.00	0.00
1,916.2	14.32	345.61	1,908.8	86.3	-22.1	-86.4	2.00	2.00	0.00
2,000.0	14.32	345.61	1,990.0	106.3	-27.3	-106.5	0.00	0.00	0.00
2,100.0		345.61	2,086.8	130.3	-33.4	-130.5	0.00	0.00	0.00
2,200.0		345.61	2,183.7	154.3	-39.6	-154.5	0.00	0.00	0.00
2,300.0		345.61	2,280.6	178.2	-45.7	-178.4	0.00	0.00	0.00
2,400.0	14.32	345.61	2,377.5	202.2	-51.9	-202.4	0.00	0.00	0.00
2,500.0	14.32	345.61	2,474.4	226.2	-58.0	-226.4	0.00	0.00	0.00
2,600.0		345.61	2,571.3	250.1	-64.2	-250.4	0.00	0.00	0.00
2,700.0	14.32	345.61	2,668.2	274.1	-70.3	-274.4	0.00	0.00	0.00
2,800.0	14.32	345.61	2,765.1	298.1	-76.5	-298.4	0.00	0.00	0.00
2,900.0	14.32	345.61	2,862.0	322.0	-82.6	-322.4	0.00	0.00	0.00
3,000.0	14.32	345.61	2,958.9	346.0	-88.7	-346.4	0.00	0.00	0.00
3,100.0	14.32	345.61	3,055.8	370.0	-94.9	-370.4	0.00	0.00	0.00
3,200.0	14.32	345.61	3,152.7	393.9	-101.0	-394.4	0.00	0.00	0.00
3,300.0		345.61	3,249.5	417.9	-107.2	-418.4	0.00	0.00	0.00
3,400.0	14.32	345.61	3,346.4	441.8	-113.3	-442.4	0.00	0.00	0.00
3,500.0		345.61	3,443.3	465.8	-119.5	-466.4	0.00	0.00	0.00
3,600.0		345.61	3,540.2	489.8	-125.6	-490.3	0.00	0.00	0.00
3,700.0		345.61	3,637.1	513.7	-131.8	-514.3	0.00	0.00	0.00
3,800.0		345.61	3,734.0	537.7	-137.9	-538.3	0.00	0.00	0.00
3,900.0		345.61	3,830.9	561.7	-144.1	-562.3	0.00	0.00	0.00
4,000.0		345.61	3,927.8	585.6	-150.2	-586.3	0.00	0.00	0.00
4,100.0		345.61	4,024.7	609.6	-156.4	-610.3	0.00	0.00	0.00
4,200.0		345.61	4,121.6	633.6	-162.5	-634.3	0.00	0.00	0.00
4,300.0		345.61	4,218.5	657.5	-168.7	-658.3	0.00	0.00	0.00
4,400.0		345.61	4,315.3	681.5	-174.8	-682.3	0.00	0.00	0.00
4,500.0		345.61	4,412.2	705.5	-181.0	-706.3	0.00	0.00	0.00
4,600.0		345.61	4,509.1	729.4	-187.1	-730.3	0.00	0.00	0.00
4,700.0		345.61	4,606.0	753.4	-193.2	-754.3	0.00	0.00	0.00
4,800.0		345.61	4,702.9	777.3	-199.4	-778.2	0.00	0.00	0.00
4,900.0	14.32	345.61	4,799.8	801.3	-205.5	-802.2	0.00	0.00	0.00
5,000.0		345.61	4,896.7	825.3	-211.7	-826.2	0.00	0.00	0.00
5,100.0		345.61	4,993.6	849.2	-217.8	-850.2	0.00	0.00	0.00
5,200.0		345.61	5,090.5	873.2	-224.0	-874.2	0.00	0.00	0.00
5,228.7		345.61	5,118.2	880.1	-225.7	-881.1	0.00	0.00	0.00
5,300.0		345.61	5,187.6	896.3	-229.9	-897.4	2.00	-2.00	0.00
5,400.0		345.61	5,285.4	916.3	-235.0	-917.4	2.00	-2.00	0.00
5,500.0		345.61	5,383.9	933.0	-239.3	-934.0	2.00	-2.00	0.00
5,600.0		345.61	5,483.0	946.3	-242.7	-947.4	2.00	-2.00	0.00
5,700.0		345.61	5,582.5	956.2	-245.3	-957.3	2.00	-2.00	0.00
5,800.0		345.61	5,682.2	962.8	-247.0	-963.9	2.00	-2.00	0.00
5,900.0		345.61	5,782.2	966.0	-247.8	-967.1	2.00	-2.00	0.00
5,944.8		0.00	5,827.0	966.3	-247.9	-967.5	2.00	-2.00	0.00
9,866.7	0.00	0.00	9,748.8	966.3	-247.9	-967.5	0.00	0.00	0.00

#### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: EDDY

Site: PLU 13-24 & 13-1 Pierce Canyon

Well: 107H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well 107H

RKB(3121+30) @ 3151.0usft RKB(3121+30) @ 3151.0usft

Grid

sign:	FIGIT I								
anned 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)
9,900.0 10,000.0	2.67 10.67	179.74 179.74	9,782.1 9,881.4	965.6 954.0	-247.9 -247.8	-966.7 -955.1	8.00 8.00	8.00 8.00	0.00 0.00
10,100.0	18.67	179.74	9,978.0	928.7	-247.7	-929.8	8.00	8.00	0.00
10,100.0	26.67	179.74	10,070.2	890.2	-247.7 -247.5	-891.3	8.00	8.00	0.00
10,300.0	34.67	179.74	10,156.2	839.2	-247.3	-840.3	8.00	8.00	0.00
10,400.0	42.67	179.74	10,234.2	776.8	-247.0	-777.9	8.00	8.00	0.00
10,500.0	50.67	179.74	10,302.8	704.1	-246.7	-705.2	8.00	8.00	0.00
10,600.0	58.67	179.74	10,360.6	622.6	-246.3	-623.7	8.00	8.00	0.00
10,700.0	66.67	179.74	10,406.4	533.8	-245.9	-534.9	8.00	8.00	0.00
10,800.0	74.67	179.74	10,439.5	439.5	-245.4	-440.6	8.00	8.00	0.00
10,900.0	82.67	179.74	10,459.1	341.5	-245.0	-342.7	8.00	8.00	0.00
10,991.7 <b>107H_FTP</b>	90.00	179.74	10,465.0	250.1	-244.6	-251.3	8.00	8.00	0.00
_	00.00	170 74	10 105 0	044.0	044.5	0.40.0	2.22	2.22	2.22
11,000.0 11,100.0	90.00 90.00	179.74 179.74	10,465.0 10,465.0	241.8 141.8	-244.5 -244.1	-242.9 -142.9	0.00 0.00	0.00 0.00	0.00 0.00
11,200.0	90.00	179.74	10,465.0	41.8	-244.1 -243.6	-142.9 -42.9	0.00	0.00	0.00
11,300.0	90.00	179.74	10,465.0	-58.2	-243.2	57.1	0.00	0.00	0.00
11,400.0	90.00	179.74	10,465.0	-158.2	-242.7	157.1	0.00	0.00	0.00
11,500.0	90.00	179.74	10,465.0	-258.2	-242.2	257.1	0.00	0.00	0.00
11,600.0	90.00	179.74	10,465.0	-358.2	-241.8	357.1	0.00	0.00	0.00
11,700.0	90.00	179.74	10,465.0	-458.2	-241.3	457.1	0.00	0.00	0.00
11,800.0	90.00	179.74	10,465.0	-558.2	-240.9	557.1	0.00	0.00	0.00
11,900.0	90.00	179.74	10,465.0	-658.2	-240.4	657.1	0.00	0.00	0.00
12,000.0	90.00	179.74	10,465.0	-758.2	-240.0	757.1	0.00	0.00	0.00
12,100.0 12,200.0	90.00 90.00	179.74 179.74	10,465.0 10,465.0	-858.2 -958.2	-239.5 -239.0	857.1 957.1	0.00 0.00	0.00 0.00	0.00 0.00
12,300.0	90.00	179.74	10,465.0	-1,058.2	-238.6	1,057.1	0.00	0.00	0.00
12,400.0	90.00	179.74	10,465.0	-1,158.2	-238.1	1,157.1	0.00	0.00	0.00
12,500.0	90.00	179.74	10,465.0	-1,258.2	-237.7	1,257.1	0.00	0.00	0.00
12,600.0	90.00	179.74	10,465.0	-1,358.2	-237.2	1,357.1	0.00	0.00	0.00
12,700.0	90.00	179.74	10,465.0	-1,458.2	-236.7	1,457.1	0.00	0.00	0.00
12,800.0	90.00	179.74	10,465.0	-1,558.2	-236.3	1,557.1	0.00	0.00	0.00
12,900.0	90.00	179.74	10,465.0	-1,658.2	-235.8	1,657.1	0.00	0.00	0.00
13,000.0	90.00	179.74	10,465.0	-1,758.2	-235.4	1,757.1	0.00	0.00	0.00
13,100.0	90.00	179.74	10,465.0	-1,858.2	-234.9	1,857.1	0.00	0.00	0.00
13,200.0 13,300.0	90.00 90.00	179.74 179.74	10,465.0 10,465.0	-1,958.2 -2,058.2	-234.4 -234.0	1,957.1 2,057.1	0.00 0.00	0.00 0.00	0.00 0.00
13,400.0	90.00	179.74	10,465.0	-2,056.2 -2,158.2	-234.0	2,057.1	0.00	0.00	0.00
13,500.0	90.00	179.74	10,465.0	-2,258.2	-233.1	2,257.1	0.00	0.00	0.00
13,600.0	90.00	179.74	10,465.0	-2,358.2	-232.6	2,357.1	0.00	0.00	0.00
13,700.0	90.00	179.74	10,465.0	-2,458.2	-232.2	2,457.1	0.00	0.00	0.00
13,800.0	90.00	179.74	10,465.0	-2,558.2	-231.7	2,557.1	0.00	0.00	0.00
13,900.0	90.00	179.74	10,465.0	-2,658.2	-231.2	2,657.1	0.00	0.00	0.00
14,000.0	90.00	179.74	10,465.0	-2,758.2	-230.8	2,757.1	0.00	0.00	0.00
14,100.0	90.00	179.74	10,465.0	-2,858.2	-230.3	2,857.1	0.00	0.00	0.00
14,200.0	90.00	179.74 170.74	10,465.0	-2,958.2 3.044.4	-229.9 220.5	2,957.1	0.00	0.00	0.00
14,286.3	90.00	179.74	10,465.0	-3,044.4	-229.5	3,043.4	0.00	0.00	0.00
<b>107H_PP1</b> 14,300.0	90.00	179.74	10,465.0	-3,058.2	-229.4	3,057.1	0.00	0.00	0.00
14.400.0									
14,400.0	90.00 90.00	179.74 179.74	10,465.0 10,465.0	-3,158.2 -3,258.2	-228.9 -228.5	3,157.1 3,257.1	0.00 0.00	0.00 0.00	0.00 0.00
14,600.0	90.00	179.74	10,465.0	-3,358.2	-228.0	3,357.1	0.00	0.00	0.00
14,700.0	90.00	179.74	10,465.0	-3,458.2	-227.6	3,457.1	0.00	0.00	0.00
14,800.0	90.00	179.74	10,465.0	-3,558.2	-227.1	3,557.1	0.00	0.00	0.00

#### Planning Report

Database: LN Company: Lo

Project:

LMRKPROD3

Long Lead\_Well Planning

EDDY

Site: PLU 13-24 & 13-1 Pierce Canyon

Well: 107H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 107H

RKB(3121+30) @ 3151.0usft RKB(3121+30) @ 3151.0usft

O : I

esign.									
lanned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
14,900.0	90.00	179.74	10,465.0	-3,658.2	-226.6	3,657.1	0.00	0.00	0.00
15,000.0	90.00	179.74	10,465.0	-3,758.2	-226.2	3,757.1	0.00	0.00	0.00
15,100.0	90.00	179.74	10,465.0	-3,858.2	-225.7	3,857.1	0.00	0.00	0.00
15,200.0	90.00	179.74	10,465.0	-3,958.2	-225.3	3,957.1	0.00	0.00	0.00
15,300.0	90.00	179.74	10,465.0	-4,058.2	-224.8	4,057.1	0.00	0.00	0.00
15,400.0	90.00	179.74	10,465.0	-4,158.2	-224.3	4,157.1	0.00	0.00	0.00
15,500.0	90.00	179.74	10,465.0	-4,258.2	-223.9	4,257.1	0.00	0.00	0.00
15,600.0	90.00	179.74	10,465.0	-4,358.2	-223.4	4,357.1	0.00	0.00	0.00
15,700.0	90.00	179.74	10,465.0	-4,458.1	-223.0	4,457.1	0.00	0.00	0.00
15,800.0	90.00	179.74	10,465.0	-4,558.1	-222.5	4,557.1	0.00	0.00	0.00
15,900.0	90.00	179.74	10,465.0	-4,658.1	-222.1	4,657.1	0.00	0.00	0.00
16,000.0	90.00	179.74	10,465.0	-4,758.1	-221.6	4,757.1	0.00	0.00	0.00
16,100.0	90.00	179.74	10,465.0	-4,858.1	-221.1	4,857.1	0.00	0.00	0.00
16,200.0	90.00	179.74	10,465.0	-4,958.1	-220.7	4,957.1	0.00	0.00	0.00
16,300.0	90.00	179.74	10,465.0	-4,956.1 -5,058.1	-220.7 -220.2	5,057.1	0.00	0.00	0.00
16,400.0	90.00	179.74	10,465.0	-5,158.1	-219.8	5,157.1	0.00	0.00	0.00
16,500.0	90.00	179.74	10,465.0	-5,258.1	-219.3	5,257.1	0.00	0.00	0.00
16,600.0	90.00	179.74	10,465.0	-5,358.1	-218.8	5,357.1	0.00	0.00	0.00
16,700.0	90.00	179.74	10,465.0	-5,458.1	-218.4	5,457.1	0.00	0.00	0.00
16,800.0	90.00	179.74	10,465.0	-5,558.1	-217.9	5,557.1	0.00	0.00	0.00
16,900.0	90.00	179.74	10,465.0	-5,658.1	-217.5	5,657.1	0.00	0.00	0.00
17,000.0	90.00	179.74	10,465.0	-5,758.1	-217.0	5,757.1	0.00	0.00	0.00
17,100.0	90.00	179.74	10,465.0	-5,858.1	-216.5	5,857.1	0.00	0.00	0.00
17,100.0	90.00	179.74	10,465.0	-5,958.1	-216.1	5,957.1	0.00	0.00	0.00
17,200.0	90.00	179.74	10,465.0	-6,058.1	-215.6	6,057.1	0.00	0.00	0.00
17,400.0	90.00	179.74	10,465.0	-6,158.1	-215.2	6,157.1	0.00	0.00	0.00
17,500.0	90.00	179.74	10,465.0	-6,258.1	-214.7	6,257.1	0.00	0.00	0.00
17,600.0	90.00	179.74	10,465.0	-6,358.1	-214.3	6,357.1	0.00	0.00	0.00
17,700.0	90.00	179.74	10,465.0	-6,458.1	-213.8	6,457.1	0.00	0.00	0.00
17,800.0	90.00	179.74	10,465.0	-6,558.1	-213.3	6,557.1	0.00	0.00	0.00
17,900.0	90.00	179.74	10,465.0	-6,658.1	-212.9	6,657.1	0.00	0.00	0.00
18,000.0	90.00	179.74	10,465.0	-6,758.1	-212.4	6,757.1	0.00	0.00	0.00
18,100.0	90.00	179.74	10,465.0	-6,858.1	-212.0	6,857.1	0.00	0.00	0.00
18,200.0	90.00	179.74	10,465.0	-6,958.1	-211.5	6,957.1	0.00	0.00	0.00
18,300.0	90.00	179.74	10,465.0	-7,058.1	-211.0	7,057.1	0.00	0.00	0.00
18,400.0	90.00	179.74	10,465.0	-7,158.1	-210.6	7,157.1	0.00	0.00	0.00
18,500.0	90.00	179.74	10,465.0	-7,258.1	-210.1	7,257.1	0.00	0.00	0.00
18,600.0	90.00	179.74	10,465.0	-7,358.1	-209.7	7,357.1	0.00	0.00	0.00
18,700.0	90.00	179.74	10,465.0	-7,458.1	-209.2	7,457.1	0.00	0.00	0.00
18,800.0	90.00	179.74	10,465.0	-7,558.1	-208.7	7,557.1	0.00	0.00	0.00
18,900.0	90.00	179.74	10,465.0	-7,658.1	-208.3	7,657.1	0.00	0.00	0.00
19,000.0	90.00	179.74	10,465.0	-7,758.1	-207.8	7,757.1	0.00	0.00	0.00
19,100.0	90.00	179.74	10,465.0	-7,758.1 -7,858.1	-207.4	7,737.1	0.00	0.00	0.00
19,200.0	90.00	179.74	10,465.0	-7,958.1	-206.9	7,957.1	0.00	0.00	0.00
19,229.9	90.00	179.74	10,465.0	-7,988.0	-206.8	7,987.0	0.00	0.00	0.00
107H_BHL									
19,300.0	90.00	179.74	10,465.0	-8,058.1	-206.5	8,057.1	0.00	0.00	0.00
19,400.0	90.00	179.74	10,465.0	-8,158.1	-206.0	8,157.1	0.00	0.00	0.00
19,479.9	90.00	179.74	10,465.0	-8,238.0	-205.6	8,237.0	0.00	0.00	0.00
107H_LTP	33.30		,	2,200.0	200.0	2,200	3.33	5.53	0.00
19.500.0	90.00	179.74	10,465.0	-8,258.1	-205.5	8,257.1	0.00	0.00	0.00
19,600.0	90.00	179.74	10,465.0	-8,358.1	-205.5	8,357.1	0.00	0.00	0.00
13,000.0	90.00	113.14	10,403.0	-0,550.1		0,337.1	0.00	0.00	0.00
19,700.0	90.00	179.74	10,465.0	-8,458.1	-204.6	8,457.1	0.00	0.00	0.00

#### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: EDDY

Site: PLU 13-24 & 13-1 Pierce Canyon

 Well:
 107H

 Wellbore:
 OH

 Design:
 Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 107H

RKB(3121+30) @ 3151.0usft RKB(3121+30) @ 3151.0usft

Grid

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)	
19,729.9	90.00	179.74	10,465.0	-8,488.0	-204.5	8,487.0	0.00	0.00	0.00	

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
107H_SHL - plan hits target cen - Point	0.00 ter	0.00	0.0	0.0	0.0	443,417.40	624,615.14	32° 13' 6.345 N	103° 55' 49.387 W
107H_LTP - plan hits target cen - Point	0.00 ter	0.00	10,465.0	-8,238.0	-205.6	435,179.42	624,409.50	32° 11' 44.829 N	103° 55' 52.140 W
107H_FTP - plan hits target cen - Point	0.00 ter	0.00	10,465.0	250.1	-244.6	443,667.55	624,370.56	32° 13' 8.830 N	103° 55' 52.224 W
107H_BHL - plan misses target - Point	0.00 center by 1.4u	0.00 usft at 19229	10,465.0 .9usft MD (1	-7,988.0 0465.0 TVD, -	-205.3 7988.0 N, -20	435,429.42 6.8 E)	624,409.79	32° 11' 47.303 N	103° 55' 52.126 W
107H_PP1 - plan hits target cen - Point	0.00 ter	0.00	10,465.0	-3,044.4	-229.5	440,372.97	624,385.68	32° 12' 36.226 N	103° 55' 52.191 W

ALL DIMENSIONS APPROXIMAL

# CACTUS WELLHEAD LLC

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

XTO ENERGY INC DELAWARE BASIN								
DRAWN	VJK	31MAR2						
APPRV								

DRAWING NO. HBE0000479

FORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, SCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY SUTHORIZED BY CACTUS WELLHEAD, LLC.

weed by OCD: 10/19/2023 1:46:23 PM

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory <a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

CONDITIONS

Action 277417

#### **CONDITIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	277417
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

7	Created By	Condition	Condition Date
	dmcclure	Approved with consideration of the amended HSU in Application ID: 410762	12/20/2024