

Well Name: POKER LAKE UNIT 29-20 BS	Well Location: T25S / R31E / SEC 29 / NWNE /	County or Parish/State:
Well Number: 155H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMLC062140A	Unit or CA Name:	Unit or CA Number: NMNM71016X
US Well Number: 3001554267	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2765096

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 12/07/2023

Time Sundry Submitted: 02:59

Date proposed operation will begin: 01/05/2024

Procedure Description: Pool Change, First and Last Take Point Changes, Bottom Hole Location Change, Drilling Plan Change, Directional Plan Change, Casing/Cement Change. POOL: FROM: (98220) Purple Sage; Wolfcamp (gas) TO: WC; Big Sinks; Bone Spring (96654) FTP: FROM: 2310' FNL & 2080' FWL TO: 2115' FNL & 2581' FEL of Section 28-T25S-R31E PPP1: 2652' FNL & 2587' FEL PPP2: 0' FNL & 2586' FEL LTP: FROM: 100' FSL & 2080' FWL TO: 2557' FSL & 2571' FEL of Section 16-T25S-R31E BHL: FROM: 50' FNL & 2080' FWL TO: 2656' FSL & 2571' FEL of Section 16-T25S-R31E HOLE AND CASING SIZES: surface, intermediate and production hole, casing and cement will be downsized based on the attached drilling program. Due to the downsize in these strings, the wellhead configuration has also changed based on the attached drilling program. Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan MBS

NOI Attachments

Procedure Description

Poker_Lake_Unit_29_20_BS_155H_Sundry_Attachments_20231207145826.pdf

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Conditions of Approval

Additional

Sec_29_25S_31E_NMP_Sundry_2765096_Poker_Lake_Unit_29_20_BS_155H_COAs_20240126091907.pdf

Sec_29_25S_31E_NMP_Sundry_2765096_Poker_Lake_Unit_29_20_BS_155H_Eng_Worksheet_20240126084114.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: JAN 23, 2024 12:15 PM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 6401 Holiday Hill Road, Bldg 5

City: Midland

State: TX

Phone: (432) 218-3671

Email address: CASSIE.EVANS@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 01/26/2024

Signature: Chris Walls

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

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.	NMLC062140A
6. If Indian, Allottee or Tribe Name	

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well		NMNM71016X
☐ Oil Well ☒ Gas Well ☐ Other		8. Well Name and No.
2. Name of Operator		POKER LAKE UNIT 29-20 BS/155H
XTO PERMIAN OPERATING LLC		9. API Well No.
3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,		3001554267
3b. Phone No. (include area code)		10. Field and Pool or Exploratory Area
(432) 683-2277		WC-025 G-08 S213304D/WOLFCAMP (GAS)
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		11. Country or Parish, State
SEC 29/T25S/R31E/NMP		EDDY/NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA					
TYPE OF SUBMISSION		TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off	
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity	
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other	
	☒ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

Pool Change, First and Last Take Point Changes, Bottom Hole Location Change, Drilling Plan Change, Directional Plan Change, Casing/Cement Change.

POOL: FROM: (98220) Purple Sage; Wolfcamp (gas) TO: WC; Big Sinks; Bone Spring (96654)
FTP: FROM: 2310 FNL & 2080 FWL TO: 2115 FNL & 2581 FEL of Section 28-T25S-R31E
PPP1: 2652 FNL & 2587 FEL
PPP2: 0 FNL & 2586 FEL
LTP: FROM: 100 FSL & 2080 FWL TO: 2557 FSL & 2571 FEL of Section 16-T25S-R31E
BHL: FROM: 50 FNL & 2080 FWL TO: 2656 FSL & 2571 FEL of Section 16-T25S-R31E

HOLE AND CASING SIZES: surface, intermediate and production hole, casing and cement will be downsized based on the attached drilling program. Due to the downsize in these strings, the wellhead configuration has also changed based on the attached drilling program.

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Regulatory Analyst	
CASSIE EVANS / Ph: (432) 218-3671	Title	
(Electronic Submission)	Date	01/23/2024
Signature		

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Petroleum Engineer	01/26/2024
CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	CARLSBAD

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

Casing/Cement design per the attached drilling program.

Attachments:

C102

Drilling Program

Directional Plan

MBS

Location of Well

0. SHL: NWNE / 536 FNL / 1882 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107089 / LONG: -103.797785 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 2310 FSL / 2080 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.102212 / LONG: -103.798447 (TVD: 12499 feet, MD: 13109 feet)

PPP: SWSE / 2310 FSL / 2080 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.110387 / LONG: -103.798103 (TVD: 12499 feet, MD: 15749 feet)

BHL: NWNE / 50 FNL / 2430 FEL / TWSP: 25S / RANGE: 31E / SECTION: 20 / LAT: 32.122993 / LONG: -103.798308 (TVD: 12499 feet, MD: 20669 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 29-20 BS 155H
LOCATION:	Sec 29-25S-31E-NMP
COUNTY:	Eddy County, New Mexico

*Changes approved through engineering via **Sundry 2765096** on 01/26/2024. Any previous COAs not addressed within the updated COAs still apply.*

COA

H₂S	☒ No	☐ Yes		
Potash / WIPP	☒ None	☐ Secretary	☐ R-111-P	☐ WIPP
Cave / Karst	☐ Low	☒ Medium	☐ High	☐ Critical
Wellhead	☐ Conventional	☒ Multibowl	☐ Both	☐ Diverter
Cementing	☐ Primary Squeeze	☒ Cont. Squeeze	☒ EchoMeter	☐ DV Tool
Special Req	☒ Break Testing	☐ Water Disposal	☐ COM	☒ Unit
Variance	☒ Flex Hose	☒ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	☒ Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
☐ Batch APD / Sundry				

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 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 939 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. **NOTE: This area has a high dissolution of salt, so the operator may need to make adjustments to their surface set depths to find a competent set point.**
 - 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 6899'**
 - 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. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **300 feet** into previous casing string (due to not meeting the 0.422" clearance requirement.) Operator shall provide method of verification. **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.**

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 (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.

- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
 - b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
 - c. BOPE tests (minimum of 4 hours)
- **Eddy County (API No. / US Well No. contains 30-015-#####)**
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 (API No. / US Well No. contains 30-025-#####)**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 689-5981
1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

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

Sec 29-25S-31E-NMP Sundry 2765096 Poker Lake Unit 29-20 BS 155H Eng Worksheet

Poker Lake Unit 29-20 BS 155H

9 5/8	surface csg in a	12 1/4	inch hole.	Design Factors					Surface		
Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J 55	BTC	16.77	5.92	1.9	939	10	3.30	11.29	37,560
"B"			BTC				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				Tail Cmt	does not	circ to sfc.	Totals:	939			37,560
Comparison of Proposed to Minimum Required Cement Volumes											
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
12 1/4	0.3132	340	568	294	93	8.90	1198	2M			0.81
Site plat (pipe racks S or D) as per G.O. 1 JLD 4.1, not found.											

7 5/8	casing inside the	9 5/8	Design Factors					Int 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	29.70	RY P 110	Flush Joint	4.70	2.57	1.74	4,000	5	2.83	4.47	118,800
"B"	29.70	HCL 80	Flush Joint	∞	2.78	1.27	6,916	3	2.06	4.83	205,405
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	10,916	324,205		
The cement volume(s) are intended to achieve a top of					0	ft from surface or a			939	overlap.	
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg		
8 3/4	0.1005	740	1524	1104	38	10.00	3339	5M	0.56		

Tail cmt											
5 1/2	casing inside the	7 5/8	Design Factors					Prod 1			
Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	20.00	RY P 110	Semi-Premiur	3.37	2.04	2.33	10,816	2	3.79	3.32	216,320
"B"	20.00	RY P 110	Semi-Flush	∞	2.04	2.33	11,492	2	3.79	3.32	229,840
w/8.4#/g mud, 30min Sfc Csg Test psig: 2,090							Totals:	22,308	446,160		
The cement volume(s) are intended to achieve a top of					8800	ft from surface or a		2116	overlap.		
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg		
6 3/4	0.0835	820	1262	1149	10	11.00			0.23		
Class 'C' tail cmt yld > 1.35											

#N/A											
0	5 1/2	Design Factors					<Choose Casing>				
Segment	#/ft	Grade	Coupling	#N/A	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"			0.00				0				0
"B"			0.00				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:							Totals:	0			0
Cmt vol calc below includes this csg, TOC intended				#N/A	ft from surface or a	#N/A					overlap.
Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE			Min Dist Hole-Cplg
0		#N/A	#N/A	0	#N/A						
#N/A Capitan Reef est top XXXX.											

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-54267	² Pool Code 96654	³ Pool Name WC; Big Sinks; Bone Spring
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 29-20 BS	⁶ Well Number 155H
⁷ OGRID No. 373075	⁸ Operator Name XTO Permian Operating, LLC.	⁹ Elevation 3,358'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	29	25 S	31 E		537	NORTH	1,392	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	16	25 S	31 E		2,656	SOUTH	2,571	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

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.

LEGEND

- SECTION LINE
- PROPOSED WELLBORE
- NEW MEXICO MINERAL LEASE
- 330' BOX
- DEDICATED ACREAGE BOX

SHL (NAD83 NME)
Y = 403,109.7
X = 707,648.9
LAT. = 32.107089° N
LONG. = 103.796202° W

LTP (NAD83 NME)
Y = 411,520.5
X = 711,777.1
LAT. = 32.130152° N
LONG. = 103.782732° W

FTP (NAD83 NME)
Y = 401,551.2
X = 711,787.5
LAT. = 32.102747° N
LONG. = 103.782862° W

BHL (NAD83 NME)
Y = 411,619.5
X = 711,776.4
LAT. = 32.130424° N
LONG. = 103.782732° W

CORNER COORDINATES (NAD83 NME)
A - Y = 401,014.4 N, X = 711,707.2 E
B - Y = 403,666.0 N, X = 711,714.2 E
C - Y = 406,311.4 N, X = 711,697.2 E
D - Y = 408,963.3 N, X = 711,680.3 E
E - Y = 411,620.4 N, X = 711,683.3 E
F - Y = 401,020.7 N, X = 713,036.5 E
G - Y = 403,670.3 N, X = 713,043.8 E
H - Y = 406,316.4 N, X = 713,033.4 E
I - Y = 408,965.5 N, X = 713,023.1 E
J - Y = 411,622.2 N, X = 713,015.5 E

SHL (NAD27 NME)
Y = 403,051.8
X = 666,463.3
LAT. = 32.106964° N
LONG. = 103.795724° W

LTP (NAD27 NME)
Y = 411,462.4
X = 670,592.0
LAT. = 32.130027° N
LONG. = 103.782252° W

FTP (NAD27 NME)
Y = 401,493.3
X = 670,601.8
LAT. = 32.102623° N
LONG. = 103.782385° W

BHL (NAD27 NME)
Y = 411,561.4
X = 670,591.4
LAT. = 32.130299° N
LONG. = 103.782252° W

CORNER COORDINATES (NAD27 NME)
A - Y = 400,956.5 N, X = 670,521.5 E
B - Y = 403,608.1 N, X = 670,528.5 E
C - Y = 406,253.4 N, X = 670,511.7 E
D - Y = 408,905.2 N, X = 670,494.8 E
E - Y = 411,562.3 N, X = 670,498.3 E
F - Y = 400,962.9 N, X = 671,850.8 E
G - Y = 403,612.4 N, X = 671,858.2 E
H - Y = 406,258.4 N, X = 671,847.8 E
I - Y = 408,907.5 N, X = 671,837.6 E
J - Y = 411,564.1 N, X = 671,830.4 E

PPP1 (NAD83 NME)
Y = 406,311.7
X = 711,782.5
LAT. = 32.115833° N
LONG. = 103.782800° W

PPP1 (NAD27 NME)
Y = 406,253.7
X = 670,597.0
LAT. = 32.115709° N
LONG. = 103.782322° W

PPP2 (NAD83 NME)
Y = 408,963.5
X = 711,779.7
LAT. = 32.123122° N
LONG. = 103.782765° W

PPP2 (NAD27 NME)
Y = 408,905.4
X = 670,594.3
LAT. = 32.129980° N
LONG. = 103.782287° W

¹⁷ OPERATOR CERTIFICATION
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Terra Sebastian 12/07/2023
Signature Date

Terra Sebastian
Printed Name

terra.b.sebastian@exxonmobil.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

10-15-2023
Date of Survey

LM 2019082896

Signature and Seal of
Professional Surveyor:

I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Tim C. Pappas 16 OCT 2023

TIM C. PAPPAS
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEXICO NO. 21209

TIM C. PAPPAS 21209
Certificate Number

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

XTO Energy Inc.

Poker Lake Unit 29-20 BS 155H

Projected TD: 22308.33' MD / 10062' TVD

SHL: 537' FNL & 1392' FEL , Section 29, T25S, R31E

BHL: 2656' FSL & 2571' FEL , Section 16, T25S, R31E

Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	839'	Water
Top of Salt	1219'	Water
Base of Salt	4004'	Water
Delaware	4214'	Water
Brushy Canyon	6899'	Water/Oil/Gas
Bone Spring	8176'	Water
1st Bone Spring	9017'	Water/Oil/Gas
2nd Bone Spring	9618'	Water/Oil/Gas
Target/Land Curve	10062'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 939' (280' 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 10915.47' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 22308.33 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10615.47 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 939'	9.625	40	J-55	BTC	New	1.32	6.70	16.77
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.88	2.71	1.72
8.75	4000' – 10915.47'	7.625	29.7	HC L-80	Flush Joint	New	2.10	1.90	1.98
6.75	0' – 10815.47'	5.5	20	RY P-110	Semi-Premium	New	1.26	1.88	2.03
6.75	10815.47' - 22308.33'	5.5	20	RY P-110	Semi-Flush	New	1.26	2.02	2.03

- XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
- XTO requests to not utilize centralizers in the curve and lateral
- 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
- XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

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

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

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 939'

Lead: 210 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft³/sx, 10.13 gal/sx water)

Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

Top of Cement: Surface

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

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 10915.47'

1st Stage

Optional Lead: 370 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 370 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6899

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: 780 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 (6899') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 22308.33'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 10615.47 feet

Tail: 800 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 11115.47 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 3280 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 nipping up on the 9.625, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

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

hole on each of the wells.

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

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 939'	12.25	FW/Native	8.4-8.9	35-40	NC
939' - 10915.47'	8.75	FW / Cut Brine / Direct Emulsion	9.5-10	30-32	NC
10915.47' - 22308.33'	6.75	OBM	10.5-11	50-60	NC - 20

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

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

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

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

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5494 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.

Well Plan Report - PLU 29-20 155H

Measured Depth:

22308.33 ft

TVD RKB:

10062.00 ft

Location

Cartographic Reference System:

New Mexico East - NAD 27

Northing:

403051.80 ft

Easting:

666463.30 ft

RKB:

3390.00 ft

Ground Level:

3358.00 ft

North Reference:

Grid

Convergence Angle:

0.29 Deg

Site:

C

Slot:

PLU 29-20 155H

Plan Sections

Measured		TVD		Y Offset		X Offset		Build		Turn		Dogleg	
Depth	(ft)	Inclination	Azimuth	RKB	(ft)	Y Offset	(ft)	Rate	(Deg/100ft)	Rate	(Deg/100ft)	Rate	(Deg/100ft) Target
0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100.00		0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3447.69		46.95	118.79	3193.59	-437.94	796.91		2.00	0.00	0.00	2.00	0.00	2.00
7421.98		46.95	118.79	5906.41	-1836.76	3342.30		0.00	0.00	0.00	0.00	0.00	0.00
9769.67		0.00	0.00	8000.00	-2274.70	4139.20		-2.00	0.00	0.00	2.00	0.00	2.00
11115.47		0.00	0.00	9345.80	-2274.70	4139.20		0.00	0.00	0.00	0.00	0.00	0.00
12240.47		90.00	359.94	10062.00	-1558.50	4138.50		8.00	0.00	0.00	8.00	FTP 8	FTP 8
22209.57		90.00	359.94	10062.00	8410.60	4128.70		0.00	0.00	0.00	0.00	0.00	LTP 8
22308.33		90.00	359.94	10062.00	8509.35	4128.60		0.00	0.00	0.00	0.00	0.00	BHL 8

Position Uncertainty

Measured		TVD		Highside		Lateral		Vertical		Magnitude		Semi-major		Semi-minor		Tool	
----------	--	-----	--	----------	--	---------	--	----------	--	-----------	--	------------	--	------------	--	------	--

Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	of Bias (ft)	Error (ft)	Error (ft)	Azimuth (°)	Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.751	0.000	0.220	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.310	0.000	1.259	0.000	0.627	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	1.698	0.000	0.986	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	0.000	2.108	0.000	1.344	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.374	0.000	2.503	0.000	1.701	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.406	0.000	2.888	0.000	2.059	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.444	0.000	3.267	0.000	2.417	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.485	0.000	3.642	0.000	2.775	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.531	0.000	4.014	0.000	3.133	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.581	0.000	4.384	0.000	3.491	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.634	0.000	4.752	0.000	3.849	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	118.791	1199.980	4.408	0.000	5.017	-0.000	2.691	0.000	5.051	0.000	4.372	4.372	131.986	MWD+IFR1+MS
1300.000	4.000	118.791	1299.838	5.263	0.000	5.339	-0.000	2.751	0.000	5.340	0.000	5.270	5.270	116.075	MWD+IFR1+MS
1400.000	6.000	118.791	1399.452	6.012	0.000	5.667	-0.000	2.816	0.000	6.067	0.000	5.625	5.625	46.422	MWD+IFR1+MS
1500.000	8.000	118.791	1498.702	6.690	0.000	6.001	-0.000	2.889	0.000	6.781	0.000	5.928	5.928	45.224	MWD+IFR1+MS
1600.000	10.000	118.791	1597.465	7.315	0.000	6.340	-0.000	2.972	0.000	7.442	0.000	6.239	6.239	44.909	MWD+IFR1+MS
1700.000	12.000	118.791	1695.623	7.899	0.000	6.686	-0.000	3.067	0.000	8.061	0.000	6.560	6.560	44.811	MWD+IFR1+MS
1800.000	14.000	118.791	1793.055	8.449	0.000	7.039	-0.000	3.175	0.000	8.647	0.000	6.890	6.890	44.810	MWD+IFR1+MS
1900.000	16.000	118.791	1889.643	8.971	0.000	7.401	-0.000	3.298	0.000	9.206	0.000	7.231	7.231	44.870	MWD+IFR1+MS
2000.000	18.000	118.791	1985.268	9.470	0.000	7.772	-0.000	3.438	0.000	9.742	0.000	7.583	7.583	44.980	MWD+IFR1+MS
2100.000	20.000	118.791	2079.816	9.948	0.000	8.155	-0.000	3.596	0.000	10.260	0.000	7.948	7.948	45.139	MWD+IFR1+MS
2200.000	22.000	118.791	2173.169	10.408	0.000	8.550	-0.000	3.772	0.000	10.760	0.000	8.327	8.327	45.349	MWD+IFR1+MS
2300.000	24.000	118.791	2265.215	10.853	0.000	8.960	-0.000	3.969	0.000	11.247	0.000	8.721	8.721	45.618	MWD+IFR1+MS
2400.000	26.000	118.791	2355.841	11.284	0.000	9.386	-0.000	4.187	0.000	11.721	0.000	9.132	9.132	45.960	MWD+IFR1+MS
2500.000	28.000	118.791	2444.937	11.703	0.000	9.830	-0.000	4.426	0.000	12.183	0.000	9.561	9.561	46.389	MWD+IFR1+MS
2600.000	30.000	118.791	2532.394	12.111	0.000	10.294	-0.000	4.687	0.000	12.637	0.000	10.010	10.010	46.929	MWD+IFR1+MS
2700.000	32.000	118.791	2618.107	12.510	0.000	10.780	-0.000	4.970	0.000	13.081	0.000	10.480	10.480	47.609	MWD+IFR1+MS
2800.000	34.000	118.791	2701.970	12.900	0.000	11.290	-0.000	5.276	0.000	13.518	0.000	10.972	10.972	48.472	MWD+IFR1+MS
2900.000	36.000	118.791	2783.881	13.282	0.000	11.825	-0.000	5.604	0.000	13.950	0.000	11.486	11.486	49.576	MWD+IFR1+MS
3000.000	38.000	118.791	2863.740	13.659	0.000	12.387	-0.000	5.956	0.000	14.377	0.000	12.024	12.024	51.003	MWD+IFR1+MS

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3100.000	40.000	118.791	2941.451	14.029	0.000	12.979	-0.000	6.332	0.000	0.000	14.802	12.583	52.871	MWD+IFR1+MS
3200.000	42.000	118.791	3016.918	14.394	0.000	13.600	-0.000	6.730	0.000	0.000	15.228	13.161	55.351	MWD+IFR1+MS
3300.000	44.000	118.791	3090.050	14.755	0.000	14.252	-0.000	7.152	0.000	0.000	15.662	13.754	58.676	MWD+IFR1+MS
3400.000	46.000	118.791	3160.757	15.111	0.000	14.935	-0.000	7.598	0.000	0.000	16.112	14.353	63.140	MWD+IFR1+MS
3447.685	46.954	118.791	3193.595	15.217	0.000	15.266	-0.000	7.750	0.000	0.000	16.307	14.633	66.000	MWD+IFR1+MS
3500.000	46.954	118.791	3229.304	15.434	0.000	15.636	-0.000	7.909	0.000	0.000	16.525	14.931	69.753	MWD+IFR1+MS
3600.000	46.954	118.791	3297.563	15.858	0.000	16.364	-0.000	8.228	0.000	0.000	17.000	15.465	78.055	MWD+IFR1+MS
3700.000	46.954	118.791	3365.822	16.300	0.000	17.111	-0.000	8.565	0.000	0.000	17.560	15.942	86.393	MWD+IFR1+MS
3800.000	46.954	118.791	3434.081	16.754	0.000	17.872	-0.000	8.913	0.000	0.000	18.192	16.366	93.455	MWD+IFR1+MS
3900.000	46.954	118.791	3502.340	17.218	0.000	18.643	-0.000	9.272	0.000	0.000	18.877	16.754	98.859	MWD+IFR1+MS
4000.000	46.954	118.791	3570.599	17.693	0.000	19.424	-0.000	9.640	0.000	0.000	19.600	17.120	102.845	MWD+IFR1+MS
4100.000	46.954	118.791	3638.858	18.177	0.000	20.214	-0.000	10.016	0.000	0.000	20.350	17.473	105.790	MWD+IFR1+MS
4200.000	46.954	118.791	3707.116	18.669	0.000	21.011	-0.000	10.399	0.000	0.000	21.118	17.820	108.003	MWD+IFR1+MS
4300.000	46.954	118.791	3775.375	19.169	0.000	21.816	-0.000	10.789	0.000	0.000	21.901	18.164	109.704	MWD+IFR1+MS
4400.000	46.954	118.791	3843.634	19.677	0.000	22.626	-0.000	11.185	0.000	0.000	22.695	18.508	111.039	MWD+IFR1+MS
4500.000	46.954	118.791	3911.893	20.191	0.000	23.442	-0.000	11.586	0.000	0.000	23.499	18.852	112.108	MWD+IFR1+MS
4600.000	46.954	118.791	3980.152	20.711	0.000	24.263	-0.000	11.991	0.000	0.000	24.309	19.198	112.979	MWD+IFR1+MS
4700.000	46.954	118.791	4048.411	21.237	0.000	25.088	-0.000	12.401	0.000	0.000	25.127	19.545	113.699	MWD+IFR1+MS
4800.000	46.954	118.791	4116.670	21.769	0.000	25.917	-0.000	12.815	0.000	0.000	25.950	19.895	114.304	MWD+IFR1+MS
4900.000	46.954	118.791	4184.929	22.305	0.000	26.750	-0.000	13.232	0.000	0.000	26.777	20.248	114.817	MWD+IFR1+MS
5000.000	46.954	118.791	4253.188	22.846	0.000	27.586	-0.000	13.653	0.000	0.000	27.609	20.603	115.256	MWD+IFR1+MS
5100.000	46.954	118.791	4321.447	23.392	0.000	28.425	-0.000	14.076	0.000	0.000	28.445	20.961	115.636	MWD+IFR1+MS
5200.000	46.954	118.791	4389.705	23.941	0.000	29.267	-0.000	14.502	0.000	0.000	29.284	21.321	115.968	MWD+IFR1+MS
5300.000	46.954	118.791	4457.964	24.494	0.000	30.112	-0.000	14.931	0.000	0.000	30.126	21.683	116.260	MWD+IFR1+MS
5400.000	46.954	118.791	4526.223	25.051	0.000	30.958	-0.000	15.362	0.000	0.000	30.970	22.049	116.517	MWD+IFR1+MS
5500.000	46.954	118.791	4594.482	25.611	0.000	31.807	-0.000	15.795	0.000	0.000	31.817	22.416	116.747	MWD+IFR1+MS
5600.000	46.954	118.791	4662.741	26.174	0.000	32.658	-0.000	16.230	0.000	0.000	32.667	22.786	116.952	MWD+IFR1+MS
5700.000	46.954	118.791	4731.000	26.739	0.000	33.511	-0.000	16.667	0.000	0.000	33.518	23.158	117.136	MWD+IFR1+MS
5800.000	46.954	118.791	4799.259	27.308	0.000	34.365	-0.000	17.105	0.000	0.000	34.371	23.533	117.302	MWD+IFR1+MS
5900.000	46.954	118.791	4867.518	27.879	0.000	35.221	-0.000	17.545	0.000	0.000	35.226	23.910	117.453	MWD+IFR1+MS
6000.000	46.954	118.791	4935.777	28.452	0.000	36.079	-0.000	17.987	0.000	0.000	36.083	24.288	117.590	MWD+IFR1+MS
6100.000	46.954	118.791	5004.036	29.028	0.000	36.937	-0.000	18.430	0.000	0.000	36.941	24.669	117.716	MWD+IFR1+MS
6200.000	46.954	118.791	5072.294	29.605	0.000	37.797	-0.000	18.874	0.000	0.000	37.800	25.052	117.830	MWD+IFR1+MS

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6300.000	46.954	118.791	5140.553	30.185	0.000	38.659	-0.000	19.319	0.000	0.000	38.661	25.436	117.936	MWD+IFR1+MS
6400.000	46.954	118.791	5208.812	30.766	0.000	39.521	-0.000	19.766	0.000	0.000	39.523	25.822	118.033	MWD+IFR1+MS
6500.000	46.954	118.791	5277.071	31.349	0.000	40.384	-0.000	20.214	0.000	0.000	40.386	26.210	118.123	MWD+IFR1+MS
6600.000	46.954	118.791	5345.330	31.934	0.000	41.248	-0.000	20.663	0.000	0.000	41.250	26.600	118.206	MWD+IFR1+MS
6700.000	46.954	118.791	5413.589	32.521	0.000	42.114	-0.000	21.112	0.000	0.000	42.115	26.992	118.283	MWD+IFR1+MS
6800.000	46.954	118.791	5481.848	33.109	0.000	42.980	-0.000	21.563	0.000	0.000	42.980	27.385	118.355	MWD+IFR1+MS
6900.000	46.954	118.791	5550.107	33.698	0.000	43.846	-0.000	22.015	0.000	0.000	43.847	27.779	118.422	MWD+IFR1+MS
7000.000	46.954	118.791	5618.366	34.289	0.000	44.714	-0.000	22.467	0.000	0.000	44.714	28.175	118.484	MWD+IFR1+MS
7100.000	46.954	118.791	5686.625	34.880	0.000	45.582	-0.000	22.920	0.000	0.000	45.583	28.572	118.543	MWD+IFR1+MS
7200.000	46.954	118.791	5754.884	35.474	0.000	46.451	-0.000	23.374	0.000	0.000	46.451	28.971	118.598	MWD+IFR1+MS
7300.000	46.954	118.791	5823.142	36.068	0.000	47.321	-0.000	23.829	0.000	0.000	47.321	29.371	118.649	MWD+IFR1+MS
7400.000	46.954	118.791	5891.401	36.663	0.000	48.191	-0.000	24.284	0.000	0.000	48.191	29.773	118.698	MWD+IFR1+MS
7421.981	46.954	118.791	5906.405	36.793	0.000	48.381	-0.000	24.384	0.000	0.000	48.381	29.861	118.710	MWD+IFR1+MS
7500.000	45.393	118.791	5960.430	37.387	0.000	49.049	-0.000	24.738	0.000	0.000	49.049	30.179	118.748	MWD+IFR1+MS
7600.000	43.393	118.791	6031.882	38.148	0.000	49.881	-0.000	25.208	0.000	0.000	49.881	30.622	118.771	MWD+IFR1+MS
7700.000	41.393	118.791	6105.731	38.866	0.000	50.682	-0.000	25.662	0.000	0.000	50.682	31.084	118.784	MWD+IFR1+MS
7800.000	39.393	118.791	6181.889	39.525	0.000	51.452	-0.000	26.090	0.000	0.000	51.452	31.552	118.796	MWD+IFR1+MS
7900.000	37.393	118.791	6260.261	40.125	0.000	52.188	-0.000	26.491	0.000	0.000	52.188	32.025	118.807	MWD+IFR1+MS
8000.000	35.393	118.791	6340.754	40.664	0.000	52.891	-0.000	26.866	0.000	0.000	52.891	32.502	118.816	MWD+IFR1+MS
8100.000	33.393	118.791	6423.267	41.141	0.000	53.561	-0.000	27.215	0.000	0.000	53.561	32.980	118.824	MWD+IFR1+MS
8200.000	31.393	118.791	6507.702	41.555	0.000	54.196	-0.000	27.539	0.000	0.000	54.196	33.458	118.830	MWD+IFR1+MS
8300.000	29.393	118.791	6593.955	41.907	0.000	54.797	-0.000	27.838	0.000	0.000	54.797	33.935	118.835	MWD+IFR1+MS
8400.000	27.393	118.791	6681.921	42.194	0.000	55.364	-0.000	28.114	0.000	0.000	55.364	34.407	118.838	MWD+IFR1+MS
8500.000	25.393	118.791	6771.493	42.418	0.000	55.898	-0.000	28.366	0.000	0.000	55.898	34.875	118.839	MWD+IFR1+MS
8600.000	23.393	118.791	6862.561	42.577	0.000	56.398	-0.000	28.597	0.000	0.000	56.398	35.335	118.839	MWD+IFR1+MS
8700.000	21.393	118.791	6955.016	42.672	0.000	56.865	-0.000	28.806	0.000	0.000	56.865	35.787	118.837	MWD+IFR1+MS
8800.000	19.393	118.791	7048.743	42.703	0.000	57.301	-0.000	28.997	0.000	0.000	57.301	36.230	118.834	MWD+IFR1+MS
8900.000	17.393	118.791	7143.630	42.669	0.000	57.706	-0.000	29.168	0.000	0.000	57.706	36.661	118.828	MWD+IFR1+MS
9000.000	15.393	118.791	7239.559	42.572	0.000	58.080	-0.000	29.323	0.000	0.000	58.080	37.080	118.820	MWD+IFR1+MS
9100.000	13.393	118.791	7336.416	42.411	0.000	58.426	-0.000	29.462	0.000	0.000	58.426	37.485	118.810	MWD+IFR1+MS
9200.000	11.393	118.791	7434.081	42.188	0.000	58.744	-0.000	29.587	0.000	0.000	58.744	37.876	118.799	MWD+IFR1+MS
9300.000	9.393	118.791	7532.435	41.903	0.000	59.036	-0.000	29.700	0.000	0.000	59.036	38.251	118.784	MWD+IFR1+MS
9400.000	7.393	118.791	7631.359	41.557	0.000	59.303	-0.000	29.801	0.000	0.000	59.303	38.609	118.768	MWD+IFR1+MS

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9500.000	5.393	118.791	7730.732	41.152	0.000	59.547	-0.000	29.894	0.000	0.000	59.547	38.950	118.750	MWD+IFR1+MS
9600.000	3.393	118.791	7830.433	40.690	0.000	59.769	-0.000	29.978	0.000	0.000	59.769	39.273	118.729	MWD+IFR1+MS
9700.000	1.393	118.791	7930.341	40.171	0.000	59.970	-0.000	30.057	0.000	0.000	59.970	39.577	118.706	MWD+IFR1+MS
9769.666	0.000	0.000	8000.000	56.056	0.000	45.252	0.000	30.109	0.000	0.000	60.094	39.732	118.711	MWD+IFR1+MS
9800.000	0.000	0.000	8030.334	56.109	0.000	45.307	0.000	30.131	0.000	0.000	60.145	39.794	118.704	MWD+IFR1+MS
9900.000	0.000	0.000	8130.334	56.286	0.000	45.490	0.000	30.206	0.000	0.000	60.313	39.998	118.685	MWD+IFR1+MS
10000.000	0.000	0.000	8230.334	56.467	0.000	45.678	0.000	30.284	0.000	0.000	60.486	40.205	118.668	MWD+IFR1+MS
10100.000	0.000	0.000	8330.334	56.649	0.000	45.867	0.000	30.364	0.000	0.000	60.660	40.415	118.652	MWD+IFR1+MS
10200.000	0.000	0.000	8430.334	56.834	0.000	46.059	0.000	30.447	0.000	0.000	60.836	40.626	118.636	MWD+IFR1+MS
10300.000	0.000	0.000	8530.334	57.019	0.000	46.253	0.000	30.532	0.000	0.000	61.013	40.839	118.620	MWD+IFR1+MS
10400.000	0.000	0.000	8630.334	57.207	0.000	46.448	0.000	30.621	0.000	0.000	61.193	41.055	118.604	MWD+IFR1+MS
10500.000	0.000	0.000	8730.334	57.396	0.000	46.646	0.000	30.711	0.000	0.000	61.373	41.272	118.588	MWD+IFR1+MS
10600.000	0.000	0.000	8830.334	57.586	0.000	46.845	0.000	30.805	0.000	0.000	61.556	41.492	118.572	MWD+IFR1+MS
10700.000	0.000	0.000	8930.334	57.778	0.000	47.047	0.000	30.901	0.000	0.000	61.739	41.713	118.557	MWD+IFR1+MS
10800.000	0.000	0.000	9030.334	57.972	0.000	47.250	0.000	31.000	0.000	0.000	61.925	41.936	118.541	MWD+IFR1+MS
10900.000	0.000	0.000	9130.334	58.167	0.000	47.455	0.000	31.102	0.000	0.000	62.112	42.161	118.525	MWD+IFR1+MS
11000.000	0.000	0.000	9230.334	58.364	0.000	47.662	0.000	31.207	0.000	0.000	62.300	42.388	118.510	MWD+IFR1+MS
11100.000	0.000	0.000	9330.334	58.563	0.000	47.871	0.000	31.315	0.000	0.000	62.490	42.617	118.494	MWD+IFR1+MS
11115.469	0.000	0.000	9345.803	58.593	0.000	47.903	0.000	31.332	0.000	0.000	62.519	42.652	118.491	MWD+IFR1+MS
11200.000	6.762	359.944	9430.138	57.591	0.000	48.086	0.000	31.428	0.000	0.000	62.744	42.854	118.365	MWD+IFR1+MS
11300.000	14.762	359.944	9528.299	56.229	0.000	48.260	0.000	31.593	0.000	0.000	63.374	43.172	117.648	MWD+IFR1+MS
11400.000	22.762	359.944	9622.908	54.314	0.000	48.406	0.000	31.883	0.000	0.000	64.024	43.452	116.922	MWD+IFR1+MS
11500.000	30.762	359.944	9712.123	51.874	0.000	48.522	0.000	32.350	0.000	0.000	64.590	43.672	116.324	MWD+IFR1+MS
11600.000	38.762	359.944	9794.209	49.099	0.000	48.608	0.000	33.031	0.000	0.000	65.056	43.836	115.852	MWD+IFR1+MS
11700.000	46.762	359.944	9867.567	46.228	0.000	48.666	0.000	33.940	0.000	0.000	65.413	43.954	115.491	MWD+IFR1+MS
11800.000	54.762	359.944	9930.769	43.553	0.000	48.698	0.000	35.067	0.000	0.000	65.660	44.034	115.221	MWD+IFR1+MS
11900.000	62.762	359.944	9982.586	41.404	0.000	48.706	0.000	36.386	0.000	0.000	65.802	44.088	115.016	MWD+IFR1+MS
12000.000	70.762	359.944	10022.008	40.110	0.000	48.693	0.000	37.850	0.000	0.000	65.853	44.129	114.846	MWD+IFR1+MS
12100.000	78.762	359.944	10048.269	39.918	0.000	48.661	0.000	39.406	0.000	0.000	65.832	44.168	114.675	MWD+IFR1+MS
12200.000	86.762	359.944	10060.857	40.914	0.000	48.614	0.000	40.996	0.000	0.000	65.762	44.216	114.468	MWD+IFR1+MS
12240.469	90.000	359.944	10062.000	41.298	0.000	48.588	0.000	41.298	0.000	0.000	65.726	44.238	114.361	MWD+IFR1+MS
12300.000	90.000	359.944	10062.000	41.638	0.000	48.551	0.000	41.638	0.000	0.000	65.673	44.274	114.198	MWD+IFR1+MS
12400.000	90.000	359.944	10062.000	42.186	0.000	48.507	0.000	42.186	0.000	0.000	65.585	44.350	113.936	MWD+IFR1+MS

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12500.000	90.000	359.944	10062.000	42.744	0.000	48.480	0.000	42.744	0.000	65.501	44.441	113.685	MWD+IFR1+MS
12600.000	90.000	359.944	10062.000	43.308	0.000	48.469	0.000	43.308	0.000	65.419	44.545	113.443	MWD+IFR1+MS
12700.000	90.000	359.944	10062.000	43.879	0.000	48.474	0.000	43.879	0.000	65.340	44.663	113.211	MWD+IFR1+MS
12800.000	90.000	359.944	10062.000	44.457	0.000	48.495	0.000	44.457	0.000	65.264	44.794	112.988	MWD+IFR1+MS
12900.000	90.000	359.944	10062.000	45.041	0.000	48.531	0.000	45.041	0.000	65.190	44.939	112.775	MWD+IFR1+MS
13000.000	90.000	359.944	10062.000	45.631	0.000	48.584	0.000	45.631	0.000	65.119	45.097	112.571	MWD+IFR1+MS
13100.000	90.000	359.944	10062.000	46.227	0.000	48.653	0.000	46.227	0.000	65.050	45.270	112.377	MWD+IFR1+MS
13200.000	90.000	359.944	10062.000	46.828	0.000	48.737	0.000	46.828	0.000	64.983	45.455	112.193	MWD+IFR1+MS
13300.000	90.000	359.944	10062.000	47.435	0.000	48.838	0.000	47.435	0.000	64.919	45.654	112.018	MWD+IFR1+MS
13400.000	90.000	359.944	10062.000	48.047	0.000	48.954	0.000	48.047	0.000	64.857	45.866	111.853	MWD+IFR1+MS
13500.000	90.000	359.944	10062.000	48.664	0.000	49.085	0.000	48.664	0.000	64.797	46.092	111.698	MWD+IFR1+MS
13600.000	90.000	359.944	10062.000	49.285	0.000	49.232	0.000	49.285	0.000	64.739	46.330	111.553	MWD+IFR1+MS
13700.000	90.000	359.944	10062.000	49.912	0.000	49.394	0.000	49.912	0.000	64.683	46.582	111.418	MWD+IFR1+MS
13800.000	90.000	359.944	10062.000	50.542	0.000	49.571	0.000	50.542	0.000	64.629	46.846	111.294	MWD+IFR1+MS
13900.000	90.000	359.944	10062.000	51.177	0.000	49.764	0.000	51.177	0.000	64.577	47.123	111.181	MWD+IFR1+MS
14000.000	90.000	359.944	10062.000	51.816	0.000	49.971	0.000	51.816	0.000	64.528	47.413	111.080	MWD+IFR1+MS
14100.000	90.000	359.944	10062.000	52.459	0.000	50.192	0.000	52.459	0.000	64.480	47.715	110.989	MWD+IFR1+MS
14200.000	90.000	359.944	10062.000	53.106	0.000	50.428	0.000	53.106	0.000	64.434	48.029	110.912	MWD+IFR1+MS
14300.000	90.000	359.944	10062.000	53.756	0.000	50.679	0.000	53.756	0.000	64.389	48.355	110.847	MWD+IFR1+MS
14400.000	90.000	359.944	10062.000	54.410	0.000	50.943	0.000	54.410	0.000	64.347	48.693	110.795	MWD+IFR1+MS
14500.000	90.000	359.944	10062.000	55.068	0.000	51.221	0.000	55.068	0.000	64.307	49.042	110.758	MWD+IFR1+MS
14600.000	90.000	359.944	10062.000	55.729	0.000	51.513	0.000	55.729	0.000	64.268	49.403	110.736	MWD+IFR1+MS
14700.000	90.000	359.944	10062.000	56.393	0.000	51.818	0.000	56.393	0.000	64.231	49.774	110.730	MWD+IFR1+MS
14800.000	90.000	359.944	10062.000	57.059	0.000	52.136	0.000	57.059	0.000	64.196	50.157	110.741	MWD+IFR1+MS
14900.000	90.000	359.944	10062.000	57.729	0.000	52.467	0.000	57.729	0.000	64.163	50.550	110.772	MWD+IFR1+MS
15000.000	90.000	359.944	10062.000	58.402	0.000	52.810	0.000	58.402	0.000	64.131	50.954	110.824	MWD+IFR1+MS
15100.000	90.000	359.944	10062.000	59.078	0.000	53.166	0.000	59.078	0.000	64.102	51.367	110.898	MWD+IFR1+MS
15200.000	90.000	359.944	10062.000	59.756	0.000	53.534	0.000	59.756	0.000	64.074	51.790	110.997	MWD+IFR1+MS
15300.000	90.000	359.944	10062.000	60.437	0.000	53.914	0.000	60.437	0.000	64.049	52.223	111.124	MWD+IFR1+MS
15400.000	90.000	359.944	10062.000	61.120	0.000	54.306	0.000	61.120	0.000	64.025	52.665	111.283	MWD+IFR1+MS
15500.000	90.000	359.944	10062.000	61.806	0.000	54.709	0.000	61.806	0.000	64.003	53.115	111.476	MWD+IFR1+MS
15600.000	90.000	359.944	10062.000	62.494	0.000	55.123	0.000	62.494	0.000	63.984	53.574	111.710	MWD+IFR1+MS
15700.000	90.000	359.944	10062.000	63.184	0.000	55.548	0.000	63.184	0.000	63.967	54.042	111.991	MWD+IFR1+MS

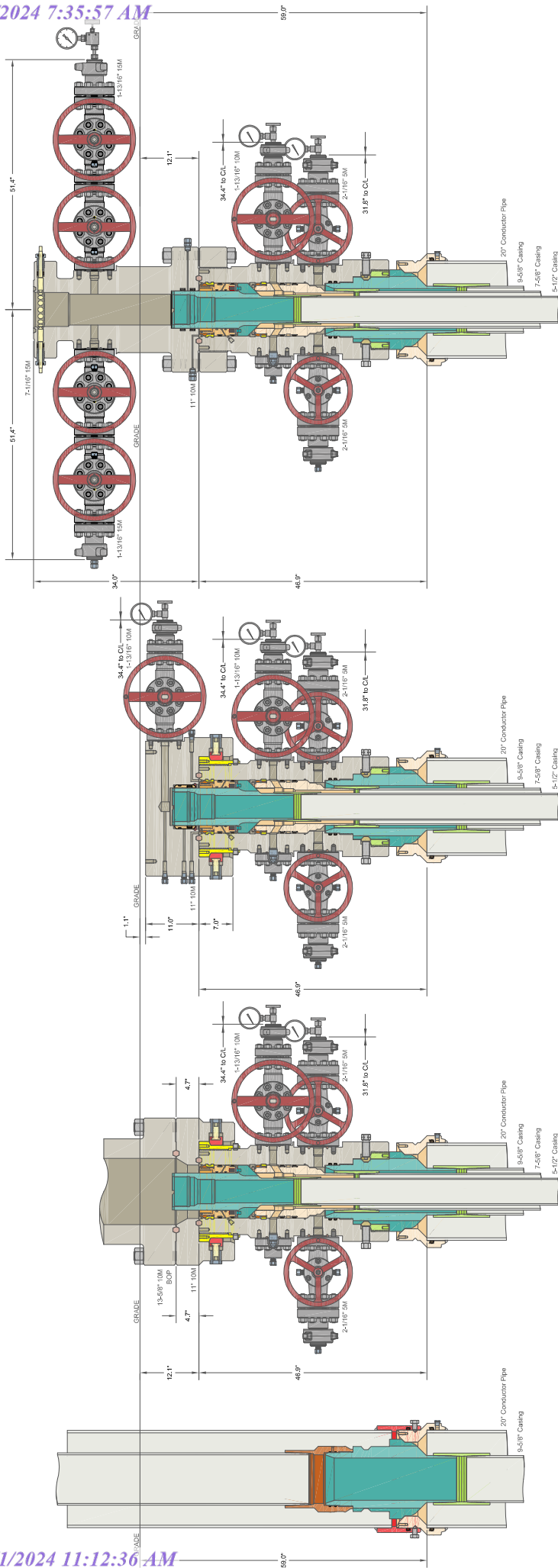
Well Plan Report

15800.000	90.000	359.944	10062.000	63.877	0.000	55.983	0.000	63.877	0.000	63.953	54.516	112.324	MWD+IFR1+MS
15900.000	90.000	359.944	10062.000	64.571	0.000	56.429	0.000	64.571	0.000	63.941	54.999	112.720	MWD+IFR1+MS
16000.000	90.000	359.944	10062.000	65.268	0.000	56.885	0.000	65.268	0.000	63.932	55.487	113.189	MWD+IFR1+MS
16100.000	90.000	359.944	10062.000	65.967	0.000	57.351	0.000	65.967	0.000	63.927	55.982	113.746	MWD+IFR1+MS
16200.000	90.000	359.944	10062.000	66.667	0.000	57.827	0.000	66.667	0.000	63.926	56.482	114.408	MWD+IFR1+MS
16300.000	90.000	359.944	10062.000	67.370	0.000	58.312	0.000	67.370	0.000	63.929	56.987	115.199	MWD+IFR1+MS
16400.000	90.000	359.944	10062.000	68.074	0.000	58.806	0.000	68.074	0.000	63.938	57.495	116.147	MWD+IFR1+MS
16500.000	90.000	359.944	10062.000	68.780	0.000	59.310	0.000	68.780	0.000	63.954	58.004	117.290	MWD+IFR1+MS
16600.000	90.000	359.944	10062.000	69.487	0.000	59.822	0.000	69.487	0.000	63.978	58.514	118.680	MWD+IFR1+MS
16700.000	90.000	359.944	10062.000	70.197	0.000	60.342	0.000	70.197	0.000	64.013	59.022	120.383	MWD+IFR1+MS
16800.000	90.000	359.944	10062.000	70.907	0.000	60.871	0.000	70.907	0.000	64.061	59.524	122.482	MWD+IFR1+MS
16900.000	90.000	359.944	10062.000	71.620	0.000	61.408	0.000	71.620	0.000	64.128	60.015	125.085	MWD+IFR1+MS
17000.000	90.000	359.944	10062.000	72.334	0.000	61.953	0.000	72.334	0.000	64.220	60.489	128.311	MWD+IFR1+MS
17100.000	90.000	359.944	10062.000	73.049	0.000	62.505	0.000	73.049	0.000	64.344	60.937	132.275	MWD+IFR1+MS
17200.000	90.000	359.944	10062.000	73.766	0.000	63.065	0.000	73.766	0.000	64.513	61.349	-42.980	MWD+IFR1+MS
17300.000	90.000	359.944	10062.000	74.484	0.000	63.632	0.000	74.484	0.000	64.736	61.713	-37.560	MWD+IFR1+MS
17400.000	90.000	359.944	10062.000	75.203	0.000	64.207	0.000	75.203	0.000	65.023	62.020	-31.790	MWD+IFR1+MS
17500.000	90.000	359.944	10062.000	75.924	0.000	64.788	0.000	75.924	0.000	65.377	62.267	-26.138	MWD+IFR1+MS
17600.000	90.000	359.944	10062.000	76.646	0.000	65.376	0.000	76.646	0.000	65.793	62.459	-21.020	MWD+IFR1+MS
17700.000	90.000	359.944	10062.000	77.370	0.000	65.970	0.000	77.370	0.000	66.260	62.606	-16.650	MWD+IFR1+MS
17800.000	90.000	359.944	10062.000	78.094	0.000	66.571	0.000	78.094	0.000	66.770	62.717	-13.049	MWD+IFR1+MS
17900.000	90.000	359.944	10062.000	78.820	0.000	67.178	0.000	78.820	0.000	67.311	62.802	-10.130	MWD+IFR1+MS
18000.000	90.000	359.944	10062.000	79.546	0.000	67.790	0.000	79.546	0.000	67.877	62.867	-7.769	MWD+IFR1+MS
18100.000	90.000	359.944	10062.000	80.274	0.000	68.409	0.000	80.274	0.000	68.464	62.919	-5.852	MWD+IFR1+MS
18200.000	90.000	359.944	10062.000	81.003	0.000	69.034	0.000	81.003	0.000	69.065	62.961	-4.284	MWD+IFR1+MS
18300.000	90.000	359.944	10062.000	81.733	0.000	69.664	0.000	81.733	0.000	69.680	62.996	-2.989	MWD+IFR1+MS
18400.000	90.000	359.944	10062.000	82.464	0.000	70.299	0.000	82.464	0.000	70.306	63.024	-1.910	MWD+IFR1+MS
18500.000	90.000	359.944	10062.000	83.196	0.000	70.940	0.000	83.196	0.000	70.942	63.049	-1.002	MWD+IFR1+MS
18600.000	90.000	359.944	10062.000	83.929	0.000	71.585	0.000	83.929	0.000	71.586	63.070	-0.233	MWD+IFR1+MS
18700.000	90.000	359.944	10062.000	84.662	0.000	72.236	0.000	84.662	0.000	72.237	63.089	0.425	MWD+IFR1+MS
18800.000	90.000	359.944	10062.000	85.397	0.000	72.892	0.000	85.397	0.000	72.895	63.106	0.991	MWD+IFR1+MS
18900.000	90.000	359.944	10062.000	86.133	0.000	73.552	0.000	86.133	0.000	73.559	63.121	1.481	MWD+IFR1+MS
19000.000	90.000	359.944	10062.000	86.869	0.000	74.217	0.000	86.869	0.000	74.229	63.136	1.908	MWD+IFR1+MS

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19100.000	90.000	359.944	10062.000	87.606	0.000	74.886	0.000	87.606	0.000	74.904	63.149	2.281	MWD+IFR1+MS
19200.000	90.000	359.944	10062.000	88.344	0.000	75.560	0.000	88.344	0.000	75.584	63.162	2.609	MWD+IFR1+MS
19300.000	90.000	359.944	10062.000	89.083	0.000	76.238	0.000	89.083	0.000	76.269	63.175	2.898	MWD+IFR1+MS
19400.000	90.000	359.944	10062.000	89.823	0.000	76.920	0.000	89.823	0.000	76.959	63.187	3.154	MWD+IFR1+MS
19500.000	90.000	359.944	10062.000	90.563	0.000	77.606	0.000	90.563	0.000	77.653	63.200	3.381	MWD+IFR1+MS
19600.000	90.000	359.944	10062.000	91.305	0.000	78.295	0.000	91.305	0.000	78.351	63.212	3.584	MWD+IFR1+MS
19700.000	90.000	359.944	10062.000	92.046	0.000	78.989	0.000	92.046	0.000	79.052	63.224	3.764	MWD+IFR1+MS
19800.000	90.000	359.944	10062.000	92.789	0.000	79.687	0.000	92.789	0.000	79.758	63.236	3.925	MWD+IFR1+MS
19900.000	90.000	359.944	10062.000	93.532	0.000	80.388	0.000	93.532	0.000	80.467	63.249	4.069	MWD+IFR1+MS
20000.000	90.000	359.944	10062.000	94.276	0.000	81.092	0.000	94.276	0.000	81.180	63.262	4.199	MWD+IFR1+MS
20100.000	90.000	359.944	10062.000	95.021	0.000	81.800	0.000	95.021	0.000	81.896	63.274	4.315	MWD+IFR1+MS
20200.000	90.000	359.944	10062.000	95.766	0.000	82.511	0.000	95.766	0.000	82.615	63.288	4.419	MWD+IFR1+MS
20300.000	90.000	359.944	10062.000	96.512	0.000	83.226	0.000	96.512	0.000	83.338	63.301	4.512	MWD+IFR1+MS
20400.000	90.000	359.944	10062.000	97.259	0.000	83.943	0.000	97.259	0.000	84.063	63.315	4.596	MWD+IFR1+MS
20500.000	90.000	359.944	10062.000	98.006	0.000	84.664	0.000	98.006	0.000	84.792	63.329	4.672	MWD+IFR1+MS
20600.000	90.000	359.944	10062.000	98.753	0.000	85.388	0.000	98.753	0.000	85.523	63.344	4.740	MWD+IFR1+MS
20700.000	90.000	359.944	10062.000	99.502	0.000	86.114	0.000	99.502	0.000	86.257	63.358	4.800	MWD+IFR1+MS
20800.000	90.000	359.944	10062.000	100.250	0.000	86.844	0.000	100.250	0.000	86.994	63.374	4.855	MWD+IFR1+MS
20900.000	90.000	359.944	10062.000	101.000	0.000	87.576	0.000	101.000	0.000	87.733	63.389	4.904	MWD+IFR1+MS
21000.000	90.000	359.944	10062.000	101.750	0.000	88.311	0.000	101.750	0.000	88.475	63.405	4.947	MWD+IFR1+MS
21100.000	90.000	359.944	10062.000	102.500	0.000	89.049	0.000	102.500	0.000	89.220	63.422	4.986	MWD+IFR1+MS
21200.000	90.000	359.944	10062.000	103.251	0.000	89.789	0.000	103.251	0.000	89.966	63.439	5.020	MWD+IFR1+MS
21300.000	90.000	359.944	10062.000	104.002	0.000	90.532	0.000	104.002	0.000	90.716	63.456	5.050	MWD+IFR1+MS
21400.000	90.000	359.944	10062.000	104.754	0.000	91.277	0.000	104.754	0.000	91.467	63.474	5.077	MWD+IFR1+MS
21500.000	90.000	359.944	10062.000	105.507	0.000	92.025	0.000	105.507	0.000	92.221	63.492	5.101	MWD+IFR1+MS
21600.000	90.000	359.944	10062.000	106.260	0.000	92.775	0.000	106.260	0.000	92.977	63.511	5.121	MWD+IFR1+MS
21700.000	90.000	359.944	10062.000	107.013	0.000	93.527	0.000	107.013	0.000	93.735	63.530	5.138	MWD+IFR1+MS
21800.000	90.000	359.944	10062.000	107.767	0.000	94.281	0.000	107.767	0.000	94.495	63.550	5.153	MWD+IFR1+MS
21900.000	90.000	359.944	10062.000	108.521	0.000	95.038	0.000	108.521	0.000	95.257	63.570	5.166	MWD+IFR1+MS
22000.000	90.000	359.944	10062.000	109.276	0.000	95.797	0.000	109.276	0.000	96.021	63.590	5.176	MWD+IFR1+MS
22100.000	90.000	359.944	10062.000	110.031	0.000	96.558	0.000	110.031	0.000	96.787	63.611	5.185	MWD+IFR1+MS
22209.574	90.000	359.944	10062.000	110.859	0.000	97.394	0.000	110.859	0.000	97.630	63.634	5.191	MWD+IFR1+MS
22308.327	90.000	359.944	10062.000	111.605	0.000	98.150	0.000	111.605	0.000	98.390	63.656	5.196	MWD+IFR1+MS

Plan Targets		PLU 29-20 155H	
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)
FTP 8	12240.46	401493.30	670601.80
LTP 8	22209.57	411462.40	670592.00
BHL 8	22308.89	411561.40	670591.40
			TVD MSL Target Shape
			6672.00 RECTANGLE
			6672.00 RECTANGLE
			6672.00 RECTANGLE



ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC		XTO ENERGY INC DELAWARE BASIN	
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		DRAWN	VJK
		APPRV	31MAR22
		DRAWING NO. HBE0000479	

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

CONDITIONS

Action 309722

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 309722
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement does not circulate during the cementing of any string, then a CBL is required.	2/1/2024