R	U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 11/06/2023
	Well Name: POKER LAKE UNIT 13-24 PC	Well Location: T24S / R29E / SEC 13 / SWNE / 32.218178 / -103.936435	County or Parish/State: EDDY / NM
	Well Number: 106Y	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
	Lease Number: NMNM005912, NMNM05912	Unit or CA Name:	Unit or CA Number: NMNM71016X
	US Well Number: 3001553559	Well Status: Plugged and Abandoned	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2757428

Type of Submission: Notice of Intent

Date Sundry Submitted: 10/27/2023

Date proposed operation will begin: 10/27/2023

Type of Action: APD Change Time Sundry Submitted: 03:55

Procedure Description: ** Skid Original Wellbore, and Surface Hole Location Change XTO Energy, Inc requests permission to skid the original wellbore of the Poker Lake Unit 13-24 PC 106Y (plugged well) and to replace it with a new well skid original wellbore of the Poker Lake Unit 13-24 PC 106H. Original Wellbore of the Poker Lake Unit 13-24 PC 106Y, from 2459'FNL & 2310'FEL, LAT 32.21805663, LONG -103.9369702 to New Wellbore: Poker Lake Unit 13-24 PC 106H 2367'FSL & 1986'FEL, LAT 32.218054, LONG -103.936485. No Additional Surface Disturbance Attachments: From 3160-3 C102 Drilling Program Directional Plan Well Site Layout Casing Specs Sheet

NOI Attachments

Procedure Description

PLU_13_24_PC_NEW_106H_Sundry_Attachments_v3_20231102222059.pdf

County or Parish/State: EDDY? eived by OCD: 11/9/2023 4:28:55 PM Well Name: POKER LAKE UNIT 13-24 Well Location: T24S / R29E / SEC 13 / PC SWNE / 32.218178 / -103.936435 NM Well Number: 106Y Type of Well: CONVENTIONAL GAS Allottee or Tribe Name: WELL Unit or CA Name: Lease Number: NMNM005912, Unit or CA Number: NMNM71016X NMNM05912 **US Well Number: 3001553559 Operator: XTO PERMIAN** Well Status: Plugged and Abandoned OPERATING LLC

Conditions of Approval

Specialist Review

PLU_13_24_PC_Batch_Wells_Sundries_COA_20231106051300.pdf

Authorized

PLU_13_24_PC_NEW_106H_Sundry_3160_3_signed_20231106142658.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

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 6401 Holiday Hill Road, Bldg 5

City: Midland

Phone: (432) 218-3671

Email address: CASSIE.EVANS@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

Email address:

City: Phone: State:

State: TX

Zip:

Signed on: NOV 02, 2023 01:42 PM

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved

Signature: Chris Walls

BLM POC Title: Petroleum Engineer

BLM POC Email Address: cwalls@blm.gov

Disposition Date: 11/06/2023

R

Received by OCD: 11/9/20	23 4:28:55 PM				Page 3 of
Form 3160-5 (June 2019)	DEPARTMENT OF THE	INTERIOR		5 Lease Serial No	FORM APPROVED OMB No. 1004-0137 xpires: October 31, 2021
			us	6. If Indian, Allottee	NMNM05912
Do not use	this form for proposals	to drill or to r	e-enter an		
SUBN	IIT IN TRIPLICATE - Other inst	ructions on page 2	2	U	reement, Name and/or No.
1. Type of Well		, 0		NMNM71016X	
	Gas Well Other			8. Well Name and N	^{0.} POKER LAKE UNIT 13-24 PC/106H
2. Name of Operator XTO PER	MIAN OPERATING LLC			9. API Well No.	
3a. Address 6401 HOLIDAY H	HILL ROAD BLDG 5, MIDLANE), 3b. Phone No. <i>(in</i> (432) 683-2277	clude area code) 10. Field and Pool o PURPLE SAGE;	
4. Location of Well <i>(Footage, Se</i> SEC 13/T24S/R29E/NMP	ec., T.,R.,M., or Survey Description	<i>n</i>)		11. Country or Paris EDDY/NM	h, State
12	2. CHECK THE APPROPRIATE	BOX(ES) TO INDIC	CATE NATURE	OF NOTICE, REPORT OR O	THER DATA
TYPE OF SUBMISSION			TY	PE OF ACTION	
✓ Notice of Intent	Acidize Alter Casing	Deepen Deepar	ic Fracturing	Production (Start/Resume Reclamation) Water Shut-Off Well Integrity
Subsequent Report	DEPARTMENT OF THE INTE BUREAU OF LAND MANAGI SUNDRY NOTICES AND REPORT Do not use this form for proposals to d abandoned well. Use Form 3160-3 (APD) SUBMIT IN TRIPLICATE - Other instruction Type of Well			Recomplete	Other
Final Abandonment Notic			d Abandon ck	Temporarily Abandon Water Disposal	
completion of the involved of completed. Final Abandonm is ready for final inspection.) ** Skid Original Wellborn XTO Energy, Inc request a new well skid original Original Wellbore of the Wellbore: Poker Lake U	perations. If the operation results ent Notices must be filed only after e, and Surface Hole Location C sts permission to skid the origin wellbore of the Poker Lake Uni Poker Lake Unit 13-24 PC 106 nit 13-24 PC 106H 2367FSL &	in a multiple completer all requirements, in Change and wellbore of the lat wellbore of the lot 13-24 PC 106H. SY, from 2459FNL	etion or recomp ncluding reclan Poker Lake Ur & 2310FEL, L	letion in a new interval, a Form nation, have been completed and hit 13-24 PC 106Y (plugged v AT 32.21805663, LONG -103	3160-4 must be filed once testing has been I the operator has detennined that the site vell) and to replace it with
From 3160-3 C102 Drilling Program Directional Plan					
		Printed/Typed)			
	- · · · · · · · · · · · · · · · · · · ·		Regulator	y Analyst	
	mission)	D	ate	11/02/	2023
	THE SPAC	E FOR FEDEF	RAL OR ST	ATE OFICE USE	
Approved by					
CHRISTOPHER WALLS / P	h: (575) 234-2234 / Approved		Title Petro	oleum Engineer	11/06/2023 Date
	gal or equitable title to those right			RLSBAD	

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

Well Site Layout Casing Specs Sheet

Location of Well

0. SHL: SWNE / 2459 FNL / 2310 FEL / TWSP: 24S / RANGE: 29E / SECTION: 13 / LAT: 32.218178 / LONG: -103.936435 (TVD: 0 feet, MD: 0 feet) PPP: NWSE / 2740 FNL / 1650 FEL / TWSP: 24S / RANGE: 29E / SECTION: 13 / LAT: 32.217276 / LONG: -103.934837 (TVD: 10424 feet, MD: 10775 feet) BHL: SWSE / 2367 FSL / 1986 FEL / TWSP: 24S / RANGE: 29E / SECTION: 24 / LAT: 32.196199 / LONG: -103.93481 (TVD: 10424 feet, MD: 18443 feet)

<i>d by OCD: 11/9/2023 4:28:55 PM</i>				FORM		
Form 3160 - 3 (August 2007)				OMB	APPROVED No. 1004-0137	
UNITED STATE					July 31, 2010	
DEPARTMENT OF THE				 Lease Serial No. NMNM05912 		
BUREAU OF LAND MAI				6. If Indian, Allote	e or Tribe Name	
APPLICATION FOR PERMIT TO	DRILL O	RREENIER				
la. Type of work: DRILL REENT	ſER			7. If Unit or CA Ag	reement, Name and	
lb. Type of Well: 🔽 Oil Well 🗌 Gas Well 🗌 Other		ingle Zone Multi	ple Zone	 Lease Name and Poker Lake Unit 13 		
2. Name of Operator XTO Energy, Inc.				9. API Well No.		
2a Addross	3b Phone N	D. (include area code)		10. Field and Pool, or	r Evaloratory	
^{3a.} Address 6401 Holiday Hill Road, Bldg 5 Midland, Texas 79701	970-769-6			Purple Sage; Wol		
4. Location of Well (Report location clearly and in accordance with a	ny State requirer	nents.*)		11. Sec., T. R. M. or		
At surface SWNE / 2459 FNL / 2160 FEL / LAT 32.2180	054 / LONG ·	103.936485		SEC 13 / T24S / F	R29E / NMP	
At proposed prod. zone LOT 36 / 50 FSL / 1320 FEL / LAT	32.123039	LONG -103.96799)7			
14. Distance in miles and direction from nearest town or post office*				12. County or Parish Eddy	13. Sta NM	
 15. Distance from proposed* 2459 feet location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 	16. No. of	16. No. of acres in lease 17. Spaci 640		ing Unit dedicated to this well		
 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 30 feet 	19. Propose 10404 fee	d Depth t / 20677 feet		M/BIA Bond No. on file COB000050		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3094 feet	22. Approx 10/27/23	imate date work will sta	rt*	23. Estimated duration90 Days		
	24. Atta	chments				
The following, completed in accordance with the requirements of Onshe	ore Oil and Gas	Order No.1, must be a	ttached to th	nis form:		
 Well plat certified by a registered surveyor. A Drilling Plan. 		4. Bond to cover t Item 20 above).	he operatio	ons unless covered by a	n existing bond on	
3. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	n Lands, the	 Operator certifie Such other site BLM. 		formation and/or plans a	as may be required	
25. Signature Capoie Wang-	Name	(Printed/Typed)			Date	
Title		Cassie Evans			10/17/23	
Regulatory Coordinator						
Approved by (Signature)	Name	(Printed/Typed)			Date	
Title	Office	2			1	
Application approval does not warrant or certify that the applicant hol conduct operations thereon. Conditions of approval, if any, are attached.	lds legal or equ	itable title to those righ	its in the sul	bject lease which would	entitle the applican	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations as	crime for any p	person knowingly and within its jurisdiction	willfully to 1	nake to any department	or agency of the U	
(Continued on page 2)	2 to any mutter			*(1	structions on pa	
(continued on page 2)				(1115	nuctions on pa	

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INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

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

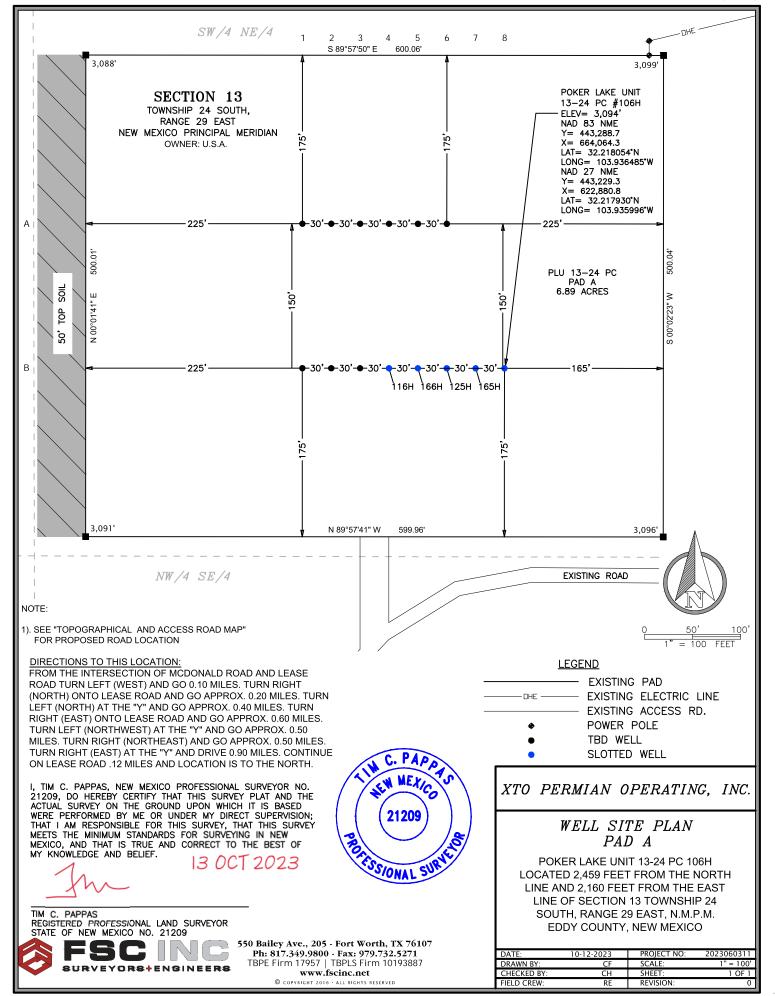
AMENDED REPORT

		•	WELL LO	OCATIO	N AND AC	REAGE DEDIC	CATION PLA	Т					
1	API Number	r		² Pool Cod	ode ³ Pool Name								
	30-015		982	20		Purple Sage;Wolfc	amp						
⁴ Property C	Code		I		⁵ Property	v Name			6 1	Well Number			
					POKER LAKE U	JNIT 13-24 PC				106H			
⁷ OGRID N	No.				⁸ Operator	r Name				⁹ Elevation			
373075	5			XI	FO PERMIAN O	PERATING, LLC			3,094'				
	¹⁰ Surface Location												
UL or lot no.	Section	Township	Range	Lot Idn	n Feet from th	e North/South line	Feet from the	East	t/West line	County			
G	13	24 S	29 E		2,459	NORTH	2,160	EAS	ST	EDDY			
			11 Bo	ttom Ho	le Location I	f Different From	n Surface						
UL or lot no.	Section	Township	Range	Lot Idn	1 Feet from th	e North/South line	Feet from the	East	t/West line	County			
J	1	24 S	29 E		2,367	SOUTH	1,986	EAS	ST	EDDY			
¹² Dedicated Acres	¹³ Joint of	r Infill ¹	⁴ Consolidation	Code ¹⁵ O	order No.								
640													

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	¹⁷ OPERATOR CERTIFICATION
LOT 3		LOT 1			the proposed bottom hole location or has a right to drill this well at this
SEC. 1 T24S R29E	280' 330'	<u>GRID AZ.=35</u> HORZ. DIST.=	9°34'33" 50.00'	SHL (NAD83 NME) LTP (NAD83 NME) Y = 443,288.7 Y = 453,367.4	location pursuant to a contract with an owner of such a mineral or wor interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Correct Content of the division of the
A BHL - 2,367'FSL 1,986'FEL		LTP 2,317' FSL 00 1,986' FEL OT	SEC. 6 T24S R30E	X = 664,064.3 X = 664,191.0 LAT. = 32.218054 °N LAT. = 32.245758 °N LONG. = 103.936485 °W LONG. = 103.935954 °W FTP (NAD83 NME) BHL (NAD83 NME) BHL (NAD83 NME) Y = 443,788.8 Y = 453,417.4 X = 664,236.9 X = 664,190.6 LAT. = 32.24572 °N LAT. = 32.245895 °N LONG. = 103.935920 °W LONG. = 103.935955 °W	Cassie Evans Printed Name cassie.evans@exxonmobil.com E-mail Address
330'				$\begin{array}{c c c c c c c c c c c c c c c c c c c $	18SURVEYOR 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.
SEC. 12 T24S R29E		8.70 [°]	SEC. 7 T24S R30E	$\begin{array}{rcrcrc} I = & 433,09383 \text{ IV} & , & X = & 604,87.03 \text{ IC} \\ J - Y = & 453,698.2 \text{ N} & , & X = & 664,849.6 \text{ E} \\ \hline \textbf{SHL} (\textbf{NAD27 NME}) & \textbf{LTP} (\textbf{NAD27 NME}) \\ Y = & 443,229.3 & Y = & 453,307.7 \\ X = & 622,880.8 & X = & 623,007.8 \\ \text{LAT.} = & 32,217930 \text{ °N} & \text{LAT.} = & 32,245634 \text{ °N} \\ \text{LONG.} = & 103.935996 \text{ °W} & \text{LONG.} = & 103.935464 \text{ °W} \\ \hline \textbf{FTP} (\textbf{NAD27 NME}) & \textbf{BHL} (\textbf{NAD27 NME}) \\ Y = & 443,729.4 & Y = & 453,357.7 \\ X = & 623,053.4 & X = & 623,007.5 \\ \text{LAT.} = & 32.219303 \text{ °N} & \text{LAT.} = & 32.245771 \text{ °N} \\ \text{LONG.} = & 103.935431 \text{ °W} & \text{LONG.} = & 103.935465 \text{ °W} \\ \hline \textbf{CORRE COORDINATES} (\textbf{NAD27 NME}) \\ \textbf{A} - Y = & 453,636.9 \text{ N} , & X = & 622,341.4 \text{ E} \end{array}$	10-12-2023 Date of Survey
		6RID AZ.=359:43 HORZ. DIST.=9,578		R - Y =450,903.3 R , $X =$ 622,371.4 L $R - Y =$ 450,903.4 N , $X =$ 622,375.8 E $D - Y =$ 443,688.8 N , $X =$ 622,375.8 E $D - Y =$ 443,034.6 N , $X =$ 622,375.8 E $F - Y =$ 443,034.7 N , $X =$ 622,392.5 E $F - Y =$ 443,034.7 N , $X =$ 622,371.6 E $G - Y =$ 445,687.9 N , $X =$ 623,710.9 E $H - Y =$ 443,389.9 N , $X =$ 623,698.9 E $I - Y =$ 453,638.6 N , $X =$ 623,666.4 E	KC/LM 20230 Signatue and Seal of Professional Surveyor: I I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NI 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND T ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISIC THAT I AM RESPONSIBLE FOR THIS SURVEY. THAT THIS SURV MEETIS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
SEC. 13		NMNM 0005912	SEC. 12 T24S R29E		TIM C. PAPPAS REGISTERED PROFESSIONAL LAND SURVEYOR STATE OF NEW MEXICO NO. 21209
SHL 2,459' FNL 2,160' FEL	F	FTP 1,959' FNL 1,986' FEL <u>GRID AZ.=19'02</u> HORZ. DIST.=52	<u>2'34"</u> 29.05'		TIM C. PAPPAS 21209 Certificate Number

Received by OCD: 11/9/2023 4:28:55 PM



Released to Imaging: 11/21/2023 12:43:33 PM

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

XTO Energy Inc. Poker Lake Unit 13-24 PC 106H Projected TD: 20677' MD / 10404' TVD SHL: 2459' FNL & 2160' FEL , Section 13, T24S, R29E BHL: 2367' FSL & 1986' FEL , Section 1, T24S, R29E Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	288'	Water
Top of Salt	525'	Water
Base of Salt	3100'	Water
Delaware	3305'	Water
Brushy Canyon	5764'	Water/Oil/Gas
Bone Spring	7063'	Water
1st Bone Spring	7920'	Water/Oil/Gas
2nd Bone Spring	8386'	Water/Oil/Gas
3rd Bone Spring	9180'	Water/Oil/Gas
Wolfcamp	10347'	Water/Oil/Gas
Wolfcamp X	10379'	Water/Oil/Gas
Wolfcamp Y	10443'	Water/Oil/Gas
Target/Land Curve	10404'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

*** Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 474.73' (50' 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 9643.5' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 20677 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9343.5 feet).

In the event of wellbore instability, XTO is submitting a secondary 4 string design to run an additona casing string as a

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade Collar		New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' - 474.73'	13.375	54.5	J-55	BTC	New	18.59	5.45	35.13
12.25	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.58	2.52	1.95
12.25	4000' - 9643.5'	7.625	29.7	HC L-80	Flush Joint	New	1.88	1.91	2.42
6.75	0' – 9543.5'	5.5	23	RY P-110	Semi-Premium	New	1.45	2.66	2.05
6.75	9543.5' - 20677'	5.5	23	RY P-110	Semi-Flush	New	1.45	2.44	2.16

 \cdot 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: 13-5/8" 10M top flange x 13-3/8" bottom
- B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange
 - \cdot 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

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 474.73'

 Tail: 480 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 +/- 9643.5' <u>1st Stage</u>

Optional Lead: 1560 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water) TOC: Surface Tail: 1800 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water) TOC: Brushy Canyon @ 5763.53

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: 3250 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 (5763.53') 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 Echometer. 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 +/- 20677'

Lead: 20 sxs NeoCe	m (mixed at 11.5 ppg	, 2.69 ft3/sx, 15.	00 gal/sx water) Top of Cement:	9343.5 feet
Tail: 770 sxs Versa	Cem (mixed at 13.2 p	og, 1.51 ft3/sx, 8.	38 gal/sx water) Top of Cement:	9843.5 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 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3662 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 13.375, 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		Muu Type	(ppg)	(sec/qt)	(cc)
0' - 474.73'	17.5	FW/Native	8.4-8.9	35-40	NC
474.73' - 9643.5'	12.25	FW / Cut Brine / Direct Emulsion / WBM	10.2-10.7	30-32	NC
9643.5' - 20677'	6.75	ОВМ	11-11.5	50-60	NC - 20

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

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

7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13.375 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 5951 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.

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

XTO Energy Inc. Poker Lake Unit 13-24 PC 106H (Secondary Design) Projected TD: 20677 MD / 10404 TVD SHL: 2459 FNL & 2160 FEL, Section 13, T245, R29E BHL: 2367 FSL & 1986 FEL, Section 1, T245, R29E Eddy County, NM

1. Geologic Name of Surface Formation Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	288'	Water
Top of Salt	525'	Water
Base of Salt	3100'	Water
Delaware	3305'	Water
Brushy Canyon	5764'	Water/Oil/Gas
Bone Spring	7063'	Water
1st Bone Spring Ss	7920'	Water/Oil/Gas
2nd Bone Spring Ss	8386'	Water/Oil/Gas
3rd Bone Spring Sh	9180'	Water/Oil/Gas
Wolfcamp	10347'	Water/Oil/Gas
Wolfcamp X	10379'	Water/Oil/Gas
Wolfcamp Y	10443'	Water/Oil/Gas
Target/Land Curve	10404'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

*** Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 475' (50' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 4261' and circulating cement to surface. The second intermediate will be 7.625 inch casing at 9860' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 20677 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9360 feet).

This secondary 4 string design is being submitted as a contingency to Poker Lake Unit 13-24 PC 106H primary design.

3. Casing Design

Hole Size	MD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 475'	13.375	54.5	J-55	BTC	New	2.07	5.45	35.11
12.25	0' – 4261'	9.625	40	J-55	BTC	New	1.46	2.05	3.70
8.75	0' – 4361'	7.625	29.7	RY P-110	Flush Joint	New	1.99	2.48	1.91
8.75	4361' – 9860'	7.625	29.7	HC L-80	Flush Joint	New	1.45	2.84	2.49
6.75	0' – 9760'	5.5	23	RY P-110	Semi-Premium	New	1.45	2.20	2.23
6.75	9760' - 20677'	5.5	23	RY P-110	Semi-Flush	New	1.45	2.07	6.89

Production casing meets the clearance requiremenets as tapered string crosses over before encountering the intermediate shoe, per
Onshore Order 2.3.B.1

• XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

XTO requests to not utilize centralizers in the curve and lateral

9.625 Collapse analyzed using 50% evacuation based on regional experience.

7.625 Collapse analyzed using 50% evacuation based on regional experience.
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 2M annular & Casaing 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 Svstem A. Starting Head: 13-5/8" 10M top flange x 13-3/8" bottom B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

Veilhead will be installed by manufacturer's representatives. • Manufacturer will monitor welding process to ensure appropriate temperature of seal. • Operator will test the 7-5/6" casing per BLM Onshore Order 2 • Wellhead Manufacturer representative will not be present for BOP test plug installation

Check casing size here

Rows hidden for unused formations

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 475'

Tail: 480 sxs Cla	ss C + 2% CaCl (mixed at	14.8 ppg, 1.35 ft3	/sx, 6.39 gal/sx water)
Top of Cement:	Surface		
Compressives:	12-hr =	250 psi	24 hr = 500 psi

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 4261'

Lead: 1780 sxs Class C (mixed at 12.9 ppg, 1.39 ft3/sx, 10.13 gal/sx water) Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water) Top of Cement: Surface Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9860' <u>1st Stage</u> Optional Lead: 90 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

 Optional Lead: 90 sxs Class C (mixed at 10.5 ppg, 2.// ft3/sx, 15.59 gal/sx water)

 TOC: 4061

 Tail: 380 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

 TOC: Brushy Canyon @ 5764

 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)

Leau. 0 3x3 Glas	5 C (mixed at 12.5 ppg, 2	io ito/sx, 5.0 i ga	ii/3X water)				
Tail: 460 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 (5764') 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% Satt + 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 to surface. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

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

Production Casing: 5.5, 23 New Semi-Flush, RY P-110 casing to be set at +/- 20677'

Lead: 10 sxs NeoCen	n (mixed at 11.5 pp	g, 2.69 ft3/sx, 15.00	gal/sx water) Top of Cement:	9360 feet
Tail: 770 sxs VersaCe	em (mixed at 13.2 p	opg, 1.51 ft3/sx, 8.38	gal/sx water) Top of Cement:	9843.5 feet
Compressives:	12-hr =	1375 psi	24 hr = 2285 psi	

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence. DV Tool can be hidden

Bradenhead squeeze hidden if not applicable

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum SM Hydril and a 13-5/8" minimum SM Double Ram BOP. MASP should not exceed 4744 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 13.375, 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. Temporary wellhead/diverter hidden if not needed

Check casing sizes here

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Hole Size	миа туре	(ppg)	(sec/qt)	(cc)
0' - 475'	17.5	FW/Native	8.4-8.9	35-40	NC
475' - 4261'	12.25	Brine	10.2-10.7	30-32	NC
4261' to 9860'	8.75	BDE/OBM or FW/Brine/WBM	9.5-10	30-32	NC
9860' to 20677'	6.75	OBM	13-13.5	50-60	NC - 20

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

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 10.0 ppg -10.5 ppg 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 13.375 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 703 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.

Check properties

Double check casing sizes in this statement

ROC

HP 532/547/549/552 - Eddy County, NM (NAD 27 NME) (HP552) - Poker Lake Unit 13-24 Pierce Canyon New SHL for 106H

ОН

Plan: Plan 1

Standard Planning Report

11 October, 2023

Received by OCD: 11/9/2023 4:28:55 PM

ExxonMobil

1 0.0		Plan 1 (OH)	,	XOMR2 OWSG				
Plan Survey Tool Pro Depth From (usft)	ogram Depth To (usft)	Date 10/11		Tool Name	R	emarks		
		(0.0	0.0	0.0		359.73	
		(u	sft)	(usft)	(usft)		(°)	
Vertical Section:		Depth F	rom (TVD)	+N/-S	+E/-W	•	Direction	
Audit Notes: Version:			Phase:	PLAN	Tie On	Depth:	0.0	
Design	Plan 1							
	IG	RF2020	10/10/2023	.,	6.44	.,	59.76	47,214.20260660
Magnetics	Model Na	ime	Sample Date	Declination (°)	1	Dip Aı (°)	-	Field Strength (nT)
Wellbore	ОН							
Grid Convergence:		0.21 °						
Position Uncertainty	+E/-VV	0.0 usit	Wellhead Ele		usfl		und Level:	3,094.0 ust
Well Position	+N/-S +E/-W	0.0 usft 0.0 usft	Northing: Easting:		43,229.67 usft 22,880.36 usft		ude: gitude:	32° 13' 4.552 N 103° 56' 9.589 V
Well	New SHL for 1	106H						
Position Uncertainty	-	0.0 usft	Slot Radius:	13-3				
Site Position: From:	Мар		Northing: Easting:	443,229 622,670	Eut	itude: Igitude:		32° 13' 4.559 N 103° 56' 12.031 W
Site	(HP552) - Pol	ker Lake Unit 13	-24 Pierce Canyor	1				
Map Zone:	New Mexico Ea	ast 3001						
Geo Datum:	NAD 1927 (NA	DCON CONUS	,	System Datum		Me		
Project Map System:		e 1927 (Exact so	County, NM (NAD 2	System Datum		Mo	an Sea Level	
-								
Wellbore: Design:	OH Plan 1							
Well:	New SHL for	106H		Survey Calcu	lation Method:	N	/inimum Curvature	
Site:		oker Lake Unit 1	3-24 Pierce	North Referen	nce:	G	Grid	
Project:	HP 532/547/ 27 NME)	549/552 - Eddy	County, NM (NAD	MD Reference			RKB30' @ 3124.0usft	· · · ·
Database: Company:	LMRKPROD ROC	13		TVD Reference	nate Reference	•••	Vell New SHL for 106 RKB30' @ 3124.0usft	

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Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 1		

Plan Sections

Measured			Vertical			Dogleg	Build	Turn		
Depth (usft)	Inclination (°)	Azimuth (°)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Rate (°/100usft)	Rate (°/100usft)	Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	4.00	200.00	899.8	-6.6	-2.4	2.00	2.00	0.00	200.00	
5,900.0	4.00	200.00	5,887.7	-334.3	-121.7	0.00	0.00	0.00	0.00	
6,100.0	0.00	0.00	6,087.5	-340.9	-124.1	2.00	-2.00	80.00	180.00	
9,843.5	0.00	0.00	9,831.0	-340.9	-124.1	0.00	0.00	0.00	0.00	
10,743.5	90.00	17.05	10,404.0	206.9	43.9	10.00	10.00	0.00	17.05	
11,609.5	90.00	359.73	10,404.0	1,060.3	169.8	2.00	0.00	-2.00	-90.00	
20,627.3	90.00	359.73	10,404.2	10,078.1	127.5	0.00	0.00	0.00	0.00 L	TP 13-24 PC 106H
20,677.3	90.00	359.73	10,404.2	10,128.1	127.2	0.00	0.00	0.00	0.00 E	3HL 13-24 PC 106H

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	2.00	200.00	800.0	-1.6	-0.6	-1.6	2.00	2.00	0.00
900.0	4.00	200.00	899.8	-6.6	-2.4	-6.5	2.00	2.00	0.00
1,000.0	4.00	200.00	999.6	-13.1	-4.8	-13.1	0.00	0.00	0.00
1,100.0	4.00	200.00	1,099.4	-19.7	-7.2	-19.6	0.00	0.00	0.00
1,200.0	4.00	200.00	1,199.1	-26.2	-9.5	-26.2	0.00	0.00	0.00
1,300.0	4.00	200.00	1,298.9	-32.8	-11.9	-32.7	0.00	0.00	0.00
1,400.0	4.00	200.00	1,398.6	-39.3	-14.3	-39.3	0.00	0.00	0.00
1,500.0	4.00	200.00	1,498.4	-45.9	-16.7	-45.8	0.00	0.00	0.00
1,600.0	4.00	200.00	1,598.1	-52.4	-19.1	-52.4	0.00	0.00	0.00
1,700.0	4.00	200.00	1,697.9	-59.0	-21.5	-58.9	0.00	0.00	0.00
1,800.0	4.00	200.00	1,797.6	-65.6	-23.9	-65.4	0.00	0.00	0.00
1,900.0	4.00	200.00	1,897.4	-72.1	-26.2	-72.0	0.00	0.00	0.00
2,000.0	4.00	200.00	1,997.2	-78.7	-28.6	-78.5	0.00	0.00	0.00
2,100.0	4.00	200.00	2,096.9	-85.2	-31.0	-85.1	0.00	0.00	0.00
2,200.0	4.00	200.00	2,196.7	-91.8	-33.4	-91.6	0.00	0.00	0.00
2,300.0	4.00	200.00	2,296.4	-98.3	-35.8	-98.2	0.00	0.00	0.00
2,400.0	4.00	200.00	2,396.2	-104.9	-38.2	-104.7	0.00	0.00	0.00
2,500.0	4.00	200.00	2,495.9	-111.4	-40.6	-111.2	0.00	0.00	0.00
2,600.0	4.00	200.00	2,595.7	-118.0	-42.9	-117.8	0.00	0.00	0.00
2,700.0	4.00	200.00	2,695.5	-124.5	-45.3	-124.3	0.00	0.00	0.00
2,800.0	4.00	200.00	2,795.2	-131.1	-47.7	-130.9	0.00	0.00	0.00
2,900.0	4.00	200.00	2,895.0	-137.7	-50.1	-137.4	0.00	0.00	0.00
3,000.0	4.00	200.00	2,994.7	-144.2	-52.5	-144.0	0.00	0.00	0.00
3,100.0	4.00	200.00	3,094.5	-150.8	-54.9	-150.5	0.00	0.00	0.00
3,200.0	4.00	200.00	3,194.2	-157.3	-57.3	-157.1	0.00	0.00	0.00
3,300.0	4.00	200.00	3,294.0	-163.9	-59.6	-163.6	0.00	0.00	0.00
3,400.0	4.00	200.00	3,393.7	-170.4	-62.0	-170.1	0.00	0.00	0.00
3,500.0	4.00	200.00	3,493.5	-177.0	-64.4	-176.7	0.00	0.00	0.00
3,600.0	4.00	200.00	3,593.3	-183.5	-66.8	-183.2	0.00	0.00	0.00
3,700.0	4.00	200.00	3,693.0	-190.1	-69.2	-189.8	0.00	0.00	0.00
3,800.0	4.00	200.00	3,792.8	-196.7	-71.6	-196.3	0.00	0.00	0.00
3,900.0	4.00	200.00	3,892.5	-203.2	-74.0	-202.9	0.00	0.00	0.00
4,000.0	4.00	200.00	3.992.3	-209.8	-76.3	-209.4	0.00	0.00	0.00
4,100.0	4.00	200.00	4,092.0	-216.3	-78.7	-215.9	0.00	0.00	0.00
4,100.0	4.00	200.00	4,191.8	-222.9	-81.1	-213.9	0.00	0.00	0.00
4,300.0	4.00	200.00	4,291.6	-229.4	-83.5	-229.0	0.00	0.00	0.00
4,400.0	4.00	200.00	4,391.3	-236.0	-85.9	-235.6	0.00	0.00	0.00
4,500.0	4.00	200.00	4,491.1	-242.5	-88.3	-242.1	0.00	0.00	0.00
4,600.0	4.00	200.00	4,590.8	-242.5	-88.3 -90.7	-242.1	0.00	0.00	0.00
4,000.0	4.00	200.00	4,690.6	-249.1	-90.7	-246.7	0.00	0.00	0.00
4,700.0	4.00	200.00	4,790.3	-262.2	-93.0 -95.4	-255.2	0.00	0.00	0.00
4,800.0	4.00	200.00	4,790.3	-202.2	-95.4 -97.8	-268.3	0.00	0.00	0.00
5.000.0									
5,000.0	4.00 4.00	200.00 200.00	4,989.9 5,089.6	-275.3 -281.9	-100.2 -102.6	-274.8 -281.4	0.00 0.00	0.00 0.00	0.00 0.00
5,100.0	4.00	200.00	3,009.0	-201.9	-102.0	-201.4	0.00	0.00	0.00

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COMPASS 5000.17 Build 101

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 1		

Planned Survey

	leasured 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)
	5,200.0	4.00	200.00	5,189.4	-288.4	-105.0	-287.9	0.00	0.00	0.00
	5,300.0	4.00	200.00	5,289.1	-295.0	-107.4	-294.5	0.00	0.00	0.00
	5,400.0	4.00	200.00	5,388.9	-301.5	-109.7	-301.0	0.00	0.00	0.00
	5,500.0	4.00	200.00	5,488.6	-308.1	-112.1	-307.6	0.00	0.00	0.00
	5,600.0	4.00	200.00	5,588.4	-314.6	-114.5	-314.1	0.00	0.00	0.00
	5,700.0	4.00	200.00	5,688.1	-321.2	-116.9	-320.6	0.00	0.00	0.00
	5,800.0	4.00	200.00	5,787.9	-327.8	-119.3	-327.2	0.00	0.00	0.00
	5,900.0	4.00	200.00	5,887.7	-334.3	-121.7	-333.7	0.00	0.00	0.00
	6,000.0	2.00	200.00	5,987.5	-339.2	-123.5	-338.6	2.00	-2.00	0.00
	6,100.0	0.00	0.00	6,087.5	-340.9	-124.1	-340.3	2.00	-2.00	160.00
	6,200.0	0.00	0.00	6,187.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,300.0	0.00	0.00	6,287.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,400.0	0.00	0.00	6,387.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,500.0	0.00	0.00	6,487.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,600.0	0.00	0.00	6,587.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,700.0	0.00	0.00	6,687.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,800.0	0.00	0.00	6,787.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	6,900.0	0.00	0.00	6,887.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,000.0	0.00	0.00	6,987.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,100.0	0.00	0.00	7,087.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,200.0	0.00	0.00	7,187.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,300.0	0.00	0.00	7,287.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,400.0	0.00	0.00	7,387.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,500.0	0.00	0.00	7,487.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,600.0	0.00	0.00	7,587.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,700.0	0.00	0.00	7,687.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,800.0	0.00	0.00	7,787.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	7,900.0	0.00	0.00	7,887.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	8,000.0	0.00	0.00	7,987.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	8,100.0	0.00	0.00	8,087.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	8,200.0	0.00	0.00	8,187.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	8,300.0	0.00	0.00	8,287.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	8,400.0	0.00	0.00	8,387.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9 500 0	0.00	0.00	0 407 E	240.0	104.1	240.2	0.00	0.00	0.00
	8,500.0	0.00 0.00	0.00 0.00	8,487.5 8,587.5	-340.9 -340.9	-124.1 -124.1	-340.3	0.00 0.00	0.00 0.00	0.00
	8,600.0 8,700.0	0.00	0.00	8,687.5	-340.9 -340.9	-124.1	-340.3 -340.3	0.00	0.00	0.00
	8,800.0	0.00	0.00	8,787.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	8,900.0	0.00	0.00	8,887.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,000.0	0.00	0.00	8,987.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,100.0	0.00	0.00	9,087.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,200.0	0.00	0.00	9,187.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,300.0	0.00	0.00	9,287.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,400.0	0.00	0.00	9,387.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,500.0	0.00	0.00	9,487.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,600.0	0.00	0.00	9,587.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,700.0	0.00	0.00	9,687.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,800.0	0.00	0.00	9,787.5	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,843.5	0.00	0.00	9,831.0	-340.9	-124.1	-340.3	0.00	0.00	0.00
	9,900.0	5.65	17.05	9,887.4	-338.2	-123.2	-337.6	10.00	10.00	30.18
	10,000.0	15.65	17.05	9,985.6	-320.6	-117.8	-320.0	10.00	10.00	0.00
	10,100.0	25.65	17.05	10,079.0	-286.9	-107.5	-286.4	10.00	10.00	0.00
	10,200.0	35.65	17.05	10,164.9	-238.2	-92.6	-237.8	10.00	10.00	0.00
L	10,200.0	35.65	17.05	10,164.9	-238.2	-92.6	-231.8	10.00	10.00	0.00

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Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
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)
10,300.0	45.65	17.05	10,240.7	-176.0	-73.5	-175.7	10.00	10.00	0.00
10 400 0	55.65	17.05	10,304.0	102.2	-50.9	-101.9	10.00	10.00	0.00
10,400.0				-102.2					
10,500.0	65.65	17.05	10,353.0	-18.9	-25.3	-18.8	10.00	10.00	0.00
10,600.0	75.65	17.05	10,386.1	71.1	2.3	71.1	10.00	10.00	0.00
10,700.0	85.65	17.05	10,402.3	165.4	31.2	165.2	10.00	10.00	0.00
10,743.5	90.00	17.05	10,404.0	206.9	43.9	206.7	10.00	10.00	0.00
10,800.0	90.00	15.92	10,404.0	261.1	60.0	260.8	2.00	0.00	-2.00
10,900.0	90.00	13.92	10,404.0	357.7	85.7	357.3	2.00	0.00	-2.00
11,000.0	90.00	11.92	10,404.0	455.2	108.1	454.7	2.00	0.00	-2.00
11,100.0	90.00	9.92	10,404.0	553.4	127.0	552.8	2.00	0.00	-2.00
11,200.0	90.00	7.92	10,404.0	652.1	142.5	651.5	2.00	0.00	-2.00
11,300.0	90.00	5.92	10,404.0	751.4	154.6	750.7	2.00	0.00	-2.00
11,400.0	90.00	3.92	10,404.0	851.0	163.1	850.3	2.00	0.00	-2.00
11,500.0	90.00	1.92	10,404.0	950.9	168.2	950.1	2.00	0.00	-2.00
11,600.0	90.00	359.92	10,404.0	1,050.9	169.8	1,050.1	2.00	0.00	-2.00
11,609.5	90.00	359.73	10,404.0	1,060.3	169.8	1,059.5	2.00	0.00	-2.00
			10,404.0						
11,700.0	90.00	359.73		1,150.9	169.4	1,150.1	0.00	0.00	0.00
11,800.0	90.00	359.73	10,404.0	1,250.9	168.9	1,250.1	0.00	0.00	0.00
11,900.0	90.00	359.73	10,404.0	1,350.9	168.4	1,350.1	0.00	0.00	0.00
12,000.0	90.00	359.73	10,404.0	1,450.9	168.0	1,450.1	0.00	0.00	0.00
12,100.0	90.00	359.73	10,404.0	1,550.9	167.5	1,550.1	0.00	0.00	0.00
12,200.0	90.00	359.73	10,404.0	1,650.9	167.0	1,650.1	0.00	0.00	0.00
12,300.0	90.00	359.73	10,404.0	1,750.9	166.6	1,750.1	0.00	0.00	0.00
12,400.0	90.00	359.73	10,404.0	1,850.9	166.1	1,850.1	0.00	0.00	0.00
12,500.0	90.00	359.73	10,404.0	1,950.9	165.6	1,950.1	0.00	0.00	0.00
12,600.0	90.00	359.73	10,404.0	2,050.9	165.2	2,050.1	0.00	0.00	0.00
12,700.0	90.00	359.73	10,404.0	2,150.9	164.7	2,150.1	0.00	0.00	0.00
12,800.0	90.00	359.73	10,404.0	2,250.9	164.2	2,250.1	0.00	0.00	0.00
12,900.0	90.00	359.73	10,404.0	2,350.9	163.7	2,350.1	0.00	0.00	0.00
13,000.0	90.00	359.73	10,404.0	2,450.9	163.3	2,450.1	0.00	0.00	0.00
13,100.0	90.00	359.73	10,404.0	2,550.9	162.8	2,550.1	0.00	0.00	0.00
13,200.0	90.00	359.73	10,404.0	2,650.9	162.3	2,650.1	0.00	0.00	0.00
13,300.0	90.00	359.73	10,404.0	2,750.9	161.9	2,750.1	0.00	0.00	0.00
13,400.0	90.00	359.73	10,404.0	2,850.9	161.4	2,850.1	0.00	0.00	0.00
13,500.0	90.00	359.73	10,404.0	2,950.9	160.9	2,050.1	0.00	0.00	0.00
13,600.0	90.00	359.73	10,404.0	3,050.9	160.5	3,050.1	0.00	0.00	0.00
13,700.0	90.00	359.73	10,404.0	3,150.9	160.0	3,150.1	0.00	0.00	0.00
13,800.0	90.00	359.73	10,404.0	3,250.9	159.5	3,250.1	0.00	0.00	0.00
13,900.0	90.00	359.73	10,404.0	3,350.9	159.1	3,350.1	0.00	0.00	0.00
14,000.0	90.00	359.73	10,404.0	3,450.9	158.6	3,450.1	0.00	0.00	0.00
14,100.0	90.00	359.73	10,404.0	3,550.9	158.1	3,550.1	0.00	0.00	0.00
14,200.0	90.00	359.73	10,404.0	3,650.9	157.6	3,650.1	0.00	0.00	0.00
14,300.0	90.00	359.73	10,404.0	3,750.9	157.2	3,750.1	0.00	0.00	0.00
14,400.0	90.00	359.73	10,404.0	3,850.9	156.7	3,850.1	0.00	0.00	0.00
14,500.0	90.00	359.73	10,404.0	3,950.8	156.2	3,950.1	0.00	0.00	0.00
14,600.0	90.00	359.73	10,404.0	4,050.8	155.8	4,050.1	0.00	0.00	0.00
14,700.0	90.00	359.73	10,404.0	4,150.8	155.3	4,150.1	0.00	0.00	0.00
14,800.0	90.00	359.73	10,404.1	4,250.8	154.8	4,250.1	0.00	0.00	0.00
14,900.0	90.00	359.73	10,404.1	4,350.8	154.4	4,350.1	0.00	0.00	0.00
15,000.0	90.00	359.73	10,404.1	4,450.8	153.9	4,450.1	0.00	0.00	0.00
15,100.0	90.00	359.73	10,404.1	4,550.8	153.9	4,450.1	0.00	0.00	0.00
13,100.0	90.00	559.15	10,404.1	-,350.0	155.4	7,000.1	0.00	0.00	0.00
15,200.0	90.00	359.73	10,404.1	4,650.8	153.0	4,650.1	0.00	0.00	0.00

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Page 6

COMPASS 5000.17 Build 101

.

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 1		

Planned Survey

Meas Dep (us	oth	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15	,300.0	90.00	359.73	10,404.1	4,750.8	152.5	4,750.1	0.00	0.00	0.00
	,400.0	90.00	359.73	10,404.1	4,850.8	152.0	4,850.1	0.00	0.00	0.00
	,500.0	90.00	359.73	10,404.1	4,950.8	151.5	4,950.1	0.00	0.00	0.00
	,600.0	90.00	359.73	10,404.1	5,050.8	151.1	5,050.1	0.00	0.00	0.00
15	,700.0	90.00	359.73	10,404.1	5,150.8	150.6	5,150.1	0.00	0.00	0.00
	,800.0	90.00	359.73	10,404.1	5,250.8	150.1	5,250.1	0.00	0.00	0.00
	,900.0	90.00	359.73	10,404.1	5,350.8	149.7	5,350.1	0.00	0.00	0.00
	,000.0	90.00	359.73	10,404,1	5,450.8	149.2	5,450.1	0.00	0.00	0.00
	,100.0	90.00	359.73	10,404.1	5,550.8	148.7	5,550.1	0.00	0.00	0.00
16	,200.0	90.00	359.73	10,404.1	5,650.8	148.3	5,650.1	0.00	0.00	0.00
	,300.0	90.00	359.73	10,404.1	5,750.8	147.8	5,750.1	0.00	0.00	0.00
	,400.0	90.00	359.73	10,404.1	5,850.8	147.3	5,850.1	0.00	0.00	0.00
	,500.0	90.00	359.73	10,404.1	5,950.8	146.8	5,950.1	0.00	0.00	0.00
16	,600.0	90.00	359.73	10,404.1	6,050.8	146.4	6,050.1	0.00	0.00	0.00
16	,700.0	90.00	359.73	10,404.1	6,150.8	145.9	6,150.1	0.00	0.00	0.00
	,800.0	90.00	359.73	10,404.1	6,250.8	145.4	6,250.1	0.00	0.00	0.00
	,900.0	90.00	359.73	10,404.1	6,350.8	145.0	6,350.1	0.00	0.00	0.00
17	,000.0	90.00	359.73	10,404.1	6,450.8	144.5	6,450.1	0.00	0.00	0.00
17	,100.0	90.00	359.73	10,404.1	6,550.8	144.0	6,550.1	0.00	0.00	0.00
17	,200.0	90.00	359.73	10,404.1	6,650.8	143.6	6,650.1	0.00	0.00	0.00
17	,300.0	90.00	359.73	10,404.1	6,750.8	143.1	6,750.1	0.00	0.00	0.00
17	,400.0	90.00	359.73	10,404.1	6,850.8	142.6	6,850.1	0.00	0.00	0.00
17	,500.0	90.00	359.73	10,404.1	6,950.8	142.2	6,950.1	0.00	0.00	0.00
17	,600.0	90.00	359.73	10,404.1	7,050.8	141.7	7,050.1	0.00	0.00	0.00
	,700.0	90.00	359.73	10,404.1	7,150.8	141.2	7,150.1	0.00	0.00	0.00
	,800.0	90.00	359.73	10,404.1	7,250.8	140.7	7,250.1	0.00	0.00	0.00
	,900.0	90.00	359.73	10,404.1	7,350.8	140.3	7,350.1	0.00	0.00	0.00
	,000.0	90.00	359.73	10,404.1	7,450.8	139.8	7,450.1	0.00	0.00	0.00
18	,100.0	90.00	359.73	10,404.1	7,550.8	139.3	7,550.1	0.00	0.00	0.00
	,200.0	90.00	359.73	10,404.1	7,650.8	138.9	7,650.1	0.00	0.00	0.00
	,300.0	90.00	359.73	10,404.1	7,750.8	138.4	7,750.1	0.00	0.00	0.00
	,400.0	90.00	359.73	10,404.1	7,850.8	137.9	7,850.1	0.00	0.00	0.00
	,500.0	90.00	359.73	10,404.1	7,950.8	137.5	7,950.1	0.00	0.00	0.00
18	,600.0	90.00	359.73	10,404.1	8,050.8	137.0	8,050.1	0.00	0.00	0.00
	,700.0	90.00	359.73	10,404.2	8,150.8	136.5	8,150.1	0.00	0.00	0.00
	,800.0	90.00	359.73	10,404.2	8,250.8	136.0	8,250.1	0.00	0.00	0.00
	,900.0	90.00	359.73	10,404.2	8,350.8	135.6	8,350.1	0.00	0.00	0.00
	,000.0	90.00	359.73	10,404.2	8,450.8	135.1	8,450.1	0.00	0.00	0.00
19	,100.0	90.00	359.73	10,404.2	8,550.8	134.6	8,550.1	0.00	0.00	0.00
	,200.0	90.00	359.73	10,404.2	8,650.8	134.2	8,650.1	0.00	0.00	0.00
	,300.0	90.00	359.73	10,404.2	8,750.8	133.7	8,750.1	0.00	0.00	0.00
	,400.0	90.00	359.73	10,404.2	8,850.8	133.2	8,850.1	0.00	0.00	0.00
	,500.0	90.00	359.73	10,404.2	8,950.8	132.8	8,950.1	0.00	0.00	0.00
19	,600.0	90.00	359.73	10,404.2	9,050.8	132.3	9,050.1	0.00	0.00	0.00
	,700.0	90.00	359.73	10,404.2	9,150.8	131.8	9,150.1	0.00	0.00	0.00
	,800.0	90.00	359.73	10,404.2	9,250.8	131.4	9,250.1	0.00	0.00	0.00
-	,900.0	90.00	359.73	10,404.2	9,350.8	130.9	9,350.1	0.00	0.00	0.00
	,000.0	90.00	359.73	10,404.2	9,450.8	130.4	9,450.1	0.00	0.00	0.00
20	,100.0	90.00	359.73	10,404.2	9,550.8	129.9	9,550.1	0.00	0.00	0.00
	,200.0	90.00	359.73	10,404.2	9,650.8	129.5	9,650.1	0.00	0.00	0.00
	,300.0	90.00	359.73	10,404.2	9,750.8	129.0	9,750.1	0.00	0.00	0.00
20	,400.0	90.00	359.73	10,404.2	9,850.8	128.5	9,850.1	0.00	0.00	0.00

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ExxonMobil

Planning Report

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН	-	
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)
20,500.0	90.00	359.73	10,404.2	9,950.8	128.1	9,950.1	0.00	0.00	0.00
20,600.0	90.00	359.73	10,404.2	10,050.8	127.6	10,050.1	0.00	0.00	0.00
20,627.3 20,677.3	90.00 90.00	359.73 359.73	10,404.2 10,404.2	10,078.1 10,128.1	127.5 127.2	10,077.4 10,127.4	0.00 0.00	0.00 0.00	0.00 0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
New SHL for 106H - plan hits target cen - Rectangle (sides W		0.00	0.0	0.0	0.0	443,229.67	622,880.36	32° 13' 4.552 N	103° 56' 9.589 W
FTP 13-24 PC 106H - plan misses target - Point	0.00 center by 55.0	0.00 Dusft at 1105	10,404.2 6.1usft MD (′	499.7 10404.0 TVD,	173.1 510.1 N, 119.	443,729.40 1 E)	623,053.43	32° 13' 9.491 N	103° 56' 7.553 W
LTP 13-24 PC 106H - plan hits target cen - Rectangle (sides W		0.00 7.7 D0.0)	10,404.2	10,078.1	127.5	453,307.74	623,007.83	32° 14' 44.281 N	103° 56' 7.671 W
BHL 13-24 PC 106H - plan misses target - Point	0.00 center by 0.1u	0.00 usft at 20677	10,404.2 .3usft MD (10	10,128.1 0404.2 TVD, 7	127.1 10128.1 N, 12	453,357.74 7.2 E)	623,007.46	32° 14' 44.776 N	103° 56' 7.673 W

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ExxonMobil

Database:	LMRKPROD3	Local Co-ordinate Reference:	Well New SHL for 106H
Company:	ROC	TVD Reference:	RKB30' @ 3124.0usft (HP552)
Project:	HP 532/547/549/552 - Eddy County, NM (NAD 27 NME)	MD Reference:	RKB30' @ 3124.0usft (HP552)
Site:	(HP552) - Poker Lake Unit 13-24 Pierce Canyon	North Reference:	Grid
Well:	New SHL for 106H	Survey Calculation Method:	Minimum Curvature
Wellbore:	ОН		
Design:	Plan 1		

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
287.9	287.9	Rustler		0.00	
524.7	524.7	Salado			
3,105.2	3,099.7	Base of Salt			
3,311.1	3,305.1	Delaware			
4,218.9	4,210.7	Cherry Canyon			
5,775.6	5,763.5	Brushy Canyon			
6,833.7	6,821.2	Basal Brushy Canyon			
7,075.7	7,063.2	Bone Spring			
7,200.4	7,187.9	Avalon Upper			
7,770.4	7,757.9	Avalon Lower			
7,932.8	7,920.3	1st Bone Spring Lime			
8,086.0	8,073.5	1st Bone Spring Sand			
8,398.6	8,386.0	2nd Bone Spring Lime			
8,924.3	8,911.8	2nd Bone Spring Sand			
9,192.3	9,179.8	3rd Bone Spring Lime			
9,570.0	9,557.5	Harkey Sand			
9,601.4	9,588.9	3rd Bone Spring Shale			
10,003.7	9,989.1	3rd Bone Spring Sand			
10,485.0	10,346.6	Wolfcamp			
10,574.6	10,379.2	Wolfcamp X			

Plan Annotations

Mea	asured	Vertical	Local Coor	dinates		
)epth usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment	
	700.0	700.0	0.0	0.0	Start Build 2.00	
	900.0	899.8	-6.6	-2.4	Start 5000.0 hold at 900.0 MD	
	5,900.0	5,887.7	-334.3	-121.7	Start DLS 2.00 TFO 180.00	
	6,100.0	6,087.5	-340.9	-124.1	Start 3743.5 hold at 6100.0 MD	
	9,843.5	9,831.0	-340.9	-124.1	Start DLS 10.00 TFO 17.05	
	10,743.5	10,404.0	206.9	43.9	Start DLS 2.00 TFO -90.00	
	11,609.5	10,404.0	1,060.3	169.8	Start 9017.8 hold at 11609.5 MD	
	20,627.3	10,404.2	10,078.1	127.5	Start 50.0 hold at 20627.3 MD	
	20,677.3	10,404.2	10,128.1	127.2	TD at 20677.3	

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5.500 20.00 LB (0.361)	P110 RY	USS-TALON	N HTQ™RD5.900)
	PIPE	CONNECTION		
MECHANICAL PROPERTIES			[6]	
Minimum Yield Strength	110,000		psi	
Maximum Yield Strength	125,000		psi	
Minimum Tensile Strength	125,000		psi	
DIMENSIONS				
Outside Diameter	5.500	5.900	in.	1
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Drift - API	4.653		in.	
Nominal Linear Weight, T&C	20.00		lbs/ft	
Plain End Weight	19.83	19.83	lbs/ft	
ECTION AREA				
Cross Sectional Area Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100%	% [2]	
PERFORMANCE				
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lbs	
Joint Strength		641,000	lbs	
Compression Rating		641,000	lbs	
Reference Length		21,548	ft ^[5]	
Maximum Uniaxial Bend Rating		91.7	deg/100 ft ^[3]	
MAKE-UP DATA				
Minimum Make-Up Torque		24,700	ft-Ibs ^[4]	
Maximum Make-Up Torque		27,700	ft-lbs ^[4]	
Maximum Operating Torque		39,500	ft-lbs ^[4]	
Make-Up Loss		5.58	in.	

Notes:

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 Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).

2) Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.

3) Uniaxial bending rating shown is structural only.

4) Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

5) Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

6) Coupling must meet minimum mechanical properties of the pipe

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U. S. Steel Tubular Products 7/30/2020 3:27:27 PM 7.625" 29.70Ibs/ft (0.375" Wall) P110 RY USS-LIBERTY FJM[®]

MECHANICAL PROPERTIES	Pipe	USS-LIBERTY FJM [®]	
Minimum Yield Strength	110,000		psi
Maximum Yield Strength	125,000		psi
Minimum Tensile Strength	125,000		psi
DIMENSIONS	Pipe	USS-LIBERTY FJM [®]	
Outside Diameter	7.625	7.625	in.
Wall Thickness	0.375		in.
Inside Diameter	6.875	6.789	in.
Standard Drift	6.750	6.750	in.
Alternate Drift			in.
Nominal Linear Weight, T&C	29.70		lbs/ft
Plain End Weight	29.06		lbs/ft
SECTION AREA	Pipe	USS-LIBERTY FJM [®]	
Critical Area	8.541	5.074	sq. in.
Joint Efficiency		59.4	%
PERFORMANCE	Pipe	USS-LIBERTY FJM [®]	
Minimum Collapse Pressure	5,350	5,350	psi
Minimum Internal Yield Pressure	9,460	9,460	psi
Minimum Pipe Body Yield Strength	940,000		lbs
Joint Strength		558,000	lbs
Compression Rating		558,000	lbs
Reference Length		12,810	ft
Maximum Uniaxial Bend Rating		39.3	deg/100 ft
MAKE-UP DATA	Pipe	USS-LIBERTY FJM [®]	
Make-Up Loss		3.92	in.
Minimum Make-Up Torque		10,800	ft-lbs
Maximum Make-Up Torque		15,250	ft-lbs

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).

Compressive & Tensile Connection Efficiencies are calculated by dividing the connection critical area by the pipe body area.

Uniaxial bending rating shown is structural only, and equal to compression efficiency.

4. USS-LIBERTY FJM™ connections are optimized for each combination of OD and wall thickness and cannot be interchanged.

5. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

6. Reference length is calculated by joint strength divided by nominal plain end weight with 1.5 safety factor.

7. Connection external pressure leak resistance has been verified to 100% API pipe body collapse pressure following the guidelines of API 5C5 Cal III.

Legal Notice

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U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

U. S. Steel Tubular Products 13.375" 54.50lb/ft (0.380" Wall) J55 USS-CDC[®]

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MECHANICAL PROPERTIES	Pipe	USS-CDC [®]		
Minimum Yield Strength	55,000		psi	
Maximum Yield Strength	80,000		psi	
Minimum Tensile Strength	75,000		psi	
DIMENSIONS	Pipe	USS-CDC [®]		
Outside Diameter	13.375	14.375	in.	
Wall Thickness	0.380		in.	
Inside Diameter	12.615	12.615	in.	
Standard Drift	12.459	12.459	in.	
Alternate Drift	12.500	12.500	in.	
Nominal Linear Weight, T&C	54.50		lb/ft	
Plain End Weight	52.79		Ib/ft	
SECTION AREA	Pipe	USS-CDC [®]		
Critical Area	15.513	15.513	sq. in.	
Joint Efficiency		100.0	%	
PERFORMANCE	Pipe	USS-CDC [®]		
Minimum Collapse Pressure	1,130	1,130	psi	
External Pressure Leak Resistance		900	psi	
Minimum Internal Yield Pressure	2,740	2,740	psi	
Minimum Pipe Body Yield Strength	853,000		lb	
Joint Strength		909,000	lb	
Compression Rating		545,400	lb	
Reference Length		11,119	ft	
Maximum Uniaxial Bend Rating		12.1	deg/100 ft	
MAKE-UP DATA	Pipe	USS-CDC [®]		
Make-Up Loss		5.31	in.	
Minimum Make-Up Torque		17,000	ft-lb	
Maximum Make-Up Torque		21,000	ft-lb	
Connection Yield Torque		35,200	ft-lb	

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).

2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.

3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

- 4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
- 5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

Legal Notice

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U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

U. S. Steel Tubular Products 9.625" 40.00lb/ft (0.395" Wall) J55 USS-CDC[®]

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MECHANICAL PROPERTIES	Pipe	USS-CDC [®]			
Minimum Yield Strength	55,000		psi		
Maximum Yield Strength	80,000		psi		
Minimum Tensile Strength	75,000		psi		
DIMENSIONS	Pipe	USS-CDC [®]			
Outside Diameter	9.625	10.625	in.		
Wall Thickness	0.395		in.		
Inside Diameter	8.835	8.835	in.		
Standard Drift	8.679	8.679	in.		
Alternate Drift	8.750	8.750	in.		
Nominal Linear Weight, T&C	40.00		lb/ft		
Plain End Weight	38.97		lb/ft		
SECTION AREA	Pipe	USS-CDC [®]			
Critical Area	11.454	11.454	sq. in.		
Joint Efficiency		100.0	%		
PERFORMANCE	Pipe	USS-CDC [®]			
Minimum Collapse Pressure	2,570	2,570	psi		
External Pressure Leak Resistance		2,060	psi		
Minimum Internal Yield Pressure	3,950	3,950	psi		
Minimum Pipe Body Yield Strength	630,000		lb		
Joint Strength		714,000	lb		
Compression Rating		428,000	lb		
Reference Length		11,900	ft		
Maximum Uniaxial Bend Rating		17.8	deg/100 ft		
MAKE-UP DATA	Pipe	USS-CDC [®]			
Make-Up Loss		5.31	in.		
Minimum Make-Up Torque		15,000	ft-lb		
Maximum Make-Up Torque		18,500	ft-lb		
Connection Yield Torque		23,100	ft-lb		

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness and Specified Minimum Yield Strength (SMYS).

2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.

3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

- 4. Reference length is calculated by joint strength divided by nominal threaded and coupled weight with 1.5 safety factor.
- 5. Connection external pressure leak resistance has been verified to 80% API pipe body collapse pressure following the guidelines of API 5C5 Call II.

Legal Notice

USS - CDC[®] (Casing Drilling Connection) is a trademark of U. S. Steel Corporation. This product is a modified API Buttress threaded and coupled connection designed for drilling with casing applications. All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ХТО
LEASE NO.:	NMNM05912
LOCATION:	Section 13, T.24 S, R.29 E., NMPM
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Poker Lake Unit 13-24 PC 125H
SURFACE HOLE FOOTAGE:	2459'/N & 2220'/E
BOTTOM HOLE FOOTAGE:	2366'/S & 2316'/E

	Poker Lake Unit 13-24 PC 106H
SURFACE HOLE FOOTAGE:	2459'/N & 2160'/E
BOTTOM HOLE FOOTAGE:	2367'/S & 1986'/E

WELL NAME & NO.:	Poker Lake Unit 13-24 PC 165H
SURFACE HOLE FOOTAGE:	2459'/N & 2190'/E
BOTTOM HOLE FOOTAGE:	2367'/S & 2151'/E

Changes approved through engineering via Sundries 2757429, 2757428, and 2758985_ on _11-5-2023_____. Any previous COAs not addressed within the updated COAs still apply.

COA

H ₂ S	C Yes	💽 No			
Potash / WIPP	• None	C Secretary	© R-111-P	□ WIPP	
Cave / Karst	• Low	C Medium	🗘 High	Critical	
Wellhead	Conventional	Multibowl	O Both	C 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 must meet all requirements from **43 CFR 3176**, 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 **13-3/8** inch surface casing shall be set at approximately **420** 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.
 - 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 <u>8</u>
 <u>hours</u> 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 5762'.
- 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.

Operator has proposed to pump down 13-3/8" X 7-5/8" annulus after primary cementing stage. <u>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.</u>

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 **200 feet** into previous casing string. Operator shall provide method of verification.

ALTERNATE CASING

Operator is approved to used Alternate casing program. Operator shall notify BLM before proceeding with alternate casing design. Intermediate casing must be kept fluid filled to meet BLM collapse requirements.

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. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 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. (This is not necessary for secondary recovery unit wells)

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system) 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 must meet all requirements from 43 CFR 3172.
- 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.

Batch Sundry:

- Approval shall be for wells with surface, intermediate, and production section within 200' TVD tolerance between shoes above the deepest well shoes set depth.
- Approval shall be for wells with same drill plan design. (Casing depth may vary and cement volumes may vary per Condition of Approval.)
- Approval shall be for wells within the same drill pad.
- Cement excess shall be a minimum of 25%, adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

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.
- <u>Wait on cement (WOC) for Potash Areas:</u> 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 <u>24 hours</u>. 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. <u>Wait on cement (WOC) for Water Basin:</u> 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 <u>8 hours</u>. 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
- 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.

ZS 11/5/2023

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Fom 3160-3 (August 2007) UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MAT APPLICATION FOR PERMIT TO	INTERIOF NAGEMEN	Т			PPROVED 1004-0137 ly 31, 2010
la. Type of work: 🔽 DRILL 🗌 REENT	ΓER			7. If Unit or CA Agree	ement, Name and No.
lb. Type of Well: 🖌 Oil Well 🗌 Gas Well 💭 Other	V	ingle Zone 🔲 Multip	ole Zone	8. Lease Name and W Poker Lake Unit 13-2	
2. Name of Operator XTO Energy, Inc.				9. API Well No.	
3a. Address 6401 Holiday Hill Road, Bldg 5 Midland, Texas 79701				10. Field and Pool, or Exploratory Purple Sage; Wolfcamp	
 Location of Well (<i>Report location clearly and in accordance with a</i> At surface SWNE / 2459 FNL / 2160 FEL / LAT 32.2180 At proposed prod. zone LOT 36 / 50 FSL / 1320 FEL / LAT 	054 / LONG	-103.936485	7	11. Sec., T. R. M. or BI SEC 13 / T24S / R2	
14. Distance in miles and direction from nearest town or post office*				12. County or Parish Eddy	13. State NM
 Distance from proposed* 2459 feet location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 	16. No. of	acres in lease 17. Spacing Unit dedicated to this well 640			rell
 Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 30 feet 	19. Proposed Depth20. BLM/BIA10404 feet / 20677 feetFED: COB0			BIA Bond No. on file OB000050	
 Elevations (Show whether DF, KDB, RT, GL, etc.) 3094 feet 	22. Approx 10/27/23	imate date work will sta	rt*	23. Estimated duration 90 Days	l
		achments			
 The following, completed in accordance with the requirements of Onsh Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office). 		 Bond to cover t Item 20 above). Operator certific 	he operatio	us form: ons unless covered by an of formation and/or plans as	C (
25. Signature Caso i Wang-	Nam	e (Printed/Typed) Cassie Evans			Date 10/17/23
Title Regulatory Coordinator	I			I	
RISTOPHER WALLS Date: 2023.11.06 14:26:0		e (Printed/Typed)			Date 11/6/2023
Title Sup PE Application approval does not warrant or certify that the applicant ho conduct operations thereon.	Offic	e CFO uitable title to those righ	ts in the sub	ject lease which would er	ntitle the applicant to
Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations a	crime for any s to any matter	person knowingly and within its jurisdiction.	willfully to r	nake to any department of	r agency of the United

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

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	284461
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Original COA's still apply. Additionally, if cement does not circulate during cementing of any string, then a CBL is required on that string.	11/21/2023

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Action 284461