

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

Sundry Print Reported 11/14/2023

Well Name: POKER LAKE UNIT 13-24 Well Location: T24S / R29E / SEC 13 / County or Parish/State: EDDY /

SWNE / 32.218178 / -103.936435

Well Number: 106Y Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

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

NMNM71016X

US Well Number: 3001553559 Well Status: Plugged and Abandoned Operator: XTO PERMIAN

OPERATING LLC

Notice of Intent

Sundry ID: 2745198

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/08/2023 Time Sundry Submitted: 09:35

Date proposed operation will begin: 08/08/2023

Procedure Description: **Surface hole Change, First and Last Take Point Changes, Bottomhole Location Change, Drilling Plan Change, Casing/Cement Change XTO Permian Operating, LCC. requests permission to make the following changes to the original APD: No Additional Surface Disturbance SHL: fr/2414'FNL & 2145'FEL to 2459'FNL & 2310'FEL, NMNM05912 FTP: fr/2740'FNL & 1650'FEL to 1959'FNL & 1986'FEL, NMNM05912 LTP: fr/330'FSL & 1650'FEL to 2317'FSL & 1986'FEL, NMLC0696005A BHL: fr/200'FSL & 1650'FEL to 2367'FSL & 1986'FEL, Section 1-T24S-R29E NMLC0696005A Additionally, XTO Permian Operating, LLC. respectfully requests permission to upsize the surface, intermediate and production hole, casing, and cement based on the attached drilling program. Due to the upsize in these strings, the wellhead configuration has also changed based on the attached drilling program. Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program MBS Directional Plan

NOI Attachments

Procedure Description

 $Poker_Lake_Unit_13_24_PC_106H_Sundry_Attachments_20230808213440.pdf$

Page 1 of 2

well Name: POKER LAKE UNIT 13-24

PC

Well Location: T24S / R29E / SEC 13 / SWNE / 32.218178 / -103.936435

County or Parish/State: Page 2 of

Allottee or Tribe Name:

NM

Well Number: 106Y

Type of Well: CONVENTIONAL GAS

Well Status: Plugged and Abandoned

WELL

Lease Number: NMNM005912

Unit or CA Name:

Unit or CA Number:

NMNM71016X

US Well Number: 3001553559

Operator: XTO PERMIAN

OPERATING LLC

Conditions of Approval

Additional

Sundry_2745198_COAs_20230901154350.pdf

Operator

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

Operator Electronic Signature: CASSIE EVANS Signed on: AUG 08, 2023 09:35 PM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 6401 Holiday Hill Road, Bldg 5

City: Midland State: TX

Phone: (432) 218-3671

Email address: CASSIE.EVANS@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Phone: 5752342234

Disposition: Approved

Signature: Chris Walls

BLM POC Title: Petroleum Engineer

BLM POC Email Address: cwalls@blm.gov

Disposition Date: 09/06/2023

Page 2 of 2

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

case Seriai 110.	NMNM005912

DOKI	EAU OF LAND MANAGEMENT			NMNM005912
SUNDRY N	OTICES AND REPORTS ON W	/ELLS	6. If Indian, Allottee	or Tribe Name
	orm for proposals to drill or to Jse Form 3160-3 (APD) for suc			
SUBMIT IN 1	FRIPLICATE - Other instructions on page	e 2	_	eement, Name and/or No.
1. Type of Well			NMNM71016X	
Oil Well Gas W	Vell Other		8. Well Name and No	POKER LAKE UNIT 13-24 PC/106H
2. Name of Operator XTO PERMIAN			9. API Well No. 30	-015-54359
3a. Address 6401 HOLIDAY HILL RO	OAD BLDG 5, MIDLAND, 3b. Phone No. (432) 683-227	(include area code ₎ 77	10. Field and Pool or PURPLE SAGEΛ	
4. Location of Well (Footage, Sec., T.,R SEC 13/T24S/R29E/NMP	.,M., or Survey Description)		11. Country or Parisl EDDY/NM	n, State
12. CHE	CK THE APPROPRIATE BOX(ES) TO INI	DICATE NATURE	OF NOTICE, REPORT OR OT	THER DATA
TYPE OF SUBMISSION		TYP	E OF ACTION	
✓ Notice of Intent	Acidize Deep		Production (Start/Resume)	<u> </u>
_		aulic Fracturing Construction	Reclamation Recomplete	Well Integrity Other
Subsequent Report		and Abandon	Temporarily Abandon	Other
Final Abandonment Notice	Convert to Injection Plug		Water Disposal	
is ready for final inspection.) **Surface hole Change, First a XTO Permian Operating, LCC. No Additional Surface Disturba SHL: fr/2414FNL & 2145FEL to FTP: fr/2740FNL & 1650FEL to	nd Last Take Point Changes, Bottomhol requests permission to make the followance 2459FNL & 2310FEL, NMNM05912 1959FNL & 1986FEL, NMLC0696005A	le Location Chan	ge, Drilling Plan Change, Ca	
Continued on page 3 additional		Γ		
, , ,	true and correct. Name (Printed/Typed)	Regulatory	Analyst	
CASSIE EVANS / Ph: (432) 218-36	071	Title		
(Electronic Submissio	n)	Date	08/08/	2023
	THE SPACE FOR FEDI	ERAL OR STA	ATE OFICE USE	
Approved by				
CHRISTOPHER WALLS / Ph: (575	s) 234-2234 / Approved	Petro Title	leum Engineer	09/06/2023 Date
	ned. Approval of this notice does not warran quitable title to those rights in the subject leduct operations thereon.		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

(Instructions on page 2)

any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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

(Form 3160-5, page 2)

Additional Information

Additional Remarks

BHL: fr/200FSL & 1650FEL to 2367FSL & 1986FEL, Section 1-T24S-R29E NMLC0696005A

Additionally, XTO Permian Operating, LLC. respectfully requests permission to upsize the surface, intermediate and production hole, casing, and cement based on the attached drilling program. Due to the upsize in these strings, the wellhead configuration has also changed based on the attached drilling program.

Casing/Cement design per the attached drilling program.

Attachments:

C102

Drilling Program

MBS

Directional Plan

Location of Well

0. SHL: SWNE / 2414 FNL / 2145 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 / 200 FSL / 1650 FEL / TWSP: 24S / RANGE: 29E / SECTION: 24 / LAT: 32.196199 / LONG: -103.93481 (TVD: 10424 feet, MD: 18443 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | XTO Energy Inc

WELL NAME & NO.: | Poker Lake Unit 13-24 PC 106H

LOCATION: Sec 13-24S-29E-NMP **COUNTY:** Eddy County, New Mexico

Changes approved through engineering via **Sundry 2745198** on 09/01/2023. Any previous COAs not addressed within the updated COAs still apply.

COA

H ₂ S	• No	C Yes		
Potash / WIPP	None	Secretary	C R-111-P	□ WIPP
Cave / Karst	C Low	• Medium	C High	Critical
Wellhead	Conventional	Multibowl	O Both	Diverter
Cementing	☐ Primary Squeeze	Cont. Squeeze	EchoMeter	□ DV Tool
Special Req	Break Testing	☐ Water Disposal	\square COM	Unit
Variance	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
		Batch APD / Sundry		

A. HYDROGEN SULFIDE

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

B. CASING

- 1. The 9-5/8 inch surface casing shall be set at approximately 388 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface. Set depth has been altered from original approved surface set point but has been checked by BLM geologist prior to approval.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of

- six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

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

- a. First stage: Operator will cement with intent to reach the top of the **Brushy** Canyon at 5786'
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.
- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

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

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

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

• Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000** (**5M**) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. (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 Choose an item. 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
 - Eddy County
 Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, BLM_NM_CFO_DrillingNotifications@BLM.GOV (575) 361-2822
 - ✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).

- b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

- a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- c. Manufacturer representative shall install the test plug for the initial BOP test
- d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR part 3170 Subpart 3172 must be followed.
- e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
 - c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE.

If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR part 3170 Subpart 3172.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

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

1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

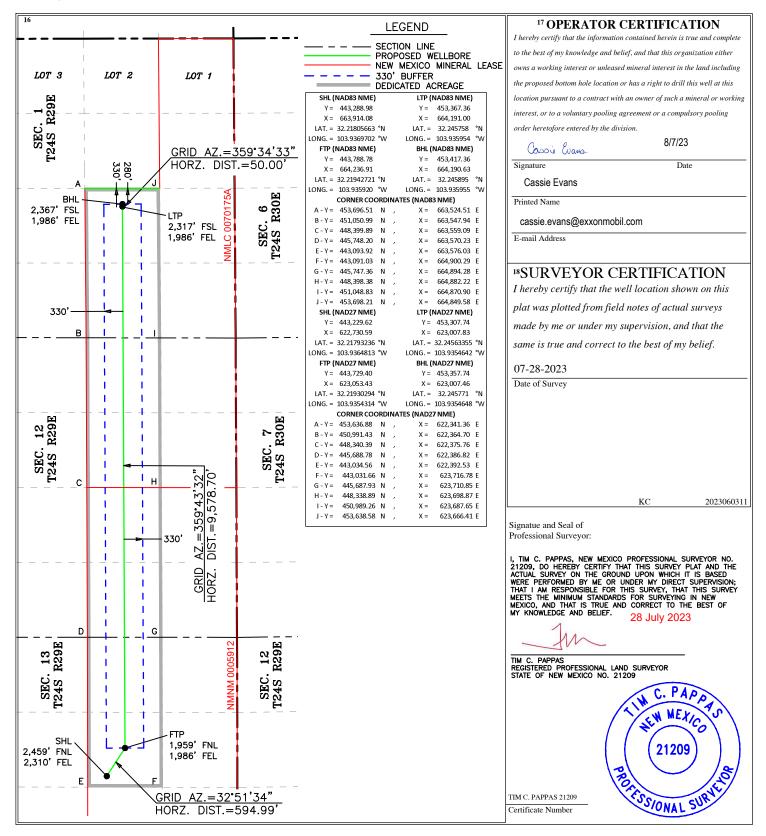
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1	API Number	r		² Pool Code		³ Pool Name					
	30-015 _	54359		98220		Purple	Sage; Wol	fcamp			
⁴ Property (Code				⁵ Property				6 7	Well Number	
33384	2			F	OKER LAKE U	NIT 13-24 PC				106H	
7 OGRID	No.				⁸ Operator	Name			⁹ Elevation		
37307	5			XT	O PERMIAN OP	ERATING, LLC				3,094'	
					¹⁰ Surface	Location					
UL or lot no.	Section	Township Range Lot Idn Feet from the North/South line Feet from the East					East/V	West line	County		
G	13	24 S	29 E		2,459	NORTH	2,310	EAST	Γ	EDDY	

¹¹ Bottom Hole Location If Different From Surface UL or lot no. Feet from the North/South line East/West line Section Township Feet from the Range County 2,367 SOUTH 1,986 EAST 24 S 29 E EDDY 12 Dedicated Acres ³ Joint or Infill ¹⁴ Consolidation Code ¹⁵ Order No. 320

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



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

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

	XTO ENERGY INDELAWARE BASI	_
DRAWN	VJK	31MAR2
APPRV		

DRAWING NO. HBE0000479

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

XTO Energy Inc.
Poker Lake Unit 13-24 PC 106H
Projected TD: 20458' MD / 10404' TVD
SHL: 2459' FNL & 2310' 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
Wolfcamp A	1	Water/Oil/Gas
Target/Land Curve	10404'	Water/Oil/Gas

^{***} Hydrocarbons @ Brushy Canyon

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 387.87' (136.86' 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 9505' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 20458 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9205 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' - 387.87'	9.625	40	J-55	BTC	New	1.34	16.23	40.61
8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.58	2.52	1.98
8.75	4000' – 9505'	7.625	29.7	HC L-80	Flush Joint	New	1.88	1.93	2.48
6.75	0' – 9405'	5.5	23	RY P-110	Semi-Premium	New	1.45	2.70	2.05
6.75	9405' - 20458'	5.5	23	RY P-110	Semi-Flush	New	1.45	2.44	2.16

- · 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

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

Wellhead:

- Permanent Wellhead Multibowl System

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

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

 · Wellhead will be installed by manufacturer's representatives.

 - · Manufacturer will monitor welding process to ensure appropriate temperature of seal.
 - · Operator will test the 7-5/8" casing per BLM Onshore Order 2
 - $\cdot \ \text{Wellhead Manufacturer representative will not be present for BOP test plug installation}$

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 387.87'

Tail: 170 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9505'

st Stage

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

TOC: Surface

Tail: 340 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: 650 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 Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

Production Casing: 5.5, 23 New Semi-Flush, RY P-110 casing to be set at +/- 20458'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9205 feet
Tail: 770 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9705 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

5. Pressure Control Equipment

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 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 9.625, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

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

hole on each of the wells.

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

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Flore Size	widd Type	(ppg)	(sec/qt)	(cc)
0' - 387.87'	12.25	FW/Native	8.4-8.9	35-40	NC
387.87' - 9505'	8.75	FW / Cut Brine / Direct Emulsion	10.2-10.7	30-32	NC
9505' - 20458'	6.75	ОВМ	11-11.5	50-60	NC - 20

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

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

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

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

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 170 to 190 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 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.

Long Lead_Well Planning

EDDY
PLU 13-24 & 13-1 Pierce Canyon Pad A
106H

ОН

Plan: Plan1

Standard Planning Report

19 July, 2023

Planning Report

LMRKPROD3 Database:

Company: Long Lead_Well Planning

Project: **EDDY**

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

Well: 106H Wellbore: OH Plan1 Design:

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 106H

RKB(3094+30) @ 3124.0usft RKB(3094+30) @ 3124.0usft

Grid

Minimum Curvature

Project EDDY

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

New Mexico East 3001 Map Zone:

System Datum:

Mean Sea Level

PLU 13-24 & 13-1 Pierce Canyon Pad A Site

Northing: 443,229.66 usft Site Position: Latitude: 32° 13' 4.559 N From: Мар Easting: 622,670.59 usft Longitude: 103° 56' 12.031 W

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

Well 106H

Well Position +N/-S 0.0 usft Northing: 443,229.62 usft Latitude: 32° 13' 4.557 N +E/-W 0.0 usft Easting: 622,730.59 usft Longitude: 103° 56' 11.333 W 3,094.0 usft

Position Uncertainty 0.0 usft Wellhead Elevation: usft **Ground Level:**

0.21° **Grid Convergence:**

ОН Wellbore

Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) IGRF2020 47,237.77763278 7/19/2023 6.47 59.77

Design Plan1

Audit Notes:

PROTOTYPE Tie On Depth: 0.0 Version: Phase:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 359.73 0.0 0.0 0.0

Plan Survey Tool Program Date 7/19/2023

Depth From Depth To

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

20,458.7 0.0 Plan1 (OH) XOM_R2OWSG MWD+IFR1+

OWSG MWD + IFR1 + Multi-St

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: EDDY

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

Well: 106H
Wellbore: OH
Design: Plan1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 106H

RKB(3094+30) @ 3124.0usft RKB(3094+30) @ 3124.0usft

Grid

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,459.9	5.20	123.56	1,459.5	-6.5	9.8	2.00	2.00	0.00	123.56	
5,521.5	5.20	123.56	5,504.5	-209.9	316.4	0.00	0.00	0.00	0.00	
5,781.4	0.00	0.00	5,764.0	-216.4	326.3	2.00	-2.00	0.00	180.00	
9,705.2	0.00	0.00	9,687.8	-216.4	326.3	0.00	0.00	0.00	0.00	
10,830.2	90.00	359.73	10,404.0	499.8	322.8	8.00	0.00	0.00	359.73	106H_FTP
12,789.2	90.00	359.73	10,404.0	2,458.7	313.5	0.00	0.00	0.00	0.00	106H_PP1
18,091.3	90.00	359.73	10,404.0	7,760.7	288.3	0.00	0.00	0.00	0.00	106H_PP2
20,408.7	90.00	359.73	10,404.0	10,078.1	277.2	0.00	0.00	0.00	0.00	106H_LTP
20,458.7	90.00	359.73	10,404.0	10,128.1	277.0	0.00	0.00	0.00	0.00	106H_BHL

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: EDDY

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

Well: 106H
Wellbore: OH
Design: Plan1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 106H

RKB(3094+30) @ 3124.0usft RKB(3094+30) @ 3124.0usft

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	123.56	1,300.0	-1.0	1.5	-1.0	2.00	2.00	0.00
1,400.0	4.00	123.56	1,399.8	-3.9	5.8	-3.9	2.00	2.00	0.00
1,459.9	5.20	123.56	1,459.5	-6.5	9.8	-6.6	2.00	2.00	0.00
1,500.0	5.20	123.56	1,499.5	-8.5	12.8	-8.6	0.00	0.00	0.00
1,600.0	5.20	123.56	1,599.1	-13.5	20.4	-13.6	0.00	0.00	0.00
1,700.0	5.20	123.56	1,698.7	-18.5	27.9	-18.7	0.00	0.00	0.00
1,800.0	5.20	123.56	1,798.2	-23.5	35.5	-23.7	0.00	0.00	0.00
1,900.0	5.20	123.56	1,897.8	-28.6	43.0	-28.8	0.00	0.00	0.00
0.000.0	5.00	400.50	4.007.4				0.00	0.00	0.00
2,000.0	5.20	123.56	1,997.4	-33.6	50.6	-33.8	0.00	0.00	0.00
2,100.0	5.20	123.56	2,097.0	-38.6	58.1	-38.8	0.00	0.00	0.00
2,200.0	5.20	123.56	2,196.6	-43.6	65.7	-43.9	0.00	0.00	0.00
2,300.0	5.20	123.56	2,296.2	-48.6	73.2	-48.9	0.00	0.00	0.00
2,400.0	5.20	123.56	2,395.8	-53.6	80.8	-54.0	0.00	0.00	0.00
2,500.0	5.20	123.56	2,495.4	-58.6	88.3	-59.0	0.00	0.00	0.00
2,600.0	5.20	123.56	2,595.0	-63.6	95.9	-64.1	0.00	0.00	0.00
2,700.0	5.20		2,694.5			-69.1	0.00	0.00	
		123.56		-68.6	103.4				0.00
2,800.0	5.20	123.56	2,794.1	-73.6	111.0	-74.1	0.00	0.00	0.00
2,900.0	5.20	123.56	2,893.7	-78.6	118.5	-79.2	0.00	0.00	0.00
3,000.0	5.20	123.56	2,993.3	-83.6	126.1	-84.2	0.00	0.00	0.00
3,100.0	5.20	123.56	3,092.9	-88.6	133.6	-89.3	0.00	0.00	0.00
3,200.0	5.20	123.56	3,192.5	-93.6	141.2	-94.3	0.00	0.00	0.00
3,300.0	5.20	123.56	3,292.1	-98.7	148.7	-99.4	0.00	0.00	0.00
3,400.0	5.20	123.56	3,391.7	-103.7	156.3	-104.4	0.00	0.00	0.00
3,500.0	5.20	123.56	3,491.3	-108.7	163.8	-109.4	0.00	0.00	0.00
3,600.0	5.20	123.56	3,590.8	-113.7	171.4	-114.5	0.00	0.00	0.00
3,700.0	5.20	123.56	3,690.4	-118.7	178.9	-119.5	0.00	0.00	0.00
3,800.0	5.20	123.56	3,790.0	-123.7	186.5	-124.6	0.00	0.00	0.00
3,900.0	5.20	123.56	3,889.6	-128.7	194.0	-129.6	0.00	0.00	0.00
4,000.0	5.20	123.56	3,989.2	-133.7	201.6	-134.7	0.00	0.00	0.00
4,100.0	5.20	123.56	4,088.8	-138.7	209.1	-139.7	0.00	0.00	0.00
4,200.0	5.20	123.56	4,188.4	-143.7	216.7	-144.7	0.00	0.00	0.00
4,300.0	5.20	123.56	4,288.0	-148.7	224.2	-149.8	0.00	0.00	0.00
4,400.0	5.20	123.56	4,387.6	-153.7	231.8	-154.8	0.00	0.00	0.00
4,500.0	5.20	123.56	4,487.1	-158.7	239.3	-159.9	0.00	0.00	0.00
4,600.0	5.20	123.56	4,586.7	-163.8	246.9	-164.9	0.00	0.00	0.00
4,700.0	5.20	123.56	4,686.3	-168.8	254.4	-170.0	0.00	0.00	0.00
4,800.0	5.20	123.56	4,785.9	-173.8	262.0	-175.0	0.00	0.00	0.00
4,900.0	5.20	123.56	4,885.5	-178.8	269.5	-180.0	0.00	0.00	0.00
5,000.0	5.20	123.56	4,985.1	-183.8	277.1	-185.1	0.00	0.00	0.00
5,100.0	5.20	123.56	5,084.7	-188.8	284.6	-190.1	0.00	0.00	0.00
5,200.0	5.20	123.56	5,184.3	-193.8	292.2	-195.2	0.00	0.00	0.00
5,300.0	5.20	123.56	5,283.9	-198.8	299.7	-200.2	0.00	0.00	0.00
5,400.0	5.20	123.56	5,383.4	-203.8	307.3	-205.3	0.00	0.00	0.00
5,500.0	5.20	123.56	5,483.0	-208.8	314.8	-210.3	0.00	0.00	0.00
5,521.5	5.20	123.56	5,504.5	-209.9	316.4	-211.4	0.00	0.00	0.00
5,600.0	3.63	123.56	5,582.7	-213.2	321.5	-214.7	2.00	-2.00	0.00
5,700.0	1.63	123.56	5,682.6	-215.8	325.3	-217.3	2.00	-2.00	0.00
5,781.4	0.00	0.00	5,764.0	-216.4	326.3	-217.9	2.00	-2.00	0.00
9,705.2	0.00	0.00	9,687.8	-216.4	326.3	-217.9	0.00	0.00	0.00
9,800.0	7.58	359.73	9,782.3	-210.4	326.2	-217.3	8.00	8.00	0.00
9,900.0	15.58	359.73	9,880.2	-190.1	326.1	-211.7 -191.6	8.00	8.00	0.00
10,000.0	23.58	359.73	9,974.3	-156.6	326.0	-158.1	8.00	8.00	0.00

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: EDDY

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

Well: 106H
Wellbore: OH
Design: Plan1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 106H

RKB(3094+30) @ 3124.0usft RKB(3094+30) @ 3124.0usft

Grid

nned 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)
10,100.0	31.58	359.73	10,062.9	-110.3	325.7	-111.9	8.00	8.00	0.00
10,200.0	39.58	359.73	10,144.2	-52.2	325.5	-53.7	8.00	8.00	0.00
10,300.0	47.58	359.73	10,216.5	16.7	325.1	15.2	8.00	8.00	0.00
10,400.0	55.58	359.73	10,278.6	95.0	324.8	93.4	8.00	8.00	0.00
10,500.0	63.58	359.73	10,329.2	181.1	324.4	179.6	8.00	8.00	0.00
10,600.0	71.58	359.73	10,367.3	273.5	323.9	272.0	8.00	8.00	0.00
40.700.0	70.50	250.72	40.000.0		202.5	200.0	0.00	0.00	0.00
10,700.0	79.58	359.73	10,392.2	370.3	323.5	368.8	8.00	8.00	0.00
10,800.0	87.58 90.00	359.73	10,403.4 10,404.0	469.6	323.0 322.8	468.0	8.00	8.00 8.00	0.00
10,830.2		359.73		499.8		498.3	8.00		0.00
10,900.0	90.00	359.73	10,404.0	569.6	322.5	568.0	0.00	0.00	0.00
11,000.0	90.00	359.73	10,404.0	669.6	322.0	668.0	0.00	0.00	0.00
11,100.0	90.00	359.73	10,404.0	769.6	321.6	768.0	0.00	0.00	0.00
11,200.0	90.00	359.73	10,404.0	869.6	321.1	868.0	0.00	0.00	0.00
11,300.0	90.00	359.73	10,404.0	969.6	320.6	968.0	0.00	0.00	0.00
11,400.0	90.00	359.73	10,404.0	1,069.6	320.1	1,068.0	0.00	0.00	0.00
11,500.0	90.00	359.73	10,404.0	1,169.6	319.7	1,168.0	0.00	0.00	0.00
11,600.0	90.00	359.73	10,404.0	1,269.6	319.2	1,268.0	0.00	0.00	0.00
11,700.0	90.00	359.73	10,404.0	1,369.6	318.7	1,368.0	0.00	0.00	0.00
11,800.0	90.00		10,404.0			1,468.0		0.00	
11,900.0	90.00	359.73	10,404.0	1,469.6	318.2		0.00		0.00
12,000.0	90.00	359.73	10,404.0	1,569.6	317.7	1,568.0	0.00	0.00 0.00	0.00
12,000.0	90.00	359.73	10,404.0	1,669.6	317.3	1,668.0	0.00	0.00	0.00
12,100.0	90.00	359.73	10,404.0	1,769.6	316.8	1,768.0	0.00	0.00	0.00
12,200.0	90.00	359.73	10,404.0	1,869.5	316.3	1,868.0	0.00	0.00	0.00
12,300.0	90.00	359.73	10,404.0	1,969.5	315.8	1,968.0	0.00	0.00	0.00
12,400.0	90.00	359.73	10,404.0	2,069.5	315.4	2,068.0	0.00	0.00	0.00
12,500.0	90.00	359.73	10,404.0	2,169.5	314.9	2,168.0	0.00	0.00	0.00
12,600.0	90.00	359.73	10,404.0	2,269.5	314.4	2,268.0	0.00	0.00	0.00
12,700.0	90.00	359.73	10,404.0	2,369.5	313.9	2,368.0	0.00	0.00	0.00
12,789.2	90.00	359.73	10,404.0	2,458.7	313.5	2,457.2	0.00	0.00	0.00
12,800.0	90.00	359.73	10,404.0	2,469.5	313.5	2,468.0	0.00	0.00	0.00
12,900.0	90.00	359.73	10,404.0	2,569.5	313.0	2,568.0	0.00	0.00	0.00
13,000.0	90.00	359.73	10,404.0	2,669.5	312.5	2,668.0	0.00	0.00	0.00
13,100.0	90.00	359.73	10,404.0	2,769.5	312.0	2,768.0	0.00	0.00	0.00
13,200.0	90.00	359.73	10,404.0	2,869.5	311.6	2,868.0	0.00	0.00	0.00
13,300.0	90.00	359.73	10,404.0	2,969.5	311.1	2,968.0	0.00	0.00	0.00
13,400.0	90.00	359.73	10,404.0	3,069.5	310.6	3,068.0	0.00	0.00	0.00
13,500.0	90.00	359.73	10,404.0	3,169.5	310.1	3,168.0	0.00	0.00	0.00
13,600.0	90.00	359.73	10,404.0	3,269.5	309.6	3,268.0	0.00	0.00	0.00
13,700.0	90.00	359.73	10,404.0	3,369.5	309.2	3,368.0	0.00	0.00	0.00
13,800.0	90.00	359.73	10,404.0	3,469.5	308.7	3,468.0	0.00	0.00	0.00
13,900.0	90.00	359.73	10,404.0	3,569.5	308.2	3,568.0	0.00	0.00	0.00
14,000.0	90.00	359.73	10,404.0	3,669.5	307.7	3,668.0	0.00	0.00	0.00
14,100.0	90.00	359.73	10,404.0	3,769.5	307.3	3,768.0	0.00	0.00	0.00
14,200.0	90.00	359.73	10,404.0	3,869.5	306.8	3,868.0	0.00	0.00	0.00
14,300.0	90.00	359.73	10,404.0	3,969.5	306.3	3,968.0	0.00	0.00	0.00
14,400.0	90.00	359.73	10,404.0	4,069.5	305.8	4,068.0	0.00	0.00	0.00
14,500.0	90.00	359.73	10,404.0	4,169.5	305.4	4,168.0	0.00	0.00	0.00
14,600.0	90.00	359.73	10,404.0	4,269.5	304.9	4,268.0	0.00	0.00	0.00
14,700.0	90.00	359.73	10,404.0	4,369.5	304.4	4,368.0	0.00	0.00	0.00
14,800.0	90.00	359.73	10,404.0	4,469.5	303.9	4,468.0	0.00	0.00	0.00
14,900.0	90.00	359.73	10,404.0	4,569.5	303.5	4,568.0	0.00	0.00	0.00
15,000.0	90.00	359.73	10,404.0	4,669.5	303.0	4,668.0	0.00	0.00	0.00
15,100.0 15,200.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	4,769.5 4,869.5	302.5 302.0	4,768.0 4,868.0	0.00 0.00	0.00 0.00	0.00 0.00

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: EDDY

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

Well: 106H
Wellbore: OH
Design: Plan1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 106H

RKB(3094+30) @ 3124.0usft RKB(3094+30) @ 3124.0usft

Grid

200.g									
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)
15,300.0 15,400.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	4,969.5 5,069.5	301.6 301.1	4,968.0 5,068.0	0.00 0.00	0.00 0.00	0.00 0.00
15,500.0	90.00	359.73	10,404.0	5,169.5	300.6	5,168.0	0.00	0.00	0.00
15,600.0	90.00	359.73	10,404.0	5,269.5	300.1	5,268.0	0.00	0.00	0.00
15,700.0	90.00	359.73	10,404.0	5,369.5	299.6	5,368.0	0.00	0.00	0.00
15,800.0 15,900.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	5,469.5 5,569.5	299.2 298.7	5,468.0 5,568.0	0.00 0.00	0.00 0.00	0.00 0.00
16,000.0	90.00 90.00	359.73	10,404.0	5,669.5	298.2	5,668.0	0.00	0.00	0.00
16,100.0 16,200.0	90.00	359.73 359.73	10,404.0 10,404.0	5,769.5 5,869.5	297.7 297.3	5,768.0 5,868.0	0.00 0.00	0.00 0.00	0.00 0.00
16,300.0	90.00	359.73	10,404.0	5,969.5	296.8	5,968.0	0.00	0.00	0.00
16,400.0	90.00	359.73	10,404.0	6,069.5	296.3	6,068.0	0.00	0.00	0.00
16,500.0	90.00	359.73	10,404.0	6,169.5	295.8	6,168.0	0.00	0.00	0.00
16,600.0	90.00	359.73	10,404.0	6,269.5	295.4	6,268.0	0.00	0.00	0.00
16,700.0	90.00	359.73	10,404.0	6,369.5	294.9	6,368.0	0.00	0.00	0.00
16,800.0	90.00	359.73	10,404.0	6,469.5	294.4	6,468.0	0.00	0.00	0.00
16,900.0	90.00	359.73	10,404.0	6,569.5	293.9	6,568.0	0.00	0.00	0.00
17,000.0	90.00	359.73	10,404.0	6,669.5	293.5	6,668.0	0.00	0.00	0.00
17,100.0	90.00	359.73	10,404.0	6,769.5	293.0	6,768.0	0.00	0.00	0.00
17,200.0	90.00	359.73	10,404.0	6,869.5	292.5	6,868.0	0.00	0.00	0.00
17,300.0	90.00	359.73	10,404.0	6,969.5	292.0	6,968.0	0.00	0.00	0.00
17,400.0	90.00	359.73	10,404.0	7,069.5	291.6	7,068.0	0.00	0.00	0.00
17,500.0	90.00	359.73	10,404.0	7,169.5	291.1	7,168.0	0.00	0.00	0.00
17,600.0	90.00	359.73	10,404.0	7,269.5	290.6	7,268.0	0.00	0.00	0.00
17,700.0	90.00	359.73	10,404.0	7,369.5	290.1	7,368.0	0.00	0.00	0.00
17,800.0 17,900.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	7,469.5 7,569.5	289.6 289.2	7,468.0 7,568.0	0.00 0.00	0.00 0.00	0.00 0.00
18,000.0	90.00	359.73	10,404.0	7,669.5	288.7	7,668.0	0.00	0.00	0.00
18,091.3	90.00	359.73	10,404.0	7,760.7	288.3	7,759.3	0.00	0.00	0.00
18,100.0	90.00	359.73	10,404.0	7,769.5	288.2	7,768.0	0.00	0.00	0.00
18,200.0	90.00	359.73	10,404.0	7,869.5	287.7	7,868.0	0.00	0.00	0.00
18,300.0	90.00	359.73	10,404.0	7,969.5	287.3	7,968.0	0.00	0.00	0.00
18,400.0	90.00	359.73	10,404.0	8,069.5	286.8	8,068.0	0.00	0.00	0.00
18,500.0	90.00	359.73	10,404.0	8,169.5	286.3	8,168.0	0.00	0.00	0.00
18,600.0 18,700.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	8,269.5 8,369.5	285.8 285.4	8,268.0 8,368.0	0.00 0.00	0.00 0.00	0.00 0.00
18,800.0	90.00	359.73 359.73	10,404.0	8,369.5 8,469.5	285.4 284.9	8,468.0	0.00	0.00	0.00
18,900.0 19,000.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	8,569.5 8,669.5	284.4 283.9	8,568.0 8,668.0	0.00 0.00	0.00 0.00	0.00 0.00
19,000.0	90.00	359.73 359.73	10,404.0	8,769.5	283.5	8,768.0	0.00	0.00	0.00
19,200.0	90.00	359.73	10,404.0	8,869.5	283.0	8,868.0	0.00	0.00	0.00
19,300.0	90.00	359.73	10,404.0	8,969.5	282.5	8,968.0	0.00	0.00	0.00
19,400.0	90.00	359.73	10,404.0	9,069.5	282.0	9,068.0	0.00	0.00	0.00
19,500.0	90.00	359.73	10,404.0	9,169.5	281.5	9,168.0	0.00	0.00	0.00
19,600.0	90.00	359.73	10,404.0	9,269.5	281.1	9,268.0	0.00	0.00	0.00
19,700.0 19,800.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	9,369.5 9,469.5	280.6 280.1	9,368.0 9,468.0	0.00 0.00	0.00 0.00	0.00 0.00
19,900.0 20,000.0	90.00 90.00	359.73 359.73	10,404.0 10,404.0	9,569.5 9,669.5	279.6 279.2	9,568.0 9,668.0	0.00 0.00	0.00 0.00	0.00 0.00
20,000.0	90.00	359.73 359.73	10,404.0	9,669.5 9,769.5	279.2 278.7	9,668.0	0.00	0.00	0.00
20,200.0	90.00	359.73	10,404.0	9,869.5	278.2	9,868.0	0.00	0.00	0.00
20,300.0	90.00	359.73	10,404.0	9,969.5	277.7	9,968.0	0.00	0.00	0.00
20,400.0	90.00	359.73	10,404.0	10,069.5	277.3	10,068.0	0.00	0.00	0.00
20,408.7	90.00	359.73	10,404.0	10,078.1	277.2	10,076.7	0.00	0.00	0.00

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: EDDY

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

Well: 106H
Wellbore: OH
Design: Plan1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well 106H

RKB(3094+30) @ 3124.0usft RKB(3094+30) @ 3124.0usft

Grid

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
20,458.7	90.00	359.73	10,404.0	10,128.1	277.0	10,126.7	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
106H_SHL - plan hits target c - Rectangle (sides		0.00	0.0	0.0	0.0	443,229.62	622,730.59	32° 13' 4.557 N	103° 56′ 11.333 W
106H_PP1 - plan hits target c - Point	0.00 enter	0.00	10,404.0	2,458.7	313.5	445,688.35	623,044.10	32° 13' 28.877 N	103° 56' 7.577 W
106H_LTP - plan hits target c - Point	0.00 enter	0.00	10,404.0	10,078.1	277.2	453,307.74	623,007.83	32° 14' 44.281 N	103° 56' 7.671 W
106H_PP2 - plan hits target c - Point	0.00 enter	0.00	10,404.0	7,760.7	288.3	450,990.36	623,018.86	32° 14' 21.347 N	103° 56' 7.642 W
106H_BHL - plan misses targ - Point	0.00 et center by 0.1u	0.00 usft at 20458	10,404.0 .7usft MD (1	10,128.1 0404.0 TVD, 1	276.9 10128.1 N, 277	453,357.74 7.0 E)	623,007.46	32° 14' 44.776 N	103° 56' 7.673 W
106H_FTP - plan hits target c - Point	0.00 enter	0.00	10,404.0	499.8	322.8	443,729.40	623,053.43	32° 13' 9.491 N	103° 56' 7.553 W

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

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 285216

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	285216
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Original COA's still apply. If cement does not circulate during cementing, then a CBL is required.	11/15/2023