

# Sundry Print Report

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

Well Name: POKER LAKE UNIT 15 Well Location: T24S / R31E / SEC 22 / County or Parish/State: EDDY /

TWR NWNW / 32.208954 / -103.772745

Well Number: 135H Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

Lease Number: NMNM0506A Unit or CA Name: Unit or CA Number:

NMNM71016X

US Well Number: 3001554171 Well Status: Drilling Well Operator: XTO PERMIAN

**OPERATING LLC** 

### **Notice of Intent**

**Sundry ID: 2745215** 

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/09/2023 Time Sundry Submitted: 06:18

Date proposed operation will begin: 08/09/2023

Procedure Description: \*\*Pool Change, First and Last Take Point Changes, Bottomhole Location Change, Drilling Plan Change, Casing/Cement Change, and Change Well Pad Names XTO Permian Operating, LCC. requests permission to make the following changes to the original APD: No Additional Surface Disturbance Change Pool from 98220 Purple Sage; Wolfcamp to 96546 Cotton Draw; Bone Spring South SHL: No Change Change FTP: fr/100'FNL & 1650'FWL to 100'FNL & 770'FWL, NMNM0506A PPP1 to 0' FSL & 771' FWL, NMNM0522A Change LTP: fr/2542'FNL & 1650'FWL to 2542'FNL & 770'FWL, NMNM030454 Change BHL: fr/2592'FNL & 1650'FWL to 2592'FNL & 770'FWL, NMNM030454 Section 34-T24S-R31E Change Name: Well Pad A to Well Pad F Change Name: Well Pad B/C to Well Pad G Change Name: Well Pad D to Well Pad H Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan Well Pad F WSL Well Pad G WSL Well Pad H WSL

### **NOI Attachments**

### **Procedure Description**

Poker\_Lake\_Unit\_15\_TWR\_135H\_Attachments\_20230809061755.pdf

Page 1 of 2

eiyed by OCD: 10/20/2023, 10:37:43, 4M Well Name: POKER LAKE UNIT 15

**TWR** 

Well Location: T24S / R31E / SEC 22 / NWNW / 32.208954 / -103.772745

County or Parish/State: Page 2 of

NM

Well Number: 135H

Type of Well: CONVENTIONAL GAS

**Allottee or Tribe Name:** 

Lease Number: NMNM0506A

**Unit or CA Name:** 

**Unit or CA Number:** 

NMNM71016X

**US Well Number: 3001554171** 

Well Status: Drilling Well

**Operator: XTO PERMIAN** 

OPERATING LLC

## **Conditions of Approval**

### **Additional**

Sec 22 24S 31E NMP Sundry 2745215 Poker Lake Unit 15 TWR 135H COAs 20230915102758.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: AUG 09, 2023 06:18 AM

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: CODY LAYTON** 

**BLM POC Phone:** 5752345959

**Disposition:** Approved

Signature: Cody R. Layton

**BLM POC Title:** Assistant Field Manager Lands & Minerals

BLM POC Email Address: clayton@blm.gov

Disposition Date: 09/29/2023

Page 2 of 2

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

<u>District IV</u> 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

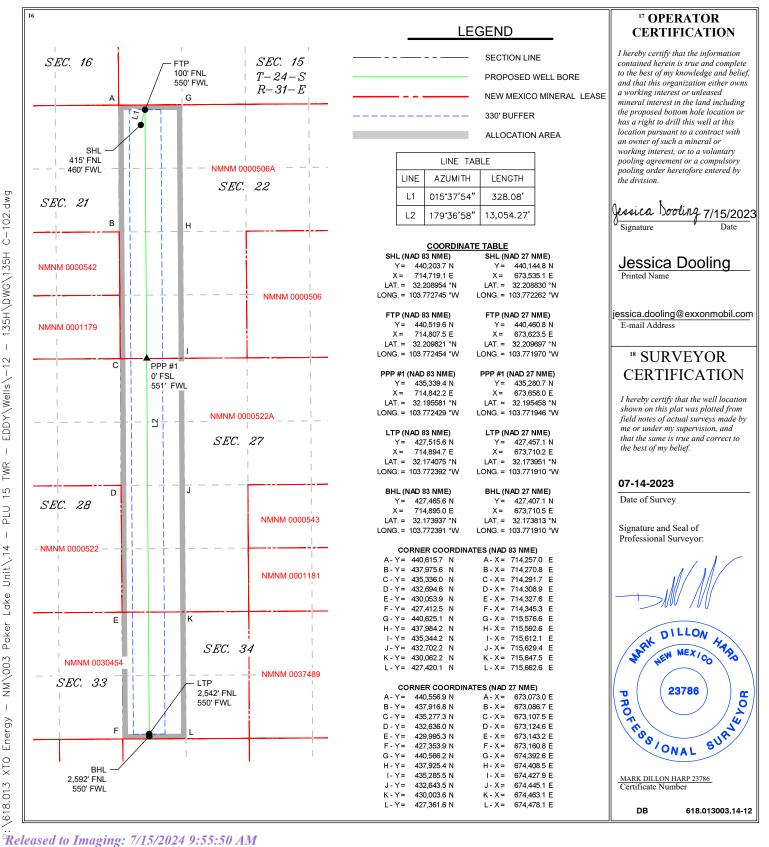
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	r <sup>2</sup> Pool Code	<sup>3</sup> Pool Name				
30-015-	96546	96546 Cotton Draw; Bone Spri				
<sup>4</sup> Property Code		<sup>5</sup> Property Name				
	POI	POKER LAKE UNIT 15 TWR				
<sup>7</sup> OGRID No.		<sup>8</sup> Operator Name				
373075	XTO PI	XTO PERMIAN OPERATING, LLC.				

<sup>10</sup> Surface Location UL or lot no. Section Township Range North/South line Feet from the East/West line C 22 24 S 31 E **NORTH** 460 **WEST EDDY** "Bottom Hole Location If Different From Surface UL or lot no. East/West line Section Feet from the County Township Range Lot Idn Feet from the North/South line Ε 34 24 S 31 E 2,592 **NORTH** 550 **WEST EDDY** <sup>5</sup>Order No. <sup>3</sup> Joint or Infill 12 Dedicated Acres Consolidation Code 400

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.



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

XTO Energy Inc. PLU 15 TWR 135H

Projected TD: 23700.8' MD / 10140' TVD
SHL: 415' FNL & 460' FWL , Section 22, T24S, R31E
BHL: 2592' FNL & 550' FWL , Section 34, T24S, R31E
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	667'	Water
Salado	981'	Water
Base of Salt	4212'	Water
Delaware	4426'	Water
Brushy Canyon	6989'	Water/Oil/Gas
Bone Spring	8305'	Water
1st Bone Spring	9329'	Water/Oil/Gas
2nd Bone Spring	10039'	Water/Oil/Gas
3rd Bone Spring	-	Water/Oil/Gas
Wolfcamp	-	Water/Oil/Gas
Wolfcamp X	-	Water/Oil/Gas
Wolfcamp Y	-	Water/Oil/Gas
Wolfcamp A	-	Water/Oil/Gas
Wolfcamp B	-	Water/Oil/Gas
Wolfcamp D	-	Water/Oil/Gas
Wolfcamp E	-	Water/Oil/Gas
Target/Land Curve	10140'	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 @ 767' (214' 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 9321.8' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23700.8 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9021.8 feet).

### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 767'	9.625	40	J-55	втс	New	1.37	8.21	20.53
8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.17	2.52	2.02
8.75	4000' – 9321.8'	7.625	29.7	HC L-80	Flush Joint	New	1.58	1.97	2.57
6.75	0' – 9221.8'	5.5	23	RY P-110	Semi-Premium	New	1.21	2.43	1.93
6.75	9221.8' - 23700.8'	5.5	23	RY P-110	Semi-Flush	New	1.21	2.21	2.02

<sup>·</sup> XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry

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

<sup>·</sup> XTO requests to not utilize centralizers in the curve and lateral

 $<sup>\</sup>cdot$  7.625 Collapse analyzed using 50% evacuation based on regional experience.

<sup>5.5</sup> Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

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

### 4. Cement Program

### Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 767'

Lead: 150 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 +/- 9321.8'

st Stage

Optional Lead: 380 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 210 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6989

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: 790 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 (6989') 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, 23 New Semi-Flush, RY P-110 casing to be set at +/- 23700.8'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9021.8 feet
Tail: 1010 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9521.8 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 4360 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

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Tible Size	Mud Type	(ppg)	(sec/qt)	(cc)
0' - 767'	12.25	FW/Native	8.4-8.9	35-40	NC
767' - 9321.8'	8.75	FW / Cut Brine / Direct Emulsion	10.2-10.7	30-32	NC
9321.8' - 23700.8'	6.75	ОВМ	12.5-13	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 165 to 185 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 6591 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 15TWR 135H

OH

Plan: Plan 1

# **Standard Planning Report**

19 July, 2023

### Planning Report

LMRKPROD3 Database:

Company: Long Lead\_Well Planning

Project: Site: Well:

**EDDY** PLU 15TWR

135H Wellbore: OH Plan 1 Design:

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

Minimum Curvature

Project EDDY

Map System: Geo Datum:

Map Zone:

**Well Position** 

US State Plane 1927 (Exact solution) NAD 1927 (NADCON CONUS)

New Mexico East 3001

System Datum:

Mean Sea Level

PLU 15TWR Site

Site Position: From: Мар

Easting:

Northing:

440,144.40 usft 674,837.30 usft

Latitude: Longitude:

usft

32° 12' 31.717 N 103° 46' 4.986 W

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

Well 135H

+N/-S +E/-W **Position Uncertainty** 

0.0 usft 0.0 usft 0.0 usft

Northing: Easting:

Wellhead Elevation:

440,144.80 usft Latitude: 673,535.10 usft Longitude:

32° 12' 31.789 N 103° 46' 20.142 W

**Ground Level:** 3,523.0 usft

0.30 **Grid Convergence:** 

ОН Wellbore

Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) IGRF2020 47,245.92583342 7/19/2023 6.39 59.79

Plan 1 Design

Audit Notes:

Version:

Vertical Section: Depth From (TVD)

Phase:

(usft)

0.0

PLAN +N/-S

(usft)

0.0

Tie On Depth: +E/-W

(usft)

0.0

0.0 Direction

(°) 179.62

**Plan Survey Tool Program** Date 7/19/2023

**Depth From** Depth To (usft)

(usft) 0.0 23,700.8 Survey (Wellbore)

Plan 1 (OH)

**Tool Name** 

XOM\_R2OWSG MWD+IFR1+

Remarks

OWSG MWD + IFR1 + Multi-St

### **Planning Report**

Database: LMRKPROD3

Company: Long Lead\_Well Planning

 Project:
 EDDY

 Site:
 PLU 15TWR

 Well:
 135H

 Wellbore:
 OH

 Design:
 Plan 1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

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	
1,760.3	11.21	4.63	1,756.8	54.4	4.4	2.00	2.00	0.00	4.63	
6,526.7	11.21	4.63	6,432.2	977.7	79.2	0.00	0.00	0.00	0.00	
7,087.0	0.00	0.00	6,989.0	1,032.2	83.6	2.00	-2.00	0.00	180.00	
9,521.8	0.00	0.00	9,423.8	1,032.2	83.6	0.00	0.00	0.00	0.00	
10,646.8	90.00	179.62	10,140.0	316.0	88.4	8.00	0.00	0.00	179.62	135H_FTP
15,827.0	90.00	179.62	10,140.0	-4,864.1	122.9	0.00	0.00	0.00	0.00	135H_PP1
23,650.8	90.00	179.62	10,140.0	-12,687.7	175.0	0.00	0.00	0.00	0.00	135H_LTP
23,700.8	90.00	179.62	10,140.0	-12,737.7	175.3	0.00	0.00	0.00	0.00	135H_BHL

### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

 Project:
 EDDY

 Site:
 PLU 15TWR

 Well:
 135H

 Wellbore:
 OH

 Design:
 Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
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	4.63	1,300.0	1.7	0.1	-1.7	2.00	2.00	0.00
1,400.0	4.00	4.63	1,399.8	7.0	0.6	-7.0	2.00	2.00	0.00
1,500.0	6.00	4.63	1,499.5	15.6	1.3	-15.6	2.00	2.00	0.00
4 000 0	0.00	4.00	4 500 7	07.0		07.0	0.00		0.00
1,600.0	8.00	4.63	1,598.7	27.8	2.3	-27.8	2.00	2.00	0.00
1,700.0	10.00	4.63	1,697.5	43.4	3.5	-43.4	2.00	2.00	0.00
1,760.3	11.21	4.63	1,756.8	54.4	4.4	-54.4	2.00	2.00	0.00
1,800.0	11.21	4.63	1,795.7	62.1	5.0	-62.1	0.00	0.00	0.00
1,900.0	11.21	4.63	1,893.8	81.5	6.6	-81.5	0.00	0.00	0.00
	11.21		1,000.0	01.0		-01.0			
2,000.0	11.21	4.63	1,991.9	100.9	8.2	-100.8	0.00	0.00	0.00
2,100.0	11.21	4.63	2,090.0	120.2	9.7	-120.2	0.00	0.00	0.00
2,200.0	11.21	4.63	2,188.1	139.6	11.3	-139.5	0.00	0.00	0.00
2,300.0	11.21	4.63	2,286.1	159.0	12.9	-158.9	0.00	0.00	0.00
2,400.0	11.21	4.63	2,384.2	178.4	14.5	-178.3	0.00	0.00	0.00
2,500.0	11.21	4.63	2,482.3	197.7	16.0	-197.6	0.00	0.00	0.00
2,600.0	11.21	4.63	2,580.4	217.1	17.6	-217.0	0.00	0.00	0.00
2,700.0	11.21	4.63	2,678.5	236.5	19.2	-236.3	0.00	0.00	0.00
2,800.0	11.21	4.63	2,776.6	255.8	20.7	-255.7	0.00	0.00	0.00
2,900.0	11.21	4.63	2,874.7	275.2	22.3	-275.1	0.00	0.00	0.00
ŕ									
3,000.0	11.21	4.63	2,972.8	294.6	23.9	-294.4	0.00	0.00	0.00
3,100.0	11.21	4.63	3,070.9	314.0	25.4	-313.8	0.00	0.00	0.00
3,200.0	11.21	4.63	3,169.0	333.3	27.0	-333.1	0.00	0.00	0.00
3,300.0	11.21	4.63	3,267.1	352.7	28.6	-352.5	0.00	0.00	0.00
3,400.0	11.21	4.63	3,365.2	372.1	30.1	-371.9	0.00	0.00	0.00
3,500.0	11.21	4.63	3,463.3	391.4	31.7	-391.2	0.00	0.00	0.00
3,600.0	11.21	4.63	3,561.4	410.8	33.3	-410.6	0.00	0.00	0.00
3,700.0	11.21	4.63	3,659.5	430.2	34.9	-429.9	0.00	0.00	0.00
3,800.0	11.21	4.63	3,757.5	449.6	36.4	-449.3	0.00	0.00	0.00
3,900.0	11.21	4.63	3,855.6	468.9	38.0	-468.7	0.00	0.00	0.00
4,000.0	11.21	4.63	3,953.7	488.3	39.6	-488.0	0.00	0.00	0.00
4,100.0	11.21	4.63	4,051.8	507.7	41.1	-507.4	0.00	0.00	0.00
4,200.0	11.21	4.63	4,149.9	527.0	42.7	-526.7	0.00	0.00	0.00
4,300.0	11.21	4.63	4,248.0	546.4	44.3	-546.1	0.00	0.00	0.00
			,						
4,400.0	11.21	4.63	4,346.1	565.8	45.8	-565.5	0.00	0.00	0.00
4,500.0	11.21	4.63	4,444.2	585.1	47.4	-584.8	0.00	0.00	0.00
4,600.0	11.21	4.63	4,542.3	604.5	49.0	-604.2	0.00	0.00	0.00
4,700.0	11.21	4.63	4,640.4	623.9	50.5	-623.5	0.00	0.00	0.00
4,800.0	11.21	4.63	4,738.5	643.3	52.1	-642.9	0.00	0.00	0.00
4,900.0	11.21	4.63	4,836.6	662.6	53.7	-662.3	0.00	0.00	0.00
5,000.0	11.21	4.63	4,934.7	682.0	55.3	-681.6	0.00	0.00	0.00
5,100.0	11.21	4.63	5,032.8	701.4	56.8	-701.0	0.00	0.00	0.00
5,200.0	11.21	4.63	5,130.9	720.7	58.4	-720.3	0.00	0.00	0.00
5,300.0	11.21	4.63	5,228.9	740.1	60.0	-739.7	0.00	0.00	0.00
			,						
5,400.0	11.21	4.63	5,327.0	759.5	61.5	-759.1	0.00	0.00	0.00
5,500.0	11.21	4.63	5,425.1	778.9	63.1	-778.4	0.00	0.00	0.00
5,600.0	11.21	4.63	5,523.2	798.2	64.7	-797.8	0.00	0.00	0.00
5,700.0	11.21	4.63	5,621.3	817.6	66.2	-817.1	0.00	0.00	0.00
5,800.0	11.21	4.63	5,719.4	837.0	67.8	-836.5	0.00	0.00	0.00
5,900.0	11.21	4.63	5,817.5	856.3	69.4	-855.9	0.00	0.00	0.00
6,000.0	11.21	4.63	5,915.6	875.7	71.0	-875.2	0.00	0.00	0.00
6,100.0	11.21	4.63	6,013.7	895.1	72.5	-894.6	0.00	0.00	0.00
6,200.0	11.21	4.63	6,111.8	914.5	74.1	-913.9	0.00	0.00	0.00
6,300.0	11.21	4.63	6,209.9	933.8	75.7	-933.3	0.00	0.00	0.00
0,300.0	11.41	4.03	0,203.3	333.0	13.1	-500.0	0.00	0.00	0.00

### Planning Report

Database: Company:

Wellbore: Design: LMRKPROD3

Long Lead\_Well Planning

Project: EDDY Site: PLU 15TWR Well: 135H

135H OH Plan 1 Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

Grid

	riali i								
ned 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)
6,400.0	11.21	4.63	6,308.0	953.2	77.2	-952.7	0.00	0.00	0.00
6,500.0	11.21	4.63	6,406.1	972.6	78.8	-972.0	0.00	0.00	0.00
6,526.7	11.21	4.63	6,432.2	977.7	79.2	-977.2	0.00	0.00	0.00
6,600.0	9.74	4.63	6,504.3	991.0	80.3	-990.5	2.00	-2.00	0.00
6,700.0	7.74	4.63	6,603.2	1,006.2	81.5	-1,005.6	2.00	-2.00	0.00
6,800.0	5.74	4.63	6,702.5	1,017.9	82.5	-1,017.3	2.00	-2.00	0.00
6,900.0	3.74	4.63	6,802.1	1,026.1	83.1	-1,025.5	2.00	-2.00	0.00
7,000.0	1.74	4.63	6,902.0	1,030.9	83.5	-1,030.3	2.00	-2.00	0.00
7,087.0	0.00	0.00	6,989.0	1,032.2	83.6	-1,031.6	2.00	-2.00	0.00
9,521.8	0.00	0.00	9,423.8	1,032.2	83.6	-1,031.6	0.00	0.00	0.00
9,600.0	6.25	179.62	9,501.8	1,027.9	83.7	-1,027.3	8.00	8.00	0.00
9,700.0	14.25	179.62	9,600.2	1,010.1	83.8	-1,009.6	8.00	8.00	0.00
9,800.0	22.25	179.62	9,695.0	978.8	84.0	-978.3	8.00	8.00	0.00
9,900.0	30.25	179.62	9,784.7	934.6	84.3	-934.1	8.00	8.00	0.00
10,000.0	38.25	179.62	9,867.2	878.4	84.7	-877.8	8.00	8.00	0.00
10,100.0	46.25	179.62	9,941.2	811.2	85.1	-810.6	8.00	8.00	0.00
10,200.0	54.25	179.62	10,005.1	734.4	85.6	-733.8	8.00	8.00	0.00
10,300.0	62.25	179.62	10,057.7	649.4	86.2	-648.8	8.00	8.00	0.00
10,400.0	70.25	179.62	10,097.9	558.0	86.8	-557.4	8.00	8.00	0.00
10,500.0	78.25	179.62	10,125.0	461.8	87.4	-461.2	8.00	8.00	0.00
10,600.0	86.25	179.62	10,138.5	362.8	88.1	-362.2	8.00	8.00	0.00
10,646.8	90.00	179.62	10,140.0	316.0	88.4	-315.4	8.00	8.00	0.00
10,700.0	90.00	179.62	10,140.0	262.8	88.8	-262.2	0.00	0.00	0.00
10,800.0	90.00	179.62	10,140.0	162.8	89.4	-162.2	0.00	0.00	0.00
10,900.0	90.00	179.62	10,140.0	62.8	90.1	-62.2	0.00	0.00	0.00
11,000.0	90.00	179.62	10,140.0	-37.2	90.8	37.8	0.00	0.00	0.00
11,100.0	90.00	179.62	10,140.0	-137.2	91.4	137.8	0.00	0.00	0.00
11,200.0	90.00	179.62	10,140.0	-137.2 -237.2	91.4	237.8	0.00	0.00	0.00
11,300.0	90.00	179.62	10,140.0	-337.2	92.1	337.8	0.00	0.00	0.00
11,400.0	90.00	179.62	10,140.0	-437.2	93.4	437.8	0.00	0.00	0.00
11,500.0	90.00	179.62	10,140.0	- <del>4</del> 37.2 -537.2	94.1	537.8	0.00	0.00	0.00
11,600.0	90.00	179.62	10,140.0	-637.2	94.7	637.8	0.00	0.00	0.00
11,700.0	90.00	179.62	10,140.0	-737.2	95.4	737.8	0.00	0.00	0.00
11,800.0	90.00	179.62	10,140.0	-837.2	96.1	837.8	0.00	0.00	0.00
11,900.0	90.00	179.62	10,140.0	-937.2	96.7	937.8	0.00	0.00	0.00
12,000.0	90.00	179.62	10,140.0	-1,037.2	97.4	1,037.8	0.00	0.00	0.00
12,100.0	90.00	179.62	10,140.0	-1,137.2	98.1	1,137.8	0.00	0.00	0.00
12,200.0	90.00	179.62	10,140.0	-1,237.2	98.7	1,237.8	0.00	0.00	0.00
12,300.0	90.00	179.62	10,140.0	-1,337.1	99.4	1,337.8	0.00	0.00	0.00
12,400.0	90.00	179.62	10,140.0	-1,437.1	100.1	1,437.8	0.00	0.00	0.00
12,500.0	90.00	179.62	10,140.0	-1,537.1	100.7	1,537.8	0.00	0.00	0.00
12,600.0	90.00	179.62	10,140.0	-1,637.1	101.4	1,637.8	0.00	0.00	0.00
12,700.0	90.00	179.62	10,140.0	-1,737.1	101.4	1,737.8	0.00	0.00	0.00
12,700.0	90.00	179.62	10,140.0	-1,737.1	102.1	1,737.8	0.00	0.00	0.00
12,900.0	90.00	179.62	10,140.0	-1,937.1	103.4	1,937.8	0.00	0.00	0.00
13,000.0	90.00	179.62	10,140.0	-2,037.1	103.4	2,037.8	0.00	0.00	0.00
13,100.0	90.00	179.62	10,140.0	-2,137.1	104.7	2,137.8	0.00	0.00	0.00
13,200.0	90.00	179.62	10,140.0	-2,237.1	105.4	2,237.8	0.00	0.00	0.00
13,300.0	90.00	179.62	10,140.0	-2,337.1	106.1	2,337.8	0.00	0.00	0.00
13,400.0	90.00	179.62	10,140.0	-2,437.1	106.7	2,437.8	0.00	0.00	0.00
13,500.0	90.00	179.62	10,140.0	-2,537.1	107.4	2,537.8	0.00	0.00	0.00
13,600.0	90.00	179.62	10,140.0	-2,637.1	108.1	2,637.8	0.00	0.00	0.00
13,700.0	90.00	179.62	10,140.0	-2,737.1	108.7	2,737.8	0.00	0.00	0.00
13,800.0	90.00	179.62	10,140.0	-2,837.1	109.4	2,837.8	0.00	0.00	0.00

### Planning Report

Database: Company: LMRKPROD3

Long Lead\_Well Planning

Project: EDDY
Site: PLU 15TWR
Well: 135H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

Grid

sign:	riaii 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)
13,900.0	90.00	179.62	10,140.0	-2,937.1	110.1	2,937.8	0.00	0.00	0.00
14,000.0	90.00	179.62	10,140.0	-3,037.1	110.7	3,037.8	0.00	0.00	0.00
14,100.0	90.00	179.62	10,140.0	-3,137.1	111.4	3,137.8	0.00	0.00	0.00
14,200.0	90.00	179.62	10,140.0	-3,237.1	112.1	3,237.8	0.00	0.00	0.00
14,300.0	90.00	179.62	10,140.0	-3,337.1	112.7	3,337.8	0.00	0.00	0.00
14,400.0	90.00	179.62	10,140.0	-3,437.1	113.4	3,437.8	0.00	0.00	0.00
14,500.0	90.00	179.62	10,140.0	-3,537.1	114.1	3,537.8	0.00	0.00	0.00
14,600.0	90.00	179.62	10,140.0	-3,637.1	114.7	3,637.8	0.00	0.00	0.00
14,700.0	90.00	179.62	10,140.0	-3,737.1	115.4	3,737.8	0.00	0.00	0.00
14,800.0	90.00	179.62	10,140.0	-3,837.1	116.1	3,837.8	0.00	0.00	0.00
14,900.0	90.00	179.62	10,140.0	-3,937.1	116.7	3,937.8	0.00	0.00	0.00
15,000.0	90.00	179.62	10,140.0	-4,037.1	117.4	4,037.8	0.00	0.00	0.00
15,100.0	90.00	179.62	10,140.0	-4,137.1	118.1	4,137.8	0.00	0.00	0.00
15,200.0	90.00	179.62	10,140.0	-4,237.1	118.7	4,237.8	0.00	0.00	0.00
15,300.0	90.00	179.62	10,140.0	-4,337.1	119.4	4,337.8	0.00	0.00	0.00
15,400.0 15,500.0	90.00 90.00	179.62 179.62	10,140.0 10,140.0	-4,437.1 -4,537.1	120.1 120.7	4,437.8 4,537.8	0.00 0.00	0.00 0.00	0.00 0.00
				•					
15,600.0	90.00	179.62	10,140.0	-4,637.1	121.4	4,637.8	0.00	0.00	0.00
15,700.0	90.00	179.62	10,140.0	-4,737.1	122.1	4,737.8	0.00	0.00	0.00
15,800.0	90.00	179.62	10,140.0	-4,837.1	122.7	4,837.8	0.00	0.00	0.00
15,827.0 15,900.0	90.00 90.00	179.62 179.62	10,140.0 10,140.0	-4,864.1 -4,937.1	122.9 123.4	4,864.8 4,937.8	0.00 0.00	0.00 0.00	0.00 0.00
16,000.0	90.00	179.62	10,140.0	-5,037.1	124.1	5,037.8	0.00	0.00	0.00
16,100.0	90.00	179.62	10,140.0	-5,137.1	124.7	5,137.8	0.00	0.00	0.00
16,200.0 16,300.0	90.00 90.00	179.62 179.62	10,140.0 10,140.0	-5,237.1 -5,337.1	125.4 126.0	5,237.8 5,337.8	0.00 0.00	0.00 0.00	0.00 0.00
16,400.0	90.00	179.62	10,140.0	-5,337.1 -5,437.1	126.7	5,437.8	0.00	0.00	0.00
16,500.0	90.00	179.62	10,140.0	-5,537.1	127.4	5,537.8	0.00	0.00	0.00
16,600.0 16,700.0	90.00 90.00	179.62 179.62	10,140.0 10,140.0	-5,637.1 -5,737.1	128.0 128.7	5,637.8 5,737.8	0.00 0.00	0.00 0.00	0.00 0.00
16,800.0	90.00	179.62	10,140.0	-5,837.0	129.4	5,837.8	0.00	0.00	0.00
16,900.0	90.00	179.62	10,140.0	-5,937.0	130.0	5,937.8	0.00	0.00	0.00
17,000.0	90.00	179.62	10,140.0	-6,037.0	130.7	6,037.8	0.00	0.00	0.00
17,100.0 17,200.0	90.00 90.00	179.62 179.62	10,140.0 10,140.0	-6,137.0 -6,237.0	131.4 132.0	6,137.8 6,237.8	0.00 0.00	0.00 0.00	0.00 0.00
17,200.0	90.00	179.62	10,140.0	-6,337.0	132.7	6,337.8	0.00	0.00	0.00
17,400.0	90.00	179.62	10,140.0	-6,437.0	133.4	6,437.8	0.00	0.00	0.00
17,500.0	90.00	179.62	10,140.0	-6,537.0	134.0	6,537.8	0.00	0.00	0.00
17,600.0	90.00	179.62	10,140.0	-6,537.0 -6,637.0	134.0	6,637.8	0.00	0.00	0.00
17,700.0	90.00	179.62	10,140.0	-6,737.0	135.4	6,737.8	0.00	0.00	0.00
17,800.0	90.00	179.62	10,140.0	-6,837.0	136.0	6,837.8	0.00	0.00	0.00
17,900.0	90.00	179.62	10,140.0	-6,937.0	136.7	6,937.8	0.00	0.00	0.00
18,000.0	90.00	179.62	10,140.0	-7,037.0	137.4	7,037.8	0.00	0.00	0.00
18,100.0	90.00	179.62	10,140.0	-7,137.0	138.0	7,137.8	0.00	0.00	0.00
18,200.0	90.00	179.62	10,140.0	-7,237.0	138.7	7,237.8	0.00	0.00	0.00
18,300.0	90.00	179.62	10,140.0	-7,337.0	139.4	7,337.8	0.00	0.00	0.00
18,400.0	90.00	179.62	10,140.0	-7,437.0	140.0	7,437.8	0.00	0.00	0.00
18,500.0	90.00	179.62	10,140.0	-7,537.0	140.7	7,537.8	0.00	0.00	0.00
18,600.0	90.00	179.62	10,140.0	-7,637.0	141.4	7,637.8	0.00	0.00	0.00
18,700.0	90.00	179.62	10,140.0	-7,737.0	142.0	7,737.8	0.00	0.00	0.00
18,800.0	90.00	179.62	10,140.0	-7,837.0	142.7	7,837.8	0.00	0.00	0.00
18,900.0	90.00	179.62	10,140.0	-7,937.0	143.4	7,937.8	0.00	0.00	0.00
19,000.0	90.00	179.62	10,140.0	-8,037.0	144.0	8,037.8	0.00	0.00	0.00
19,100.0	90.00	179.62	10,140.0	-8,137.0	144.7	8,137.8	0.00	0.00	0.00

### **Planning Report**

Database: LMRKPROD3

Company: Long Lead\_Well Planning

 Project:
 EDDY

 Site:
 PLU 15TWR

 Well:
 135H

 Wellbore:
 OH

 Design:
 Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

Grid

Design:	Plan 1								
Planned Survey									
Measured			Vertical			Vertical	Doglog	Build	Turn
					. = / \		Dogleg		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
19,200.0	90.00	179.62	10,140.0	-8,237.0	145.4	8,237.8	0.00	0.00	0.00
19,300.0	90.00	179.62	10,140.0	-8,337.0	146.0	8,337.8	0.00	0.00	0.00
19,400.0	90.00	179.62	10,140.0	-8,437.0	146.7	8,437.8	0.00	0.00	0.00
19,500.0	90.00	179.62	10.140.0	-8,537.0	147.4	8,537.8	0.00	0.00	0.00
19,600.0	90.00	179.62	10,140.0	-8,637.0	148.0	8,637.8	0.00	0.00	0.00
19,700.0	90.00	179.62	10,140.0	-8,737.0	148.7	8,737.8	0.00	0.00	0.00
19,700.0	90.00	179.62	10,140.0	-8,837.0	149.4	8,837.8	0.00	0.00	0.00
19,900.0	90.00	179.62	10,140.0	-8,937.0	150.0	8,937.8	0.00	0.00	0.00
20,000.0	90.00	179.62	10,140.0	-9,037.0	150.7	9,037.8	0.00	0.00	0.00
20,100.0	90.00	179.62	10,140.0	-9,137.0	151.4	9,137.8	0.00	0.00	0.00
20,200.0	90.00	179.62	10,140.0	-9,237.0	152.0	9,237.8	0.00	0.00	0.00
20,300.0	90.00	179.62	10,140.0	-9,337.0	152.7	9,337.8	0.00	0.00	0.00
20,400.0	90.00	179.62	10,140.0	-9,437.0	153.4	9,437.8	0.00	0.00	0.00
20,500.0	90.00	179.62	10,140.0	-9,537.0	154.0	9,537.8	0.00	0.00	0.00
20,600.0	90.00	179.62	10,140.0	-9,637.0	154.7	9,637.8	0.00	0.00	0.00
20,700.0	90.00	179.62	10,140.0	-9,737.0	155.4	9,737.8	0.00	0.00	0.00
20,800.0	90.00	179.62	10,140.0	-9,837.0	156.0	9,837.8	0.00	0.00	0.00
20,900.0	90.00	179.62	10,140.0	-9,937.0	156.7	9,937.8	0.00	0.00	0.00
21.000.0	90.00	179.62	10,140.0	-10,037.0	157.4	10,037.8	0.00	0.00	0.00
21,100.0	90.00	179.62	10,140.0	-10,137.0	158.0	10,137.8	0.00	0.00	0.00
21,200.0	90.00	179.62	10,140.0	-10,237.0	158.7	10,237.8	0.00	0.00	0.00
21,300.0	90.00	179.62	10,140.0	-10,337.0	159.3	10,337.8	0.00	0.00	0.00
21,400.0	90.00	179.62	10,140.0	-10,436.9	160.0	10,437.8	0.00	0.00	0.00
	90.00	179.62	10,140.0	-10,536.9	160.7		0.00	0.00	0.00
21,500.0 21,600.0	90.00	179.62	10,140.0	-10,536.9	161.3	10,537.8 10,637.8	0.00	0.00	0.00
21,700.0	90.00	179.62	10,140.0	-10,030.9	162.0	10,037.8	0.00	0.00	0.00
21,800.0	90.00	179.62	10,140.0	-10,736.9	162.7	10,737.8	0.00	0.00	0.00
21,900.0	90.00	179.62	10,140.0	-10,936.9	163.3	10,037.8	0.00	0.00	0.00
22,000.0	90.00	179.62	10,140.0	-11,036.9	164.0	11,037.8	0.00	0.00	0.00
22,100.0	90.00	179.62	10,140.0	-11,136.9	164.7	11,137.8	0.00	0.00	0.00
22,200.0	90.00	179.62	10,140.0	-11,236.9	165.3	11,237.8	0.00	0.00	0.00
22,300.0	90.00	179.62	10,140.0	-11,336.9	166.0	11,337.8	0.00	0.00	0.00
22,400.0	90.00	179.62	10,140.0	-11,436.9	166.7	11,437.8	0.00	0.00	0.00
22,500.0	90.00	179.62	10,140.0	-11,536.9	167.3	11,537.8	0.00	0.00	0.00
22,600.0	90.00	179.62	10,140.0	-11,636.9	168.0	11,637.8	0.00	0.00	0.00
22,700.0	90.00	179.62	10,140.0	-11,736.9	168.7	11,737.8	0.00	0.00	0.00
22,800.0	90.00	179.62	10,140.0	-11,836.9	169.3	11,837.8	0.00	0.00	0.00
22,900.0	90.00	179.62	10,140.0	-11,936.9	170.0	11,937.8	0.00	0.00	0.00
23,000.0	90.00	179.62	10,140.0	-12,036.9	170.7	12,037.8	0.00	0.00	0.00
23,100.0	90.00	179.62	10,140.0	-12,136.9	171.3	12,137.8	0.00	0.00	0.00
23,200.0	90.00	179.62	10,140.0	-12,236.9	172.0	12,237.8	0.00	0.00	0.00
23,300.0	90.00	179.62	10,140.0	-12,336.9	172.7	12,337.8	0.00	0.00	0.00
23,400.0	90.00	179.62	10,140.0	-12,436.9	173.3	12,437.8	0.00	0.00	0.00
		179.62	10,140.0	-12,536.9		12,537.8			0.00
23,500.0 23,600.0	90.00	179.62 179.62	10,140.0		174.0		0.00	0.00	
23,600.0 23,650.8	90.00	179.62 179.62		-12,636.9	174.7	12,637.8	0.00	0.00	0.00
	90.00		10,140.0	-12,687.7	175.0	12,688.6	0.00	0.00	0.00
23,700.0	90.00	179.62	10,140.0	-12,736.9	175.3	12,737.8	0.00	0.00	0.00
23,700.8	90.00	179.62	10,140.0	-12,737.7	175.3	12,738.6	0.00	0.00	0.00

### **Planning Report**

Database: LMRKPROD3

Company: Long Lead\_Well Planning
Project: EDDY

 Project:
 EDDY

 Site:
 PLU 15TWR

 Well:
 135H

 Wellbore:
 OH

 Design:
 Plan 1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

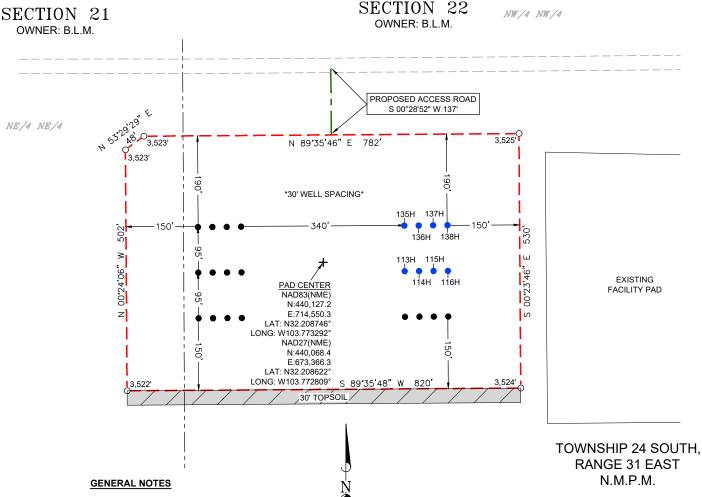
**Survey Calculation Method:** 

Well 135H

RKB(3523+33) @ 3556.0usft RKB(3523+33) @ 3556.0usft

Grid

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
135H_SHL - plan hits target cel - Rectangle (sides \		0.00	0.0	0.0	0.0	440,144.80	673,535.10	32° 12' 31.789 N	103° 46' 20.142 W
135H_LTP - plan misses target - Point	0.00 t center by 0.1u	0.00 usft at 23650	10,140.0 .8usft MD (1	-12,687.7 0140.0 TVD, -	175.1 -12687.7 N, 17	427,457.10 (5.0 E)	673,710.20	32° 10′ 26.223 N	103° 46' 18.875 W
135H_BHL - plan misses target - Point	0.00 t center by 0.1u	0.00 usft at 23700	10,140.0 .8usft MD (1	-12,737.7 0140.0 TVD, -	175.4 -12737.7 N, 17	427,407.10 (5.3 E)	673,710.50	32° 10' 25.728 N	103° 46' 18.874 W
135H_PP1 - plan hits target cel - Point	0.00 nter	0.00	10,140.0	-4,864.1	122.9	435,280.70	673,658.00	32° 11' 43.647 N	103° 46' 19.007 W
135H_FTP - plan hits target cel - Point	0.00 nter	0.00	10,140.0	316.0	88.4	440,460.80	673,623.50	32° 12' 34.911 N	103° 46' 19.094 W



 BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATES SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983.

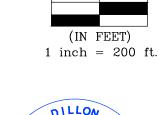
- LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATA (NAD83).
- 3. REFER TO TOPOGRAPHICAL AND ACCESS ROAD MAP FOR PROPOSED ROAD LOCATION.

### **DRIVING DIRECTION TO LOCATION**

FROM THE INTERSECTION OF HIGHWAY 128 AND BUCK JACKSON ROAD, GO SOUTHWEST ON BUCK JACKSON APPROX. 3.2 MILES. TURN RIGHT (NORTH) ON EXISTING ROAD FOR APPROX. 0.2 MILES. TURN LEFT (WEST) AND GO APPROX. 0.7 MILES ARRIVING AT PROPOSED ROAD AND LOCATION IS TO THE SOUTH.

I,MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PREFORMED 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.

MARK DILLON HARP REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 23786



GRAPHIC SCALE

100

ACREAGE INFORMATION

PROPOSED PAD
TOP SOIL

= 9.965 ACRES = 0.565 ACRES

TOTAL = 10.530 ACRES



# LEGEND SECTION LINE PROPOSED PAD PROPOSED ACCESS ROAD TBD WELL LOCATION PERMITTED WELL LOCATION EXISTING ROAD TOP SOIL EXISTING PAD

# Manhard

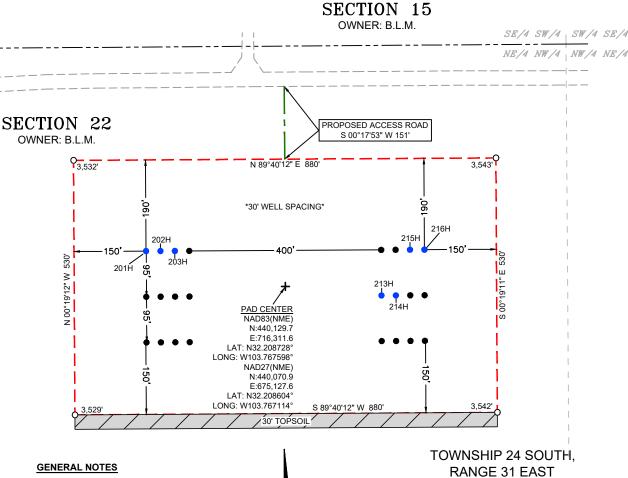
505 Pecan Street, Suite 201, Fort Worth, TX 76102 ph:817.865.5344 manhard.com Texas Board of Professional Engineers & Land Surveyors Reg. No. F-10194754 (Surv), F-21732 (Eng)

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# A WELL SITE PLAN FOR XTO PERMIAN OPERATING, LLC. POKER LAKE UNIT 15 TWR PROPOSED PAD "F"

PAD CENTER IS LOCATED 491 FEET FROM THE NORTH LINE AND 411 FEET FROM THE WEST LINE OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

CHECKED BY: AR	DATE: 07/21/2023	SCALE: 1" = 200'	PROJECT NO.: 618.013003.14
DRAWN BY:	FIELD CREW: RD	REVISION NO.: NO	SHEET: 1 OF 3



BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATES SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983.

LATITUDE AND LONGITUDE VALUES SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN DATA (NAD83).

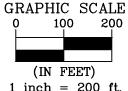
REFER TO TOPOGRAPHICAL AND ACCESS ROAD MAP FOR PROPOSED ROAD LOCATION.

### **DRIVING DIRECTION TO LOCATION**

FROM THE INTERSECTION OF HIGHWAY 128 AND BUCK JACKSON ROAD, GO SOUTHWEST ON BUCK JACKSON APPROX. 3.2 MILES. TURN RIGHT (NORTH) ON EXISTING ROAD FOR APPROX. 0.2 MILES. TURN LEFT (WEST) AND GO APPROX. 0.4 MILES ARRIVING AT PROPOSED ROAD AND LOCATION IS TO THE SOUTH.

I.MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PREFORMED 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.

MARK DILLON HARP REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 23786

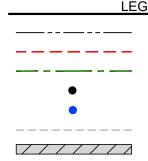


1 inch = 200 ft.

JARK DILLON HAR

PHOTE SONAL

MEX/Co



TOP SOIL

N.M.P.M.

ACREAGE INFORMATION PROPOSED PAD = 10.707 ACRES = 0.606 ACRES TOTAL = 11.313 ACRES

**LEGEND** 

SECTION LINE PROPOSED PAD PROPOSED ACCESS ROAD TBD WELL LOCATION PERMITTED WELL LOCATION **EXISTING ROAD** TOP SOIL

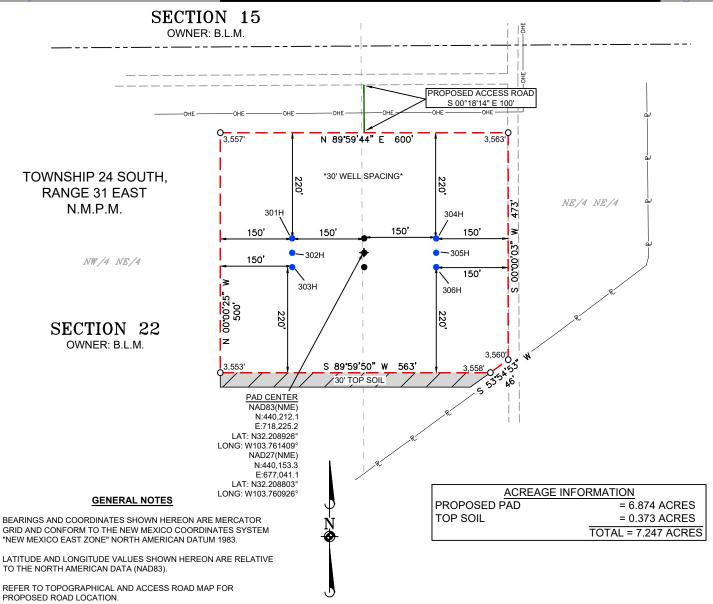
505 Pecan Street, Suite 201, Fort Worth, TX 76102 ph:817.865.5344 manhard.com Texas Board of Professional Engineers & Land Surveyors Reg. No. F-10194754 (Surv), F-21732 (Eng)

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### A WELL SITE PLAN FOR XTO PERMIAN OPERATING, LLC. POKER LAKE UNIT 15 TWR PROPOSED PAD "G"

PAD CENTER IS LOCATED 500 FEET FROM THE NORTH LINE AND 2,052 FEET FROM THE WEST LINE OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

CHECKED BY:  AR	DATE: 07/21/2023	SCALE: 1" = 200'	PROJECT NO.: 618.013003.14
DRAWN BY:	FIELD CREW:	REVISION NO.: NO	SHEET: 1 OF 3



### **DRIVING DIRECTION TO LOCATION**

FROM THE INTERSECTION OF HIGHWAY 128 AND BUCK JACKSON RD. GO SOUTHWEST ON BUCK JACKSON RD. FOR APPROX. 3.2 MILES. TURN RIGHT (NORTH) ON EXISTING LEASE ROAD AND GO APPROX. 0.2 MILES. TURN LEFT (WEST) ON EXISTING LEASE ROAD AND GO 0.1 MILES ARRIVING AT PROPOSED ROAD AND THE LOCATION IS TO THE SOUTH.

I,MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PREFORMED 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 FELIEF.

MARK DILLON HARP REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 23786

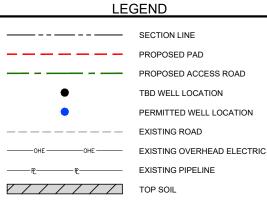


GRAPHIC SCALE

100

(IN FEET)

1 inch = 200 ft.





505 Pecan Street, Suite 201, Fort Worth, TX 76102 ph:817.865.5344 manhard.com Texas Board of Professional Engineers & Land Surveyors Reg. No. F-10194754 (Surv), F-21732 (Eng)

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# A WELL SITE PLAN FOR XTO PERMIAN OPERATING, LLC. POKER LAKE UNIT 15 TWR PROPOSED PAD "H"

PAD CENTER IS LOCATED 431 FEET FROM THE NORTH LINE AND 1,316 FEET FROM THE EAST LINE OF SECTION 22, TOWNSHIP 24 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

CHECKED BY:  AR	DATE: 07/21/2023	SCALE: 1" = 200'	PROJECT NO.: 618.013003.14
DRAWN BY:	FIELD CREW:	REVISION NO.: NO	SHEET: 1 OF 3

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

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 277703

### **CONDITIONS**

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	277703
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

### CONDITIONS

Created By	Condition	Condition Date
ward.rik	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	7/15/2024