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

Sundry Print Report

09/18/2023

Well Name: POKER LAKE UNIT 15 TWR

Well Location: T24S / R31E / SEC 22 / NENE /

County or Parish/State:

Well Number: 305H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0506A

Unit or CA Name:

Unit or CA Number: NMNM71016X

US Well Number: 3001554188

Well Status: Approved Application for Permit to Drill

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2745232

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/09/2023

Time Sundry Submitted: 07:02

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: Change Pool from 96403 Wildcat; Bone Spring to 96546 Cotton Draw; Bone Spring South No Additional Surface Disturbance Change FTP: fr/330’ FNL & 770’ FEL to 100’ FNL & 330’ FEL, NMNM0506A PPP1 to 2640’ FSL & 330’ FEL, NMNM0506 PPP2 to 0’ FSL & 330’ FEL, NMNM0522A PPP3 to 2639’ FSL & 330’ FEL, NMNM0543 Change LTP: fr/330’ FSL & 770’ FEL to 100’ FSL & 330’ FSL, NMNM081181 Change BHL: fr/200’FSL & 770’FEL to 50’FSL & 330’FEL, Section 27-T24S-R31E NMNM081181 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

PLU_15_TWR_305H_Attachments_20230809070232.pdf

Well Name: POKER LAKE UNIT 15 TWR

Well Location: T24S / R31E / SEC 22 / NENE /

County or Parish/State:

Well Number: 305H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM0506A

Unit or CA Name:

Unit or CA Number: NMNM71016X

US Well Number: 3001554188

Well Status: Approved Application for Permit to Drill

Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

Sec_22_24S_31E_NMP_Sundry_2745232_Poker_Lake_Unit_15_TWR_305H_Eng_Worksheet_20230914162457.pdf

Sec_22_24S_31E_NMP_Sundry_2745232_Poker_Lake_Unit_15_TWR_305H_COAs_20230914162457.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 07:02 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: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 09/18/2023

Signature: Chris Walls

Sec 22-24S-31E-NMP Sundry 2745232 Poker Lake Unit 15 TWR 305H Eng Worksheet

Poker Lake Unit 15 TWR 305H

9 5/8	surface csg in a	12 1/4	inch hole.	Design Factors				Surface			
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J 55	BTC	20.78	7.09	1.86	758	12	3.19	13.15	30,320
"B"			BTC				**0**				**0**
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,500		Tail Cmt	does not	circ to sfc.		Totals:	758			30,320

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0.3132	280	456	237	92	9.20	1239	2M	0.81

Site plat (pipe racks S or E) as per C-O-1 III.D.4.i. not found.

7 5/8	casing inside the	9 5/8		Design Factors				Int 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	RY P 110	Flush Joint	4.70	2.52	1.71	4,000	4	2.64	4.32	118,800
"B"	**29.70**	**HCL 80**	Flush Joint	∞	**2.73**	**1.24**	**5,705**	**3**	**1.92**	4.66	**169,439**
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	9,705			288,239
The cement volume(s) are intended to achieve a top of				0	ft from surface or a			758			overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 3/4	0.1005	620	1377	981	40	10.20	3590	5M	0.56

Tail cmt

5 1/2	casing inside the	7 5/8		Design Factors				Prod 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	RY P 110	Semi-Premiur	3.60	2	2.28	9,605	2	3.52	3.09	192,100
"B"	**20.00**	**RY P 110**	Semi-Flush	∞	**2.00**	**2.28**	**11,839**	**2**	**3.52**	3.09	**236,780**
w/8.4#/g mud, 30min Sfc Csg Test psig:	1,958						Totals:	21,444			428,880
The cement volume(s) are intended to achieve a top of				8600	ft from surface or a			1105			overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
6 3/4	0.0835	840	1292	1083	19	12.00			0.23

Class 'C' tail cmt yld > 1.35

#N/A

0		5 1/2		Design Factors				<Choose Casing>			
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			0.00				0				0
"B"			**0.00**				**0**				**0**
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	0			0
Cmt vol calc below includes this csg, TOC intended				#N/A	ft from surface or a			#N/A			overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A				

#N/A Capitan Reef est top XXXX.

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
30-015-	96546	Cotton Draw; Bone Spring South

[4] Property Code	[5] Property Name	[6] Well Number
	POKER LAKE UNIT 15 TWR	305H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,559'

[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
A	22	24 S	31 E		432	NORTH	1,169	EAST	EDDY

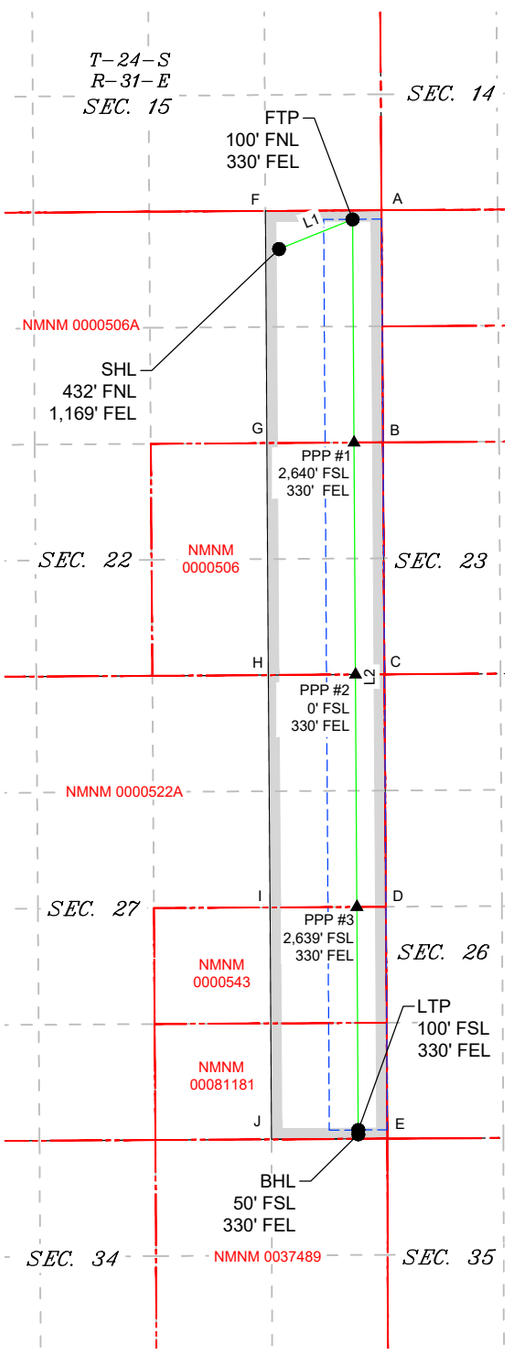
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	27	24 S	31 E		50	SOUTH	330	EAST	EDDY

[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.

16



LEGEND

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

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	068°05'02"	902.14'
L2	179°38'34"	10,414.45'

COORDINATE TABLE

SHL (NAD 83 NME)	SHL (NAD 27 NME)
Y = 440,211.7 N	Y = 440,152.9 N
X = 718,375.6 E	X = 677,191.6 E
LAT. = 32.208923 °N	LAT. = 32.208799 °N
LONG. = 103.760923 °W	LONG. = 103.760440 °W

FTP (NAD 83 NME)	FTP (NAD 27 NME)
Y = 440,548.4 N	Y = 440,489.6 N
X = 719,212.6 E	X = 678,028.5 E
LAT. = 32.209836 °N	LAT. = 32.209713 °N
LONG. = 103.758211 °W	LONG. = 103.757728 °W

PPP #1 (NAD 83 NME)	PPP #1 (NAD 27 NME)
Y = 438,008.0 N	Y = 437,949.2 N
X = 719,228.4 E	X = 678,044.3 E
LAT. = 32.202853 °N	LAT. = 32.202729 °N
LONG. = 103.758204 °W	LONG. = 103.757721 °W

PPP #2 (NAD 83 NME)	PPP #2 (NAD 27 NME)
Y = 435,367.9 N	Y = 435,309.2 N
X = 719,244.9 E	X = 678,060.6 E
LAT. = 32.195596 °N	LAT. = 32.195472 °N
LONG. = 103.758196 °W	LONG. = 103.757714 °W

PPP #3 (NAD 83 NME)	PPP #3 (NAD 27 NME)
Y = 432,722.8 N	Y = 432,664.2 N
X = 719,261.4 E	X = 678,077.0 E
LAT. = 32.188325 °N	LAT. = 32.188201 °N
LONG. = 103.758189 °W	LONG. = 103.757707 °W

LTP (NAD 83 NME)	LTP (NAD 27 NME)
Y = 430,184.2 N	Y = 430,125.6 N
X = 719,277.2 E	X = 678,092.8 E
LAT. = 32.181346 °N	LAT. = 32.181222 °N
LONG. = 103.758181 °W	LONG. = 103.757700 °W

BHL (NAD 83 NME)	BHL (NAD 27 NME)
Y = 430,134.2 N	Y = 430,075.6 N
X = 719,277.5 E	X = 678,093.1 E
LAT. = 32.181209 °N	LAT. = 32.181085 °N
LONG. = 103.758181 °W	LONG. = 103.757700 °W

CORNER COORDINATES (NAD 83 NME)

A - Y = 440,650.4 N	A - X = 719,541.9 E
B - Y = 438,010.1 N	B - X = 719,558.4 E
C - Y = 435,370.2 N	C - X = 719,574.8 E
D - Y = 432,724.7 N	D - X = 719,591.9 E
E - Y = 430,086.1 N	E - X = 719,607.8 E
F - Y = 440,642.4 N	F - X = 718,219.0 E
G - Y = 438,001.5 N	G - X = 718,236.4 E
H - Y = 435,361.3 N	H - X = 718,253.7 E
I - Y = 432,717.2 N	I - X = 718,271.0 E
J - Y = 430,078.3 N	J - X = 718,287.6 E

CORNER COORDINATES (NAD 27 NME)

A - Y = 440,591.6 N	A - X = 678,357.9 E
B - Y = 437,951.4 N	B - X = 678,374.2 E
C - Y = 435,311.5 N	C - X = 678,390.5 E
D - Y = 432,666.1 N	D - X = 678,407.6 E
E - Y = 430,027.6 N	E - X = 678,423.4 E
F - Y = 440,583.6 N	F - X = 677,035.0 E
G - Y = 437,942.7 N	G - X = 677,052.2 E
H - Y = 435,302.6 N	H - X = 677,069.4 E
I - Y = 432,658.6 N	I - X = 677,086.6 E
J - Y = 430,019.7 N	J - X = 677,103.2 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.

Jessica Dooling 7/15/2023
Signature Date

Jessica Dooling
Printed Name

jessica.dooling@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.

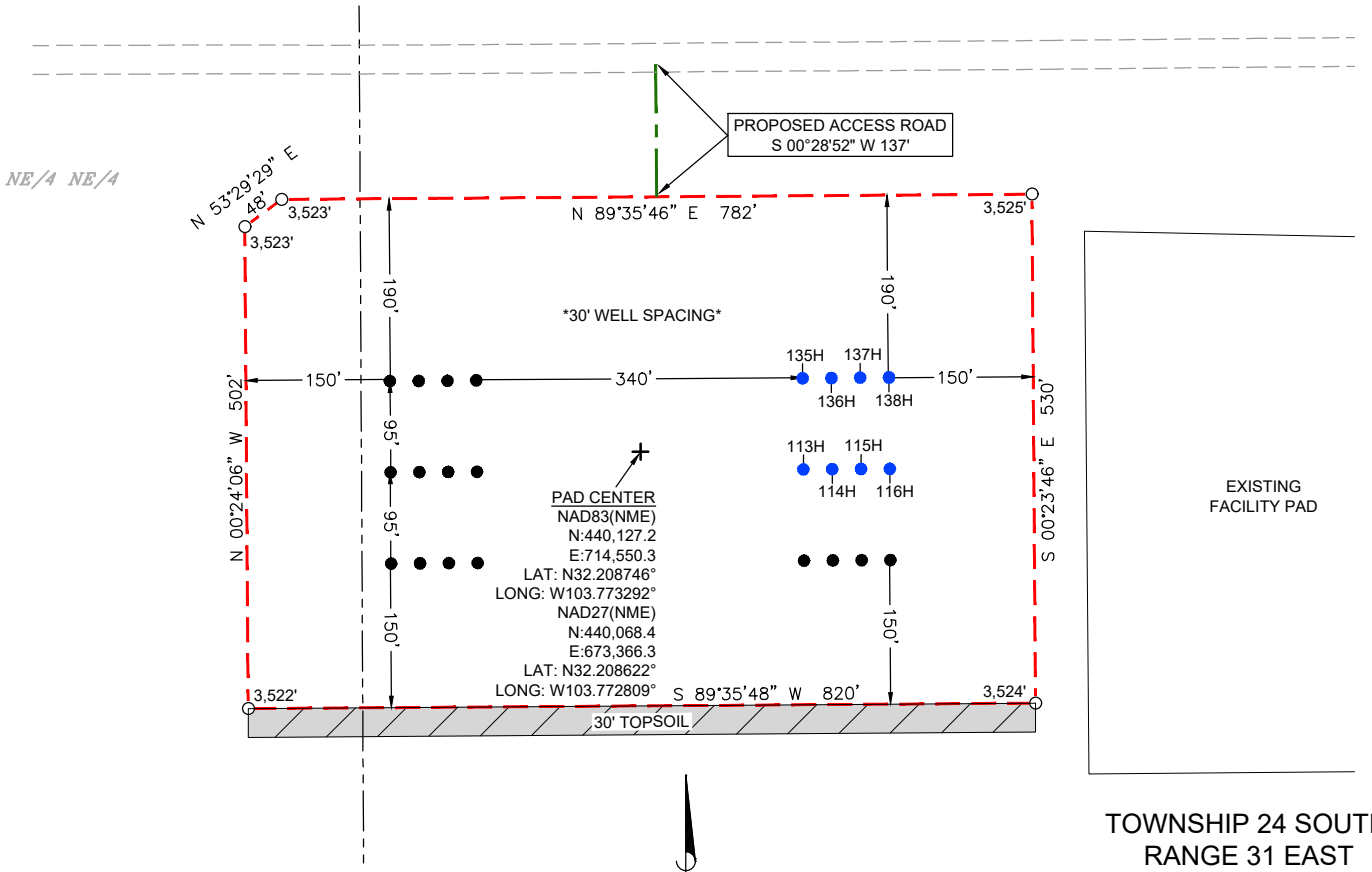
07-13-2023
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number

DB 618.013003.14-10



TOWNSHIP 24 SOUTH,
RANGE 31 EAST
N.M.P.M.

GENERAL NOTES

1. BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATES SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983.
2. 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
0 100 200
(IN FEET)
1 inch = 200 ft.

ACREAGE INFORMATION	
PROPOSED PAD	= 9.965 ACRES
TOP SOIL	= 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 CONSULTING
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)

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

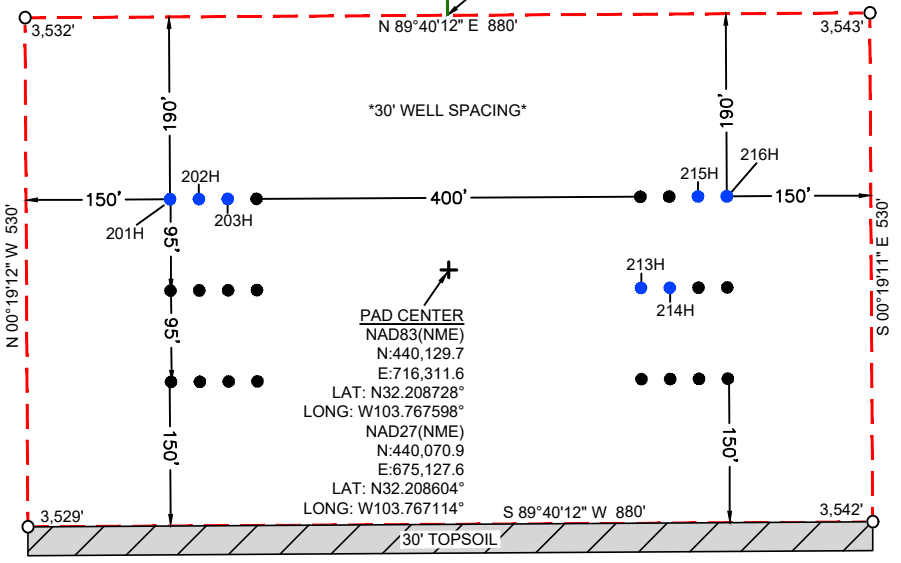
CHECKED BY:	DATE:	SCALE:	PROJECT NO.:
AR	07/21/2023	1" = 200'	618.013003.14
DRAWN BY:	**FIELD CREW:**	**REVISION NO.:**	**SHEET:**
AI	RD	NO	1 OF 3

P:\618.013 XTO Energy - NM\003 Poker Lake Unit\.14 - PLU 15 TWR - EDDY\DWG\Exhibits\WELL SITE PLANS\PLU 15 TWR- WELL SITE PLAN-PAD F.dwg

SECTION 15
OWNER: B.L.M.

SE/4 SW/4 | SW/4 SE/4
NE/4 NW/4 | NW/4 NE/4

SECTION 22
OWNER: B.L.M.



TOWNSHIP 24 SOUTH,
RANGE 31 EAST
N.M.P.M.

GENERAL NOTES

1. BEARINGS AND COORDINATES SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATES SYSTEM "NEW MEXICO EAST ZONE" NORTH AMERICAN DATUM 1983.
2. 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. 0.4 MILES ARRIVING AT PROPOSED ROAD AND LOCATION IS TO THE SOUTH.

N

GRAPHIC SCALE
0 100 200
(IN FEET)
1 inch = 200 ft.

ACREAGE INFORMATION	
PROPOSED PAD	= 10.707 ACRES
TOP SOIL	= 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

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

MARK DILLON HARP · NEW MEXICO · 23786 · PROFESSIONAL SURVEYOR

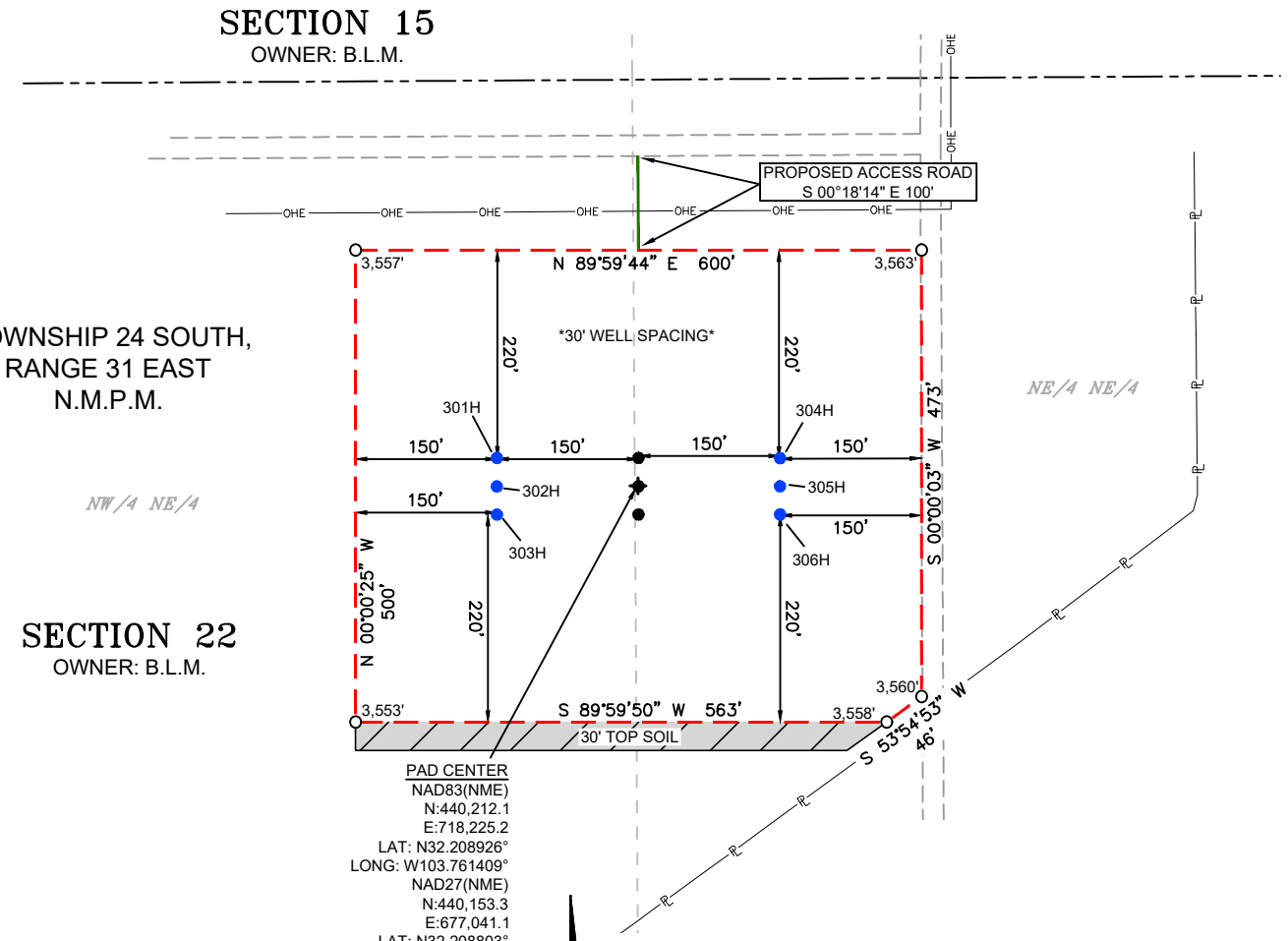
Manhard CONSULTING
505 Pecan Street, Suite 201, Fort Worth, TX 76102
ph: 817.865.5344 manhard.com
Texas Board of Professional Engineers & Land Surveyors Reg. No. F-10194754 (Surv), F-21732 (Eng)

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

P:\618.013 XTO Energy – NM\003 Poker Lake Unit\.14 – PLU 15 TWR – EDDY\DWG\Exhibits\WELL SITE PLANS\PLU 15 TWR– WELL SITE PLAN–PAD G.dwg



ACREAGE INFORMATION	
PROPOSED PAD	= 6.874 ACRES
TOP SOIL	= 0.373 ACRES
	TOTAL = 7.247 ACRES

GENERAL NOTES

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2. 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 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.

GRAPHIC SCALE
0 100 200
(IN FEET)
1 inch = 200 ft.

LEGEND

- SECTION LINE
- PROPOSED PAD
- PROPOSED ACCESS ROAD
- TBD WELL LOCATION
- PERMITTED WELL LOCATION
- EXISTING ROAD
- OHE — OHE EXISTING OVERHEAD ELECTRIC
- PL — PL EXISTING PIPELINE
- TOP SOIL

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

Manhard CONSULTING
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)

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

P:\618.013 XTO Energy – NM\003 Poker Lake Unit\.14 – PLU 15 TWR – EDDY\DWG\Exhibits\WELL SITE PLANS\PLU 15 TWR– WELL SITE PLAN–PAD H.dwg

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

XTO Energy Inc.
PLU 15 TWR 305H
Projected TD: 21444.3' MD / 10452' TVD
SHL: 432' FNL & 1169' FEL , Section 22, T24S, R31E
BHL: 50' FSL & 330' FEL , Section 27, 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	658'	Water
Salado	998'	Water
Base of Salt	4264'	Water
Delaware	4473'	Water
Brushy Canyon	7028'	Water/Oil/Gas
Bone Spring	8334'	Water
1st Bone Spring	9412'	Water/Oil/Gas
2nd Bone Spring	10103'	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	10452'	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 @ 758' (240' 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 9705.1' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 21444.3 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9405.1 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 758'	9.625	40	J-55	BTC	New	1.31	8.31	20.78
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.10	2.52	1.94
8.75	4000' – 9705.1'	7.625	29.7	HC L-80	Flush Joint	New	1.53	1.89	2.40
6.75	0' – 9605.1'	5.5	20	RY P-110	Semi-Premium	New	1.26	1.78	2.18
6.75	9605.1' - 21444.3'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.63	2.18

· 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 +/- 758'

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 +/- 9705.1'
1st Stage
Optional Lead: 380 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: Surface
Tail: 240 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 7028
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 (7028') 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 +/- 21444.3'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9405.1 feet
Tail: 820 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9905.1 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 4494 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 (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 758'	12.25	FW/Native	8.4-8.9	35-40	NC
758' - 9705.1'	8.75	FW / Cut Brine / Direct Emulsion	10.2-10.7	30-32	NC
9705.1' - 21444.3'	6.75	OBM	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 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 6794 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
305H

OH

Plan: Plan 1

Standard Planning Report

18 July, 2023

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 305H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3559+30) @ 3589.0usft
Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

Project EDDY

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 PLU 15TWR

Site Position:		**Northing:**	440,144.40 usft	**Latitude:**	32° 12' 31.717 N
From:	Map	**Easting:**	674,837.30 usft	**Longitude:**	103° 46' 4.986 W
Position Uncertainty:	3.0 usft	**Slot Radius:**	13-3/16 "		

Well 305H

Well Position	**+N/-S**	0.0 usft	**Northing:**	440,152.90 usft	**Latitude:**	32° 12' 31.678 N
	+E/-W	0.0 usft	**Easting:**	677,191.60 usft	**Longitude:**	103° 45' 37.583 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,559.0 usft
Grid Convergence:		0.31 °				

Wellbore OH

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	7/18/2023	6.39	59.79	47,247.14598259

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	179.64

Plan Survey Tool Program **Date** 7/18/2023

	Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.0	21,444.3	Plan 1 (OH)	XOM_R2OWSG MWD+IFR1+ OWSG MWD + IFR1 + Multi-St	

ExxonMobil

Planning Report

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Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**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	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,056.0	15.12	38.33	2,047.3	77.8	61.5	2.00	2.00	0.00	38.33	
6,441.3	15.12	38.33	6,280.7	975.1	770.9	0.00	0.00	0.00	0.00	
7,197.3	0.00	0.00	7,028.0	1,052.9	832.4	2.00	-2.00	0.00	180.00	
9,905.1	0.00	0.00	9,735.8	1,052.9	832.4	0.00	0.00	0.00	0.00	
11,030.1	90.00	179.64	10,452.0	336.7	836.9	8.00	0.00	0.00	179.64	305H_FTP
13,570.6	90.00	179.64	10,452.0	-2,203.7	852.7	0.00	0.00	0.00	0.00	305H_PP1
16,210.6	90.00	179.64	10,452.0	-4,843.7	869.1	0.00	0.00	0.00	0.00	305H_PP2
18,855.6	90.00	179.64	10,452.0	-7,488.7	885.6	0.00	0.00	0.00	0.00	305H_PP3
21,394.3	90.00	179.64	10,452.0	-10,027.3	901.4	0.00	0.00	0.00	0.00	305H_LTP
21,444.3	90.00	179.64	10,452.0	-10,077.3	901.7	0.00	0.00	0.00	0.00	305H_BHL

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 305H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3559+30) @ 3589.0usft
Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**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
305H_SHL									
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	2.00	38.33	1,400.0	1.4	1.1	-1.4	2.00	2.00	0.00
1,500.0	4.00	38.33	1,499.8	5.5	4.3	-5.4	2.00	2.00	0.00
1,600.0	6.00	38.33	1,599.5	12.3	9.7	-12.2	2.00	2.00	0.00
1,700.0	8.00	38.33	1,698.7	21.9	17.3	-21.8	2.00	2.00	0.00
1,800.0	10.00	38.33	1,797.5	34.1	27.0	-34.0	2.00	2.00	0.00
1,900.0	12.00	38.33	1,895.6	49.1	38.8	-48.9	2.00	2.00	0.00
2,000.0	14.00	38.33	1,993.1	66.8	52.8	-66.4	2.00	2.00	0.00
2,056.0	15.12	38.33	2,047.3	77.8	61.5	-77.4	2.00	2.00	0.00
2,100.0	15.12	38.33	2,089.7	86.8	68.6	-86.4	0.00	0.00	0.00
2,200.0	15.12	38.33	2,186.3	107.3	84.8	-106.7	0.00	0.00	0.00
2,300.0	15.12	38.33	2,282.8	127.7	101.0	-127.1	0.00	0.00	0.00
2,400.0	15.12	38.33	2,379.3	148.2	117.2	-147.4	0.00	0.00	0.00
2,500.0	15.12	38.33	2,475.9	168.6	133.3	-167.8	0.00	0.00	0.00
2,600.0	15.12	38.33	2,572.4	189.1	149.5	-188.2	0.00	0.00	0.00
2,700.0	15.12	38.33	2,669.0	209.6	165.7	-208.5	0.00	0.00	0.00
2,800.0	15.12	38.33	2,765.5	230.0	181.9	-228.9	0.00	0.00	0.00
2,900.0	15.12	38.33	2,862.0	250.5	198.0	-249.2	0.00	0.00	0.00
3,000.0	15.12	38.33	2,958.6	271.0	214.2	-269.6	0.00	0.00	0.00
3,100.0	15.12	38.33	3,055.1	291.4	230.4	-290.0	0.00	0.00	0.00
3,200.0	15.12	38.33	3,151.7	311.9	246.6	-310.3	0.00	0.00	0.00
3,300.0	15.12	38.33	3,248.2	332.3	262.8	-330.7	0.00	0.00	0.00
3,400.0	15.12	38.33	3,344.7	352.8	278.9	-351.0	0.00	0.00	0.00
3,500.0	15.12	38.33	3,441.3	373.3	295.1	-371.4	0.00	0.00	0.00
3,600.0	15.12	38.33	3,537.8	393.7	311.3	-391.8	0.00	0.00	0.00
3,700.0	15.12	38.33	3,634.3	414.2	327.5	-412.1	0.00	0.00	0.00
3,800.0	15.12	38.33	3,730.9	434.6	343.6	-432.5	0.00	0.00	0.00
3,900.0	15.12	38.33	3,827.4	455.1	359.8	-452.8	0.00	0.00	0.00
4,000.0	15.12	38.33	3,924.0	475.6	376.0	-473.2	0.00	0.00	0.00
4,100.0	15.12	38.33	4,020.5	496.0	392.2	-493.6	0.00	0.00	0.00
4,200.0	15.12	38.33	4,117.0	516.5	408.4	-513.9	0.00	0.00	0.00
4,300.0	15.12	38.33	4,213.6	536.9	424.5	-534.3	0.00	0.00	0.00
4,400.0	15.12	38.33	4,310.1	557.4	440.7	-554.6	0.00	0.00	0.00
4,500.0	15.12	38.33	4,406.6	577.9	456.9	-575.0	0.00	0.00	0.00
4,600.0	15.12	38.33	4,503.2	598.3	473.1	-595.3	0.00	0.00	0.00
4,700.0	15.12	38.33	4,599.7	618.8	489.2	-615.7	0.00	0.00	0.00
4,800.0	15.12	38.33	4,696.3	639.3	505.4	-636.1	0.00	0.00	0.00
4,900.0	15.12	38.33	4,792.8	659.7	521.6	-656.4	0.00	0.00	0.00
5,000.0	15.12	38.33	4,889.3	680.2	537.8	-676.8	0.00	0.00	0.00
5,100.0	15.12	38.33	4,985.9	700.6	553.9	-697.1	0.00	0.00	0.00
5,200.0	15.12	38.33	5,082.4	721.1	570.1	-717.5	0.00	0.00	0.00
5,300.0	15.12	38.33	5,179.0	741.6	586.3	-737.9	0.00	0.00	0.00
5,400.0	15.12	38.33	5,275.5	762.0	602.5	-758.2	0.00	0.00	0.00
5,500.0	15.12	38.33	5,372.0	782.5	618.7	-778.6	0.00	0.00	0.00
5,600.0	15.12	38.33	5,468.6	802.9	634.8	-798.9	0.00	0.00	0.00
5,700.0	15.12	38.33	5,565.1	823.4	651.0	-819.3	0.00	0.00	0.00
5,800.0	15.12	38.33	5,661.6	843.9	667.2	-839.7	0.00	0.00	0.00
5,900.0	15.12	38.33	5,758.2	864.3	683.4	-860.0	0.00	0.00	0.00
6,000.0	15.12	38.33	5,854.7	884.8	699.5	-880.4	0.00	0.00	0.00
6,100.0	15.12	38.33	5,951.3	905.3	715.7	-900.7	0.00	0.00	0.00
6,200.0	15.12	38.33	6,047.8	925.7	731.9	-921.1	0.00	0.00	0.00
6,300.0	15.12	38.33	6,144.3	946.2	748.1	-941.5	0.00	0.00	0.00

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 305H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3559+30) @ 3589.0usft
Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**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)
6,400.0	15.12	38.33	6,240.9	966.6	764.3	-961.8	0.00	0.00	0.00
6,441.3	15.12	38.33	6,280.7	975.1	770.9	-970.2	0.00	0.00	0.00
6,500.0	13.95	38.33	6,337.6	986.6	780.1	-981.7	2.00	-2.00	0.00
6,600.0	11.95	38.33	6,435.0	1,004.2	794.0	-999.2	2.00	-2.00	0.00
6,700.0	9.95	38.33	6,533.2	1,019.1	805.7	-1,014.0	2.00	-2.00	0.00
6,800.0	7.95	38.33	6,632.0	1,031.3	815.4	-1,026.2	2.00	-2.00	0.00
6,900.0	5.95	38.33	6,731.2	1,040.8	822.9	-1,035.6	2.00	-2.00	0.00
7,000.0	3.95	38.33	6,830.9	1,047.6	828.2	-1,042.3	2.00	-2.00	0.00
7,100.0	1.95	38.33	6,930.7	1,051.6	831.4	-1,046.3	2.00	-2.00	0.00
7,197.3	0.00	0.00	7,028.0	1,052.9	832.4	-1,047.6	2.00	-2.00	0.00
9,905.1	0.00	0.00	9,735.8	1,052.9	832.4	-1,047.6	0.00	0.00	0.00
10,000.0	7.59	179.64	9,830.4	1,046.6	832.5	-1,041.4	8.00	8.00	0.00
10,100.0	15.59	179.64	9,928.3	1,026.5	832.6	-1,021.3	8.00	8.00	0.00
10,200.0	23.59	179.64	10,022.4	993.0	832.8	-987.8	8.00	8.00	0.00
10,300.0	31.59	179.64	10,111.0	946.7	833.1	-941.5	8.00	8.00	0.00
10,400.0	39.59	179.64	10,192.2	888.6	833.5	-883.3	8.00	8.00	0.00
10,500.0	47.59	179.64	10,264.6	819.7	833.9	-814.4	8.00	8.00	0.00
10,600.0	55.59	179.64	10,326.7	741.4	834.4	-736.1	8.00	8.00	0.00
10,700.0	63.59	179.64	10,377.3	655.2	834.9	-650.0	8.00	8.00	0.00
10,800.0	71.59	179.64	10,415.4	562.9	835.5	-557.6	8.00	8.00	0.00
10,900.0	79.59	179.64	10,440.2	466.1	836.1	-460.8	8.00	8.00	0.00
11,000.0	87.59	179.64	10,451.4	366.8	836.7	-361.5	8.00	8.00	0.00
11,030.1	90.00	179.64	10,452.0	336.7	836.9	-331.4	8.00	8.00	0.00
305H_FTP									
11,100.0	90.00	179.64	10,452.0	266.8	837.3	-261.5	0.00	0.00	0.00
11,200.0	90.00	179.64	10,452.0	166.8	838.0	-161.5	0.00	0.00	0.00
11,300.0	90.00	179.64	10,452.0	66.8	838.6	-61.5	0.00	0.00	0.00
11,400.0	90.00	179.64	10,452.0	-33.2	839.2	38.5	0.00	0.00	0.00
11,500.0	90.00	179.64	10,452.0	-133.2	839.8	138.5	0.00	0.00	0.00
11,600.0	90.00	179.64	10,452.0	-233.2	840.4	238.5	0.00	0.00	0.00
11,700.0	90.00	179.64	10,452.0	-333.2	841.1	338.5	0.00	0.00	0.00
11,800.0	90.00	179.64	10,452.0	-433.2	841.7	438.5	0.00	0.00	0.00
11,900.0	90.00	179.64	10,452.0	-533.2	842.3	538.5	0.00	0.00	0.00
12,000.0	90.00	179.64	10,452.0	-633.2	842.9	638.5	0.00	0.00	0.00
12,100.0	90.00	179.64	10,452.0	-733.2	843.6	738.5	0.00	0.00	0.00
12,200.0	90.00	179.64	10,452.0	-833.2	844.2	838.5	0.00	0.00	0.00
12,300.0	90.00	179.64	10,452.0	-933.2	844.8	938.5	0.00	0.00	0.00
12,400.0	90.00	179.64	10,452.0	-1,033.2	845.4	1,038.5	0.00	0.00	0.00
12,500.0	90.00	179.64	10,452.0	-1,133.2	846.0	1,138.5	0.00	0.00	0.00
12,600.0	90.00	179.64	10,452.0	-1,233.2	846.7	1,238.5	0.00	0.00	0.00
12,700.0	90.00	179.64	10,452.0	-1,333.2	847.3	1,338.5	0.00	0.00	0.00
12,800.0	90.00	179.64	10,452.0	-1,433.2	847.9	1,438.5	0.00	0.00	0.00
12,900.0	90.00	179.64	10,452.0	-1,533.2	848.5	1,538.5	0.00	0.00	0.00
13,000.0	90.00	179.64	10,452.0	-1,633.2	849.2	1,638.5	0.00	0.00	0.00
13,100.0	90.00	179.64	10,452.0	-1,733.2	849.8	1,738.5	0.00	0.00	0.00
13,200.0	90.00	179.64	10,452.0	-1,833.2	850.4	1,838.5	0.00	0.00	0.00
13,300.0	90.00	179.64	10,452.0	-1,933.2	851.0	1,938.5	0.00	0.00	0.00
13,400.0	90.00	179.64	10,452.0	-2,033.2	851.6	2,038.5	0.00	0.00	0.00
13,500.0	90.00	179.64	10,452.0	-2,133.2	852.3	2,138.5	0.00	0.00	0.00
13,570.6	90.00	179.64	10,452.0	-2,203.7	852.7	2,209.0	0.00	0.00	0.00
305H_PP1									
13,600.0	90.00	179.64	10,452.0	-2,233.1	852.9	2,238.5	0.00	0.00	0.00
13,700.0	90.00	179.64	10,452.0	-2,333.1	853.5	2,338.5	0.00	0.00	0.00
13,800.0	90.00	179.64	10,452.0	-2,433.1	854.1	2,438.5	0.00	0.00	0.00

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Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 305H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3559+30) @ 3589.0usft
Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**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)
13,900.0	90.00	179.64	10,452.0	-2,533.1	854.7	2,538.5	0.00	0.00	0.00
14,000.0	90.00	179.64	10,452.0	-2,633.1	855.4	2,638.5	0.00	0.00	0.00
14,100.0	90.00	179.64	10,452.0	-2,733.1	856.0	2,738.5	0.00	0.00	0.00
14,200.0	90.00	179.64	10,452.0	-2,833.1	856.6	2,838.5	0.00	0.00	0.00
14,300.0	90.00	179.64	10,452.0	-2,933.1	857.2	2,938.5	0.00	0.00	0.00
14,400.0	90.00	179.64	10,452.0	-3,033.1	857.9	3,038.5	0.00	0.00	0.00
14,500.0	90.00	179.64	10,452.0	-3,133.1	858.5	3,138.5	0.00	0.00	0.00
14,600.0	90.00	179.64	10,452.0	-3,233.1	859.1	3,238.5	0.00	0.00	0.00
14,700.0	90.00	179.64	10,452.0	-3,333.1	859.7	3,338.5	0.00	0.00	0.00
14,800.0	90.00	179.64	10,452.0	-3,433.1	860.3	3,438.5	0.00	0.00	0.00
14,900.0	90.00	179.64	10,452.0	-3,533.1	861.0	3,538.5	0.00	0.00	0.00
15,000.0	90.00	179.64	10,452.0	-3,633.1	861.6	3,638.5	0.00	0.00	0.00
15,100.0	90.00	179.64	10,452.0	-3,733.1	862.2	3,738.5	0.00	0.00	0.00
15,200.0	90.00	179.64	10,452.0	-3,833.1	862.8	3,838.5	0.00	0.00	0.00
15,300.0	90.00	179.64	10,452.0	-3,933.1	863.5	3,938.5	0.00	0.00	0.00
15,400.0	90.00	179.64	10,452.0	-4,033.1	864.1	4,038.5	0.00	0.00	0.00
15,500.0	90.00	179.64	10,452.0	-4,133.1	864.7	4,138.5	0.00	0.00	0.00
15,600.0	90.00	179.64	10,452.0	-4,233.1	865.3	4,238.5	0.00	0.00	0.00
15,700.0	90.00	179.64	10,452.0	-4,333.1	865.9	4,338.5	0.00	0.00	0.00
15,800.0	90.00	179.64	10,452.0	-4,433.1	866.6	4,438.5	0.00	0.00	0.00
15,900.0	90.00	179.64	10,452.0	-4,533.1	867.2	4,538.5	0.00	0.00	0.00
16,000.0	90.00	179.64	10,452.0	-4,633.1	867.8	4,638.5	0.00	0.00	0.00
16,100.0	90.00	179.64	10,452.0	-4,733.1	868.4	4,738.5	0.00	0.00	0.00
16,200.0	90.00	179.64	10,452.0	-4,833.1	869.1	4,838.5	0.00	0.00	0.00
16,210.6	90.00	179.64	10,452.0	-4,843.7	869.1	4,849.1	0.00	0.00	0.00
305H_PP2									
16,300.0	90.00	179.64	10,452.0	-4,933.1	869.7	4,938.5	0.00	0.00	0.00
16,400.0	90.00	179.64	10,452.0	-5,033.1	870.3	5,038.5	0.00	0.00	0.00
16,500.0	90.00	179.64	10,452.0	-5,133.1	870.9	5,138.5	0.00	0.00	0.00
16,600.0	90.00	179.64	10,452.0	-5,233.1	871.5	5,238.5	0.00	0.00	0.00
16,700.0	90.00	179.64	10,452.0	-5,333.1	872.2	5,338.5	0.00	0.00	0.00
16,800.0	90.00	179.64	10,452.0	-5,433.1	872.8	5,438.5	0.00	0.00	0.00
16,900.0	90.00	179.64	10,452.0	-5,533.1	873.4	5,538.5	0.00	0.00	0.00
17,000.0	90.00	179.64	10,452.0	-5,633.1	874.0	5,638.5	0.00	0.00	0.00
17,100.0	90.00	179.64	10,452.0	-5,733.1	874.7	5,738.5	0.00	0.00	0.00
17,200.0	90.00	179.64	10,452.0	-5,833.1	875.3	5,838.5	0.00	0.00	0.00
17,300.0	90.00	179.64	10,452.0	-5,933.1	875.9	5,938.5	0.00	0.00	0.00
17,400.0	90.00	179.64	10,452.0	-6,033.1	876.5	6,038.5	0.00	0.00	0.00
17,500.0	90.00	179.64	10,452.0	-6,133.1	877.1	6,138.5	0.00	0.00	0.00
17,600.0	90.00	179.64	10,452.0	-6,233.1	877.8	6,238.5	0.00	0.00	0.00
17,700.0	90.00	179.64	10,452.0	-6,333.1	878.4	6,338.5	0.00	0.00	0.00
17,800.0	90.00	179.64	10,452.0	-6,433.1	879.0	6,438.5	0.00	0.00	0.00
17,900.0	90.00	179.64	10,452.0	-6,533.1	879.6	6,538.5	0.00	0.00	0.00
18,000.0	90.00	179.64	10,452.0	-6,633.1	880.2	6,638.5	0.00	0.00	0.00
18,100.0	90.00	179.64	10,452.0	-6,733.1	880.9	6,738.5	0.00	0.00	0.00
18,200.0	90.00	179.64	10,452.0	-6,833.1	881.5	6,838.5	0.00	0.00	0.00
18,300.0	90.00	179.64	10,452.0	-6,933.1	882.1	6,938.5	0.00	0.00	0.00
18,400.0	90.00	179.64	10,452.0	-7,033.1	882.7	7,038.5	0.00	0.00	0.00
18,500.0	90.00	179.64	10,452.0	-7,133.1	883.4	7,138.5	0.00	0.00	0.00
18,600.0	90.00	179.64	10,452.0	-7,233.1	884.0	7,238.5	0.00	0.00	0.00
18,700.0	90.00	179.64	10,452.0	-7,333.1	884.6	7,338.5	0.00	0.00	0.00
18,800.0	90.00	179.64	10,452.0	-7,433.0	885.2	7,438.5	0.00	0.00	0.00
18,855.7	90.00	179.64	10,452.0	-7,488.7	885.6	7,494.1	0.00	0.00	0.00

ExxonMobil

Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 305H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3559+30) @ 3589.0usft
Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**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)
305H_PP3									
18,900.0	90.00	179.64	10,452.0	-7,533.0	885.8	7,538.5	0.00	0.00	0.00
19,000.0	90.00	179.64	10,452.0	-7,633.0	886.5	7,638.5	0.00	0.00	0.00
19,100.0	90.00	179.64	10,452.0	-7,733.0	887.1	7,738.5	0.00	0.00	0.00
19,200.0	90.00	179.64	10,452.0	-7,833.0	887.7	7,838.5	0.00	0.00	0.00
19,300.0	90.00	179.64	10,452.0	-7,933.0	888.3	7,938.5	0.00	0.00	0.00
19,400.0	90.00	179.64	10,452.0	-8,033.0	889.0	8,038.5	0.00	0.00	0.00
19,500.0	90.00	179.64	10,452.0	-8,133.0	889.6	8,138.5	0.00	0.00	0.00
19,600.0	90.00	179.64	10,452.0	-8,233.0	890.2	8,238.5	0.00	0.00	0.00
19,700.0	90.00	179.64	10,452.0	-8,333.0	890.8	8,338.5	0.00	0.00	0.00
19,800.0	90.00	179.64	10,452.0	-8,433.0	891.4	8,438.5	0.00	0.00	0.00
19,900.0	90.00	179.64	10,452.0	-8,533.0	892.1	8,538.5	0.00	0.00	0.00
20,000.0	90.00	179.64	10,452.0	-8,633.0	892.7	8,638.5	0.00	0.00	0.00
20,100.0	90.00	179.64	10,452.0	-8,733.0	893.3	8,738.5	0.00	0.00	0.00
20,200.0	90.00	179.64	10,452.0	-8,833.0	893.9	8,838.5	0.00	0.00	0.00
20,300.0	90.00	179.64	10,452.0	-8,933.0	894.6	8,938.5	0.00	0.00	0.00
20,400.0	90.00	179.64	10,452.0	-9,033.0	895.2	9,038.5	0.00	0.00	0.00
20,500.0	90.00	179.64	10,452.0	-9,133.0	895.8	9,138.5	0.00	0.00	0.00
20,600.0	90.00	179.64	10,452.0	-9,233.0	896.4	9,238.5	0.00	0.00	0.00
20,700.0	90.00	179.64	10,452.0	-9,333.0	897.0	9,338.5	0.00	0.00	0.00
20,800.0	90.00	179.64	10,452.0	-9,433.0	897.7	9,438.5	0.00	0.00	0.00
20,900.0	90.00	179.64	10,452.0	-9,533.0	898.3	9,538.5	0.00	0.00	0.00
21,000.0	90.00	179.64	10,452.0	-9,633.0	898.9	9,638.5	0.00	0.00	0.00
21,100.0	90.00	179.64	10,452.0	-9,733.0	899.5	9,738.5	0.00	0.00	0.00
21,200.0	90.00	179.64	10,452.0	-9,833.0	900.2	9,838.5	0.00	0.00	0.00
21,300.0	90.00	179.64	10,452.0	-9,933.0	900.8	9,938.5	0.00	0.00	0.00
21,394.3	90.00	179.64	10,452.0	-10,027.3	901.4	10,032.8	0.00	0.00	0.00
305H_LTP									
21,400.0	90.00	179.64	10,452.0	-10,033.0	901.4	10,038.5	0.00	0.00	0.00
21,444.3	90.00	179.64	10,452.0	-10,077.3	901.7	10,082.8	0.00	0.00	0.00
305H_BHL									

ExxonMobil
Planning Report

Database:	LMRKPROD3	**Local Co-ordinate Reference:**	Well 305H
Company:	Long Lead_Well Planning	**TVD Reference:**	RKB(3559+30) @ 3589.0usft
Project:	EDDY	**MD Reference:**	RKB(3559+30) @ 3589.0usft
Site:	PLU 15TWR	**North Reference:**	Grid
Well:	305H	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	OH		
Design:	Plan 1		

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
305H_SHL - plan hits target center - Rectangle (sides W20.0 H20.0 D0.0)	0.00	0.00	0.0	0.0	0.0	440,152.90	677,191.60	32° 12' 31.678 N	103° 45' 37.583 W
305H_LTP - plan misses target center by 26.5usft at 21394.3usft MD (10452.0 TVD, -10027.3 N, 901.4 E) - Point	0.00	0.00	10,425.5	-10,027.3	901.2	430,125.60	678,092.80	32° 10' 52.401 N	103° 45' 27.719 W
305H_PP3 - plan misses target center by 0.2usft at 18855.7usft MD (10452.0 TVD, -7488.7 N, 885.6 E) - Point	0.00	0.00	10,452.0	-7,488.7	885.4	432,664.20	678,077.00	32° 11' 17.523 N	103° 45' 27.745 W
305H_FTP - plan hits target center - Point	0.00	0.00	10,452.0	336.7	836.9	440,489.60	678,028.50	32° 12' 34.966 N	103° 45' 27.822 W
305H_BHL - plan misses target center by 0.2usft at 21444.3usft MD (10452.0 TVD, -10077.3 N, 901.7 E) - Point	0.00	0.00	10,452.0	-10,077.3	901.5	430,075.60	678,093.10	32° 10' 51.906 N	103° 45' 27.719 W
305H_PP2 - plan misses target center by 0.1usft at 16210.6usft MD (10452.0 TVD, -4843.7 N, 869.1 E) - Point	0.00	0.00	10,452.0	-4,843.7	869.0	435,309.20	678,060.60	32° 11' 43.699 N	103° 45' 27.771 W
305H_PP1 - plan hits target center - Point	0.00	0.00	10,452.0	-2,203.7	852.7	437,949.20	678,044.30	32° 12' 9.825 N	103° 45' 27.796 W

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 15 TWR 305H
LOCATION:	Sec 22-24S-31E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2745232** on 09/14/2023. 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

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately 758 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. ***Set depth checked and approved by BLM geologist.***

    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 **7-5/8** 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 7028'**

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. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

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 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)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

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 (575-361-2822 Eddy 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 267107

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 267107
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Prior to the submission of this C-104, there was a C-103 NOI submitted for approval. The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval. This action is currently under review from our legal department	7/22/2024