

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Report of 43
11/07/2024

Well Name: POKER LAKE UNIT 22

DTD

Well Location: T24S / R30E / SEC 22 /

NWNE / 32.209431 / -103.866378

County or Parish/State: EDDY /

NM

Well Number: 155H Type of Well: CONVENTIONAL GAS

WELL

Allottee or Tribe Name:

••

Unit or CA Name:

**Unit or CA Number:** 

**US Well Number: 3001549872** 

Lease Number: NMNM068905

**Operator: XTO PERMIAN OPERATING** 

LLC

# **Notice of Intent**

**Sundry ID: 2786003** 

Type of Submission: Notice of Intent

**Date Sundry Submitted:** 04/19/2024

Type of Action: APD Change

Time Sundry Submitted: 01:55

Date proposed operation will begin: 05/03/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include FTP, LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation (Pool). FROM: TO: FTP: 100' FSL & 2237' FEL OF SECTION 15-T24S-R30E 100' FNL & 1389' FEL OF SECTION 22-T24S-R30E LTP: 328' FNL & 2178' FEL OF SECTION 3-T24S-R30E 2537' FNL & 1388' FEL OF SECTION 34-T24S-R30E BHL: 198' FNL & 2178' FEL OF SECTION 3-T24S-R30E 2627' FNL & 1388' FEL OF SECTION 34-T24S-R30E The proposed total depth is changing from 28060' MD; 12193' TVD (Jennings/ WOLFCAMP (GAS)) to 24156' MD; 11364' TVD (Wolfcamp A). See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance, and Well Control Plan, Non-API Standard Spec Sheets.

# **NOI Attachments**

# **Procedure Description**

PLU\_22\_DTD\_155H\_Sundry\_Documents\_20241023071958.pdf

Released to Imaging: 11/15/2024 7:41:12 AM

eived by OCD: 11/7/2024 3:22:41 PM Well Name: POKER LAKE UNIT 22

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NWNE / 32.209431 / -103.866378

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**Operator: XTO PERMIAN OPERATING** 

# **Conditions of Approval**

# Additional

Poker\_Lake\_Unit\_22\_DTD\_155H\_COA\_20241107083715.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: RICHARD REDUS** Signed on: OCT 23, 2024 07:19 AM

Name: XTO PERMIAN OPERATING LLC

Title: Permitting Manager

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING State: TX

Phone: (720) 539-1673

Email address: RICHARD.L.REDUS@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: 11/07/2024 Form 3160-5 (June 2019)

# **UNITED STATES** DEPARTMENT OF THE INTERIOR

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

BETTHERMENT OF THE INTERIOR	
BUREAU OF LAND MANAGEMENT	5. Lease Serial No. NMLC068905
SUNDRY NOTICES AND REPORTS ON W Do not use this form for proposals to drill or to abandoned well. Use Form 3160-3 (APD) for suc	re-enter an
SUBMIT IN TRIPLICATE - Other instructions on pag	e 2 7. If Unit of CA/Agreement, Name and/or No.
1. Type of Well  Oil Well  Gas Well  Other	8. Well Name and No. POKER LAKE UNIT 22 DTD/155H
2. Name of Operator XTO PERMIAN OPERATING LLC	9. API Well No. 3001549872
3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND, 3b. Phone No.	(include area code) 10. Field and Pool or Exploratory Area
(432) 683-22°	
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 22/T24S/R30E/NMP	11. Country or Parish, State  EDDY/NM
12. CHECK THE APPROPRIATE BOX(ES) TO INI	DICATE NATURE OF NOTICE, REPORT OR OTHER DATA
TYPE OF SUBMISSION	TYPE OF ACTION
Notice of Intent  Acidize  Alter Casing  Hydr	en Production (Start/Resume) Water Shut-Off aulic Fracturing Reclamation Well Integrity
Subsequent Report Casing Repair New	Construction Recomplete Other
	and Abandon Temporarily Abandon
Final Abandonment Notice Convert to Injection Plug	Back Water Disposal
completed. Final Abandonment Notices must be filed only after all requirement is ready for final inspection.)  XTO Permian Operating, LLC. respectfully requests approval to make LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation FROM: TO:  FTP: 100' FSL & 2237' FEL OF SECTION 15-T24S-R30E 100' FNL & LTP: 328' FNL & 2178' FEL OF SECTION 3-T24S-R30E 2537' FNL & BHL: 198' FNL & 2178' FEL OF SECTION 3-T24S-R30E 2627' FNL & The proposed total depth is changing from 28060 MD; 12193 TVD (Je See attached Drilling Plan for updated cement and casing program.	1389' FEL OF SECTION 22-T24S-R30E 1388' FEL OF SECTION 34-T24S-R30E 1388' FEL OF SECTION 34-T24S-R30E
Continued on page 3 additional information  14. I hereby certify that the foregoing is true and correct. Name ( <i>Printed/Typed</i> )	
RICHARD REDUS / Ph: (720) 539-1673	Permitting Manager Title
Signature (Electronic Submission)	Date 10/23/2024
THE SPACE FOR FED	ERAL OR STATE OFICE USE
Approved by	
CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Petroleum Engineer 11/07/2024 Title Date
Conditions of approval, if any, are attached. Approval of this notice does not warran certify that the applicant holds legal or equitable title to those rights in the subject lewhich would entitle the applicant to conduct operations thereon.	
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for an	ny 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

(Form 3160-5, page 2)

# **Additional Information**

# **Additional Remarks**

Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance, and Well Control Plan, Non-API Standard Spec Sheets.

# **Location of Well**

0. SHL: NWNE / 414 FNL / 1886 FEL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.209431 / LONG: -103.866378 ( TVD: 0 feet, MD: 0 feet )
PPP: SWNE / 100 FSL / 1577 FWL / TWSP: 24S / RANGE: 30E / SECTION: 15 / LAT: 32.210805 / LONG: -103.872488 ( TVD: 12193 feet, MD: 15166 feet )
PPP: SWSE / 100 FSL / 2237 FEL / TWSP: 24S / RANGE: 30E / SECTION: 15 / LAT: 32.210837 / LONG: -103.867509 ( TVD: 12193 feet, MD: 12526 feet )
PPP: NWNE / 300 FNL / 313 FWL / TWSP: 24S / RANGE: 30E / SECTION: 10 / LAT: 32.253158 / LONG: -103.876545 ( TVD: 12193 feet, MD: 17806 feet )
BHL: LOT 2 / 198 FNL / 2178 FEL / TWSP: 24S / RANGE: 30E / SECTION: 3 / LAT: 32.253539 / LONG: -103.867292 ( TVD: 12193 feet, MD: 28060 feet )

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO
LEASE NO.: NMLC068905
LOCATION: Sec. 22, T.24 S, R 30 E

COUNTY: Eddy County, New Mexico ▼

WELL NAME & NO.: Poker Lake Unit 22 DTD 155H

SURFACE HOLE FOOTAGE: 414'/N & 1886'/E

BOTTOM HOLE FOOTAGE: 2627'/N & 1388'/E

Changes approved through engineering via **Sundry 2786003** on \_11-6-2024\_\_. Any previous COAs not addressed within the updated COAs still apply.

COA

$H_2S$	•	No	0	Yes
Potash /	None	Secretary	O R-111-Q	☐ Open Annulus
WIPP	Choose	e an option (including bla	nk option.)	□ WIPP
Cave / Karst	• Low	O Medium	O High	Critical
Wellhead	<ul><li>Conventional</li></ul>	<ul><li>Multibowl</li></ul>	O Both	<ul><li>Diverter</li></ul>
Cementing	Primary Squeeze	☐ Cont. Squeeze	EchoMeter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	$\square$ COM	Unit
Waste Prev.	O Self-Certification	O Waste Min. Plan	• APD Submitted p	orior to 06/10/2024
Additional	✓ Flex Hose	Casing Clearance	☐ Pilot Hole	Break Testing
Language	$\square$ Four-String	Offline Cementing	☐ Fluid-Filled	

# 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 894 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with

- surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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 6466'
  - b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Operator has proposed to pump down Surface X <u>Intermediate 1</u> 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 Surface casing to tieback requirements listed above 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.

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

- 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.

Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

- a. 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.
- b. Manufacturer representative shall install the test plug for the initial BOP test.
- c. 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.
- d. 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)

# **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 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 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

# **Offline Cementing**

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

Engineer may elect to vary this language. Speak with Chris about implementing changes and whether that change seems reasonable.

# **Casing Clearance**

String does not meet 0.422" clearance requirement per 43 CFR 3172. Cement tieback requirement increased 100' for Production casing tieback. Operator may contact approving engineer to discuss changing casing set depth or grade to meet clearance requirement.

# 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)

# **Contact Eddy County Petroleum Engineering Inspection Staff:**

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM NM CFO DrillingNotifications@BLM.GOV**; (575) 361-2822

- 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
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

# 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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 3172.
- 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:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. 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.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. 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.
  - i. 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).
  - ii. 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.)
- iii. 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 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.

**Approved by Zota Stevens on 11/7/2024** 575-234-5998 / zstevens@blm.gov

Type:
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☐ As Drilled

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# WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name			
30-015-	98220	PURPLE SAGE; WOLFCAMP (GAS)			
Property Code	Property Name	Well Number			
	POKER I	155H			
OGRID No.	Operator Name		Ground Level Elevation		
373075	XTO PERMIA	3,413'			
Surface Owner: □State □Fee □	Tribal 🛮 Federal	Mineral Owner: □State □Fee □Tribal ☑F	ederal		

### **Surface Hole Location**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
В	22	24\$	30E		414 FNL	1,886 FEL	32.209431	-103.866378	EDDY

### **Bottom Hole Location**

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	34	24\$	30E		2,627 FNL	1,388 FEL	32.174383	-103.864699	EDDY

Dedicated Acres	Infill or Defining Well	nfill or Defining Well Defining Well API		Consolidation Code
1,600.00	INFILL	30-015-49881	Y	U
Order Numbers.		•	Well Setbacks are under Common C	Ownership: 🛮 Yes 🗆 No

# Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
В	22	24S	30E		414 FNL	1,886 FEL	32.209431	-103.866378	EDDY

# First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
В	22	24\$	30E		100 FNL	1,389 FEL	32.210305	-103.864770	EDDY

## Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	34	24S	30E		2,537 FNL	1,388 FEL	32.174630	-103.864700	EDDY

Unitized Area of Area of Interest		Ground Elevation
	Spacing Unit Type:   Horizontal  Vertical	3,413'

# OPERATOR CERTIFICATIONS

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, 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 at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory

If this .

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which any part of the compulsory pooling orde.

Terra Debastian 10/2.

Signature Date If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or information) in which any part of the well's completed interval will be located or obtained a

PROPERTY ONAL Signature and Seal of Professional Surveyor

SURVEYOR CERTIFICATIONS

correct to the best of my belief

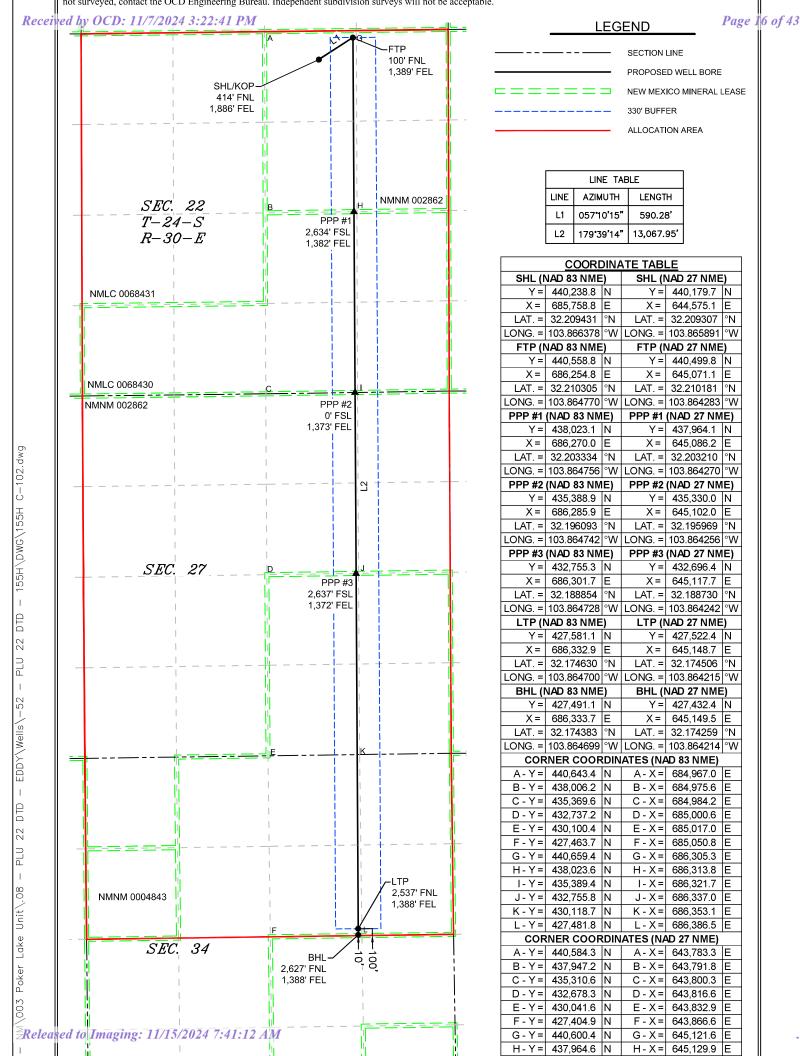
MARK DILLON HARP 23786

10/29/2024

155H\DWG\155H C-102.dwg 22 PLU EDDY\Wells\-52 PLU

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



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

XTO Energy Inc.

POKER LAKE UNIT 22 DTD 155H

Projected TD: 24156' MD / 11364' TVD

SHL: 414' FNL & 1886' FEL , Section 22, T24S, R30E

BHL: 2627' FNL & 1388' FEL , Section 34, T24S, R30E

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	1130'	Water
Top of Salt	1533'	Water
Base of Salt	3726'	Water
Delaware	3920'	Water
Brushy Canyon	6466'	Water/Oil/Gas
Bone Spring	7790'	Water
Avalon	8483'	Water/Oil/Gas
1st Bone Spring	8499'	Water/Oil/Gas
2nd Bone Spring	9084'	Water/Oil/Gas
3rd Bone Spring	9910'	Water/Oil/Gas
Wolfcamp	11095'	Water/Oil/Gas
Wolfcamp X	11116'	Water/Oil/Gas
Wolfcamp Y	11197'	Water/Oil/Gas
Wolfcamp A	11244'	Water/Oil/Gas
Target/Land Curve	11364'	Water/Oil/Gas

<sup>\*\*\*</sup> Hydrocarbons @ Brushy Canyon

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 1230' (303' 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 10480' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 24156 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10180 feet).

# 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1230'	9.625	40	J-55	втс	New	1.59	5.12	12.80
8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.20	2.92	1.79
8.75	4000' — 10480'	7.625	29.7	HC L-80	Flush Joint	New	1.60	2.28	2.11
6.75	0' – 10380'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.79	1.99
6.75	10380' - 24156'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.63	1.99

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

XTO will use a Multi-Bowl System, see attached.

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

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# **U. S. Steel Tubular Products** 5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-TALON HTQ™ RD

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000		psi	
Maximum Yield Strength	125,000		psi	
Minimum Tensile Strength	125,000		psi	
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		
Outside Diameter	5,500	5.900	in.	
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
SECTION AREA	Pipe	USS-TALON HTQ™ RD		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lb	
Joint Strength		641,000	lb	
Compression Rating		641,000	Ib	
Reference Length		21,370	ft	[5]
Maximum Uniaxial Bend Rating		91.7	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		
Make-Up Loss		5.58	in.	
Minimum Make-Up Torque		17,000	ft-lb	[4]
Maximum Make-Up Torque		20,000	ft-lb	[4]
Maximum Operating Torque		39,500	ft-lb	[4]

# **Notes**

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- 3. Uniaxial bend rating shown is structural only.
- 4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- 6. Coupling must meet minimum mechanical properties of the pipe.

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> U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380

1-877-893-9461 connections@uss.com www.usstubular.com

# **U. S. Steel Tubular Products**

# 5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ®



11/8/2023 1:08:50 PM

MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Minimum Yield Strength	110,000		psi	
Maximum Yield Strength	125,000		psi	
Minimum Tensile Strength	125,000		psi	
DIMENSIONS	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Outside Diameter	5.500	6.300	in.	
Wall Thickness	0.361	-	in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
SECTION AREA	Pipe	USS-FREEDOM HTQ®		-
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100.0	%	
PERFORMANCE	Pipe	USS-FREEDOM HTQ®		-
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lb	
Joint Strength		641,000	lb	
Compression Rating		641,000	lb	
Reference Length [4]		21,370	ft	
Maximum Uniaxial Bend Rating [2]		91.7	deg/100 ft	
MAKE-UP DATA	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Make-Up Loss		4.13	in.	
Minimum Make-Up Torque [3]		15,000	ft-lb	
Maximum Make-Up Torque [3]		21,000	ft-lb	
Maximum Operating Torque[3]		29,500	ft-lb	

# Notes

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.
- 3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
- 4. Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

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### 4. Cement Program

# Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 1230'

Lead: 310 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 +/- 10480'

st Stage

Optional Lead: 350 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 @ 6466

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: 730 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 (6466') 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 +/- 24156'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10180 feet
Tail: 960 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10680 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 10M Double Ram BOP. MASP should not exceed 4296 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. Operator will test aas per 43 CFR 3172.

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	Hole Size	Mud Type	(ppg)	(sec/qt)	(cc)
0' - 1230'	12.25	FW/Native	8.4-8.9	35-40	NC
1230' - 10480'	8.75	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
10480' - 24156'	6.75	ОВМ	11.5-12	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. 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

Open hole logging will not be done on this well.

# 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 175 to 195 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 6796 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 - Poker Lake Unit 22 DTD South 155H

Well Plan Report

3/4/24, 9:24 PM	4 PM		Well Plan F
leased to	Plan Report	Well Plan Report - Poker Lake Unit 22 DTD South 155H	South 155H
	Moseurod Douth.	24456.48.#	
	sured Depuil.	24 130,40 11	
	TVD RKB:	11364.00 ft	
	Location		
	Cartographic Reference System:	New Mexico East - NAD 27	
7:4	Northing:	440179.70 ft	
	Easting:	644575.10 ft	
	RKB:	3445.00 ft	
	Ground Level:	3413.00 ft	
Z	North Reference:	Grid	
O	Convergence Angle:	0.25 Deg	

	ild Turn Dogleg	Rate	oft) (Deg/100ft) (Deg/100ft) Target	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	00 0
	Build	X Offset Rate	(ft) (Deg/100ft)					496.00 -2.00				
		Y Offset	(#)	0.00	0.00	9.62	310.48	320.10	320.10	-396.08	-12657.19	-12747 31
DTD South 155H	ΔΛΤ	RKB	(ft)	0.00	1100.00	1418.27	6381.73	6700.00	10647.80	11364.00	11364.00	11364 00
Poker Lake Unit 22 DTD South 155H		Azimuth	(Deg)	0.00	00.00	57.16	57.16	0.00	0.00	179.66	179.66	179 66
Pol		Inclination	(Deg)	00.0	00.00	6.38	6.38	00.0	00.0	90.00	00'06	00 06
Plan Sections	Measured	Depth	(ft)	00.00	1100.00	1418.92	6413.31	6732.23	10680.03	11805.03	24066.36	24156 48

	<u> </u>	Dsed
	- Semi- Semi- Tool	Azimuth
	Semi- minor	Error
	Semi- major	Error
	Magnitude	of Bias
		Bias
	Vertical	Error
I		Bias
South 155	Lateral	Error
2 DTD S		Bias
Poker Lake Unit 22 DTD South 155H	TVD Highside	Error
Poker L	ΔΛΙ	RKB
Position Uncertainty	Measured	Depth Inclination Azimuth

	(5)	0.000 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.000 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.000 MWD+JFR1+SAG+MS+GS_XTO_PLUDTD_22	90.000 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.101 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.450 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.829 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	91.138 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.995 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.773 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.581 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.415 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.269 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.141 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	90.028 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.927 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.837 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.756 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.684 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.618 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.559 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.505 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.457 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.412 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.372 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22								
	(#	0.000	0.179	0.538	968.0	1.255	1.613	1.972	2.330	2.689	3.047	3.405	3.764	4.118	4.470	4.821	4.889	5.172	5.522	5.873	6.225	6.577	6.929	7.283	2 636	2.990	8.344	8 698	9.053	9 408	9.763	10.118	10.473	10.829
	(£	0.000	0.358	0.717	1.075	1.434	1.792	2.151	2.509	2.868	3.226	3.585	3.943	4.298	4.650	5.004	5.071	5.357	5.711	990'9	6.421	6.777	7.134	7.490	7.847	8,205	8.562	8.920	9.278	9.636	9.995	10.353 1	10.712 1	11.071 1
Well Plan Report	<b>(#</b> )	0.000	000'0	000.0	000.0	0.000	000.0	0.000	0.000	0.000	0.000	00000	0.000	000'0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000.0	0.000	000.0	0.000	000'0	000'0	000.0	000.0	0.000	0.000	000.0	000.0	0.000
Well Pla	(ft) (ft)	0.000 0.000	2.300 0.000	2.310 0.000	2.325 0.000	2.347 0.000	2.375 0.000	2.407 0.000	2.444 0.000	2.486 0.000	2.532 0.000	2.582 0.000	2.636 0.000	2.692 0.000	2.749 0.000	2.808 0.000	2.816 0.000	2.870 0.000	2.938 0.000	3.010 0.000	3.084 0.000	3.160 0.000	3.239 0.000	3.319 0.000	3.401 0.000	3.485 0.000	3.571 0.000	3.658 0.000	3.747 0.000	3.837 0.000	3.929 0.000	4.022 0.000	4.117 0.000	4.213 0.000
	(ft) (ft)	0.000 0.000	0.179 0.000	0.538 0.000	0.896 0.000	1.255 0.000	1.613 0.000	1.972 0.000	2.330 0.000	2.689 0.000	3.047 0.000	3.405 0.000	3.764 0.000	4.246 0.000	4.597 0.000	4.948 0.000	5.015 0.000	5.301 0.000	5.654 0.000	0.008 0.000	6.363 0.000	6.718 0.000	7.074 0.000	7.430 0.000	7.786 0.000	8,143 0,000	8.500 0.000	8.857 0.000	9.214 0.000	9.571 0.000	9.929 0.000	10.287 0.000	10.644 0.000	11.002 0.000
	(ft) (ft)	0.000 0.000	0.358 0.000	0.717 0.000	1.075 0.000	1.434 0.000	1.792 0.000	2.151 0.000	2.509 0.000	2.868 0.000	3.226 0.000	3.585 0.000	3.943 0.000	4.170 0.000	4.515 0.000	4.856 0.000	4.919 0.000	5.205 0.000	5.558 0.000	5.911 0.000	6.266 0.000	6.621 0.000	000.0 226.9	7.333 0.000	7.689 0.000	8.046 0.000	8.403 0.000	8.760 0.000	9.118 0.000	9.475 0.000	9.833 0.000	10.191 0.000	10.549 0.000	10.908 0.000
	(#)	0.000	100.000	200.000	300.000	400.000	200.000	000.009	700.000	800.000	900.000	1000.000	1100.000	1199.980	1299.838	1399.452	1418.265	1498.840	1598.221	1697.602	1796.983	1896.364	1995.745	2095.126	2194.507	2293,888	2393.269	2492.649	2592.030	2691 411	2790.792	2890.173	2989.554	3088.935
	0	0000	0.000	0000	0.000	0.000	000'0	0.000	0.000	0000	0.000	0.000	000'0	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57.163	57 163	57.163	57.163	57.163	57.163	57.163	57.163	57.163
	(0)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.000	4.000	000.9	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378
3/4/24, 9:24 PM	<b>(#</b> )	0.000	100.000	200.000	300.000	400.000	500,000	000'009	700.000	800.000	900.000	1000.000	1100.000	1200,000	1300.000	1400.000	1418.924	1500.000	1600.000	1700.000	1800.000	1900.000	2000.000	2100.000	2200,000	2300,000	2400.000	2500,000	2600,000	2700.000	2800.000	2900.000	3000.000	3100.000
	eleas	ed t	o In	nagi	ng:	11/.	15/2	024	7:4	1:12	2 A1	М																						

	9 11.184 89.335 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 11.540 89.302 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 11.895 89.271 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 12.251 89.243 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 12.607 89.218 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	5 12.963 89.195 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 13.319 89.174 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 13.675 89.155 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 14.031 89.138 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 14.388 89.123 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 14.744 89.109 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 15.100 89.097 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 15.457 89.086 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	15.813 89.077 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	16.170 89.069 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	) 16.526 89.062 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	16.883 89.056 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 17.239 89.052 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 17.596 89.048 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 17.952 89.046 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 18.309 89.045 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 18.666 89.044 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 19.022 89.045 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 19.379 89.046 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 19.736 89.048 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 20.093 89.051 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 20.450 89.055 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 20.806 89.060 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 21.163 89.066 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 21.520 89.072 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 21.877 89.080 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 22.234 89.088 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 22.591 89.096 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 22.638 89.098 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
Well Plan Report	0.000 0.000 11.429	0.000 0.000 11.788	0.000 0.000 12.147	0.000 0.000 12.506	0.000 0.000 12.866	0.000 0.000 13.225	0.000 0.000 13.584	0.000 0.000 13.943	0.000 0.000 14.303	0.000 0.000 14.662	0.000 0.000 15.022	0.000 0.000 15.381	0.000 0.000 15.741	0.000 0.000 16.100	0.000 0.000 16.460	0.000 0.000 16.820	0.000 0.000 17.180	0.000 0.000 17.539	0.000 0.000 17.899	0.000 0.000 18.259	0.000 0.000 18.619	0.000 0.000 18.978	0.000 0.000 19.338	0.000 0.000 19.698	0.000 0.000 20.058	0.000 0.000 20.418	0.000 0.000 20.778	0.000 0.000 21.138	0.000 0.000 21.498	0.000 0.000 21.858	0.000 0.000 22.218	0.000 0.000 22.578	0.000 0.000 22.938	0.000 0.000 22.986
	0.000 4.310	0.000 4.409	0.000 4.509	0.000 4.611	0.000 4.714	0.000 4.818	0.000 4.924	0.000 5.031	0.000 5.140	0.000 5.250	0.000 5.362	0.000 5.475	0.000 5.590	0.000 5.706	0.000 5.824	0.000 5.944	0.000 6.066	0.000 6.189	0.000 6.314	0.000 6.440	0.000 6.569	0.000 6.699	0.000 6.832	996'9 000'0	0.000 7.102	0.000 7.240	0.000 7.380	0.000 7.523	0.000 7.667	0.000 7.814	0.000 7.962	0.000 8.113	0.000 8.266	0.000 8.287
	11.360 0.0	11.719 0.0	12.077 0.0	12.435 0.0	12.793 0.0	13.152 0.0	13.510	13.869 0.0	14.227 0.0	14.586 0.0	14.945 0.0	15.303 0.0	15.662 0.0	16.021	16.379	16.738	17.097	17.456 0.0	17.815 0.0	18.174 0.0	18.533	18.892	19.251	19.610	19.969 0.0	20.328 0.0	20.687 0.0	21.046 0.0	21.405 0.0	21.764 0.0	22.123	22.482	22.841	22.889
	11.266 0.000	11.625 0.000	11.983 0.000	12.342 0.000	12.701 0.000	13.060 0.000	13.419 0.000	13.777 0.000	14.137 0.000	14.496 0.000	14.855 0.000	15.214 0.000	15.573 0.000	15.932 0.000	16.292 0.000	16.651 0.000	17.011 0.000	17.370 0.000	17.729 0.000	18.089 0.000	18.448 0.000	18.808 0.000	19.167 0.000	19.527 0.000	19.886 0.000	20.246 0.000	20.606 0.000	20.965 0.000	21.325 0.000	21.685 0.000	22.044 0.000	22.404 0.000	22.764 0.000	22.812 0.000
	3188.316	3287 697	3387 078	3486.459	3585 840	3685.221	3784.602	3883,983	3983,364	4082.745	4182 126	4281.507	4380.888	4480.269	4579,650	4679.031	4778.412	4877.793	4977 174	5076 555	5175.936	5275.317	5374.698	5474.079	5573 460	5672.841	5772.222	5871 603	5970 984	6070.364	6169.745	6269.126	6368.507	6381 735
	57.163	57 163	57 163	57 163	57 163	57.163	57.163	57.163	57.163	57.163	57 163	57.163	57.163	57.163	57.163	57 163	57 163	57.163	57 163	57 163	57.163	57.163	57.163	57.163	57 163	57.163	57.163	57.163	57 163	57 163	57.163	57.163	57.163	57 163
	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378	6.378
3/4/24, 9:24 PM	3200.000	3300.000	3400.000	3500,000	3600,000	3700.000	3800.000	3900,000	4000.000	4100.000	4200.000	4300,000	4400.000	4500,000	4600.000	4700.000	4800.000	4900.000	2000.000	5100.000	5200.000	5300.000	5400.000	5500,000	2600,000	2700,000	2800,000	2900,000	000'0009	6100.000	6200.000	6300.000	6400.000	6413.310
	eleas	ed t	o In	nagi	ng:	11/.	15/2	024	7:4	1:1	2 A1	М																						

	89.109 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.163 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.252 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.252 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.192 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.106 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	89.023 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.943 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.865 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.790 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.717 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.647 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.578 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.512 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.448 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.385 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.324 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.265 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.208 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.152 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.098 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	88.045 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.994 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.943 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.895 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.847 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.801 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.755 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.711 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.668 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.626 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.585 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.545 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	87.506 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
Well Plan Report	0.000 23.298 22.948	0.000 23.656 23.304	0.000 24.012 23.661	0.000 24.126 23.774	0.000 24.364 24.012	0.000 24.715 24.362	0.000 25.067 24.713	0.000 25.419 25.064	0.000 25.771 25.415	0.000 26.123 25.766	0.000 26.475 26.118	0.000 26.828 26.470	0.000 27.180 26.821	0.000 27.533 27.174	0.000 27.886 27.526	0.000 28.239 27.878	0.000 28.593 28.231	0.000 28.946 28.583	0.000 29.299 28.936	0.000 29.653 29.289	0.000 30.007 29.642	0.000 30.361 29.995	0.000 30.715 30.349	0.000 31.069 30.702	0.000 31.423 31.056	0.000 31,777 31,410	0.000 32.131 31.763	0.000 32.486 32.117	0.000 32.840 32.471	0.000 33.195 32.825	0.000 33.550 33.180	0.000 33.904 33.534	0.000 34.259 33.888	0.000 34.614 34.243
Well	8.421 0.000	8.577 0.000	8.732 0.000	8.781 0.000	8.886 0.000	9.042 0.000	9.201 0.000	9.362 0.000	9.526 0.000	9.693 0.000	9.862 0.000	10.034 0.000	10.209 0.000	10.387 0.000	10.567 0.000	10.750 0.000	10.936 0.000	11.125 0.000	11.316 0.000	11.510 0.000	11.708 0.000	11.908 0.000	12.110 0.000	12.316 0.000	12.525 0.000	12.736 0.000	12.951 0.000	13.168 0.000	13.389 0.000	13.612 0.000	13.838 0.000	14.067 0.000	14.300 0.000	14.535 0.000
	23.127 0.000 23.200 0.000	23.467 0.000 23.558 0.000	23.780 0.000 23.913 0.000	24.126 0.000 23.774 0.000	24.364 0.000 24.012 0.000	24.715 0.000 24.362 0.000	25.067 0.000 24.713 0.000	25.419 0.000 25.064 0.000	25.771 0.000 25.415 0.000	26.123 0.000 25.767 0.000	26.475 0.000 26.118 0.000	26.828 0.000 26.470 0.000	27.180 0.000 26.822 0.000	27.533 0.000 27.174 0.000	27.886 0.000 27.526 0.000	28.239 0.000 27.878 0.000	28.592 0.000 28.231 0.000	28.946 0.000 28.584 0.000	29.299 0.000 28.937 0.000	29.653 0.000 29.290 0.000	30.006 0.000 29.643 0.000	30.360 0.000 29.996 0.000	30.714 0.000 30.349 0.000	31.068 0.000 30.703 0.000	31.422 0.000 31.056 0.000	31,777 0,000 31,410 0,000	32.131 0.000 31.764 0.000	32.485 0.000 32.118 0.000	32.840 0.000 32.472 0.000	33.194 0.000 32.826 0.000	33.549 0.000 33.180 0.000	33.904 0.000 33.534 0.000	34.259 0.000 33.889 0.000	34.614 0.000 34.243 0.000
	6468.021	6567.814	792.7999	6700.000	6767.767	6867.767	2967.767	7067.767	7167.767	7267.767	7367.767	7467.767	7567.767	7667,767	792.792	7867.767	7967.767	8067.767	8167.767	8267.767	8367.767	8467.767	8567.767	8667 767	8767.767	8867.767	8967.767	29067,767	9167.767	9267 767	9367.767	9467.767	9567.767	792.7996
	57.163	57.163	57.163	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.000	0000	0000	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	0.000	0.000	0.000	0.000	0.000
	4.645	2.645	0.645	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	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	0.000
3/4/24, 9:24 PM	6500.000	000.0099	6700.000	6732.233	000.0089	000.0069	7000.0007	7100.000	7200.000	7300,000	7400.000	7500.000	7600.000	7700.000	7800.000	7900.000	8000.000	8100.000	8200 000	8300 000	8400.000	8500.000	8600.000	8700.000	8800,000	8900.000	000 0006	9100.000	9200 000	9300.000	9400.000	9500.000	9600.000	9700.000
	eleas	ed t	o In	nagi	ing:	11/.	15/2	2024	7:4	1:1	2 A1	И																						

Rela	3/4/24, 9:24 PM							
eas	000'0086	0.000	0.000	9767.767	34.969 0.000 34.598 0.000	0 14.773 0.000	0.000 34.969 34.597	87.468 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
ed t	000'0066	0.000	0.000	9867.767	35.324 0.000 34.953 0.000	0 15.014 0.000	0.000 35.324 34.952	87.430 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
o In	10000.000	0.000	0.000	9967 767	35.679 0.000 35.307 0.000	0 15.258 0.000	0.000 35.679 35.306	87.394 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
nagi	10100.000	0.000	0.000	10067.767	36.034 0.000 35.662 0.000	0 15.505 0.000	0.000 36.035 35.661	87.358 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
ng:	10200.000	0.000	0.000	10167 767	36.389 0.000 36.017 0.000	0 15.756 0.000	0.000 36.390 36.016	87.323 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
11/.	10300.000	0.000	0.000	10267.767	36.744 0.000 36.372 0.000	16.009 0.000	0.000 36.745 36.371	87.289 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
15/2	10400.000	0.000	0.000	10367 767	37.100 0.000 36.727 0.000	0 16.265 0.000	0.000 37.101 36.726	87.256 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
024	10500.000	0.000	0.000	10467.767	37.455 0.000 37.082 0.000	0 16.524 0.000	0.000 37.456 37.081	87.223 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
7:4	10600,000	0000	0000	10567.767	37.811 0.000 37.437 0.000	000.0 16.786	0.000 37.812 37.436	87.191 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
1:12	10680.033	0.000	0.000	10647.800	38.095 0.000 37.721 0.000	0 16.998 0.000	0.000 38.096 37.720	87.166 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
2 A1	10700.000	1.597	179.657	10667 764	38.124 0.000 37.789 -0.000	0 17.052 0.000	0.000 38.164 37.788	87.155 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
M	10800,000	9.597	179.657	10767.206	37.890 0.000 38.112 -0.000	0 17.313 0.000	0.000 38.484 38.111	87.098 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	10900.000	17.597	179.657	10864.325	37.066 0.000 38.424 -0.000	0 17.563 0.000	0.000 38.790 38.423	87.077 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11000,000	25,597	179.657	10957.229	35.682 0.000 38.720 -0.000	17.794 0.000	0.000 39.072 38.719	87.087 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11100.000	33.597	179.657	11044.110	33.789 0.000 38.995 -0.000	0004 0.000	0.000 39.321 38.994	87.153 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11200.000	41.597	179.657	11123.277	31.466 0.000 39.246 -0.000	0 18.189 0.000	0.000 39.531 39.246	87.344 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11300.000	49.597	179.657	11193.190	28.826 0.000 39.470 -0.000	0 18.350 0.000	0.000 39.698 39.470	87.840 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11400.000	57.597	179.657	11252.487	26.027 0.000 39.664 -0.000	0 18.487 0.000	0.000 39.823 39.664	89.204 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11500.000	65.597	179.657	11300.015	23.294 0.000 39.825 -0.000	0 18.603 0.000	0.000 39.909 39.824	94.099 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11600.000	73.597	179.657	11334.849	20.934 0.000 39.952 -0.000	0 18.701 0.000	0.000 39.973 39.939	126.555 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11700.000	81.597	179.657	11356.309	19.330 0.000 40.042 -0.000	0 18.785 0.000	0.000 40.054 39.976	-23.108 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11805.033	90.000	179.657	11363.997	18.861 0.000 40.097 -0.000	0 18.861 0.000	0.000 40.112 39.984	-20.499 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	11900.000	90.000	179.657	11363.997	18.931 0.000 40.131 -0.000	0 18.931 0.000	0.000 40.152 39.985	-20.767 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12000.000	90.000	179.657	11363.997	19.015 0.000 40.176 -0.000	0 19.015 0.000	0.000 40.201 39.986	-20.193 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12100.000	90.000	179.657	11363 997	19.110 0.000 40.229 -0.000	0 19.110 0.000	0.000 40.257 39.989	-19.305 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12200,000	000'06	179,657	11363.997	19.214 0.000 40.290 -0.000	0 19.214 0.000	0.000 40.321 39.994	-18.308 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12300.000	90.000	179.657	11363.997	19.329 0.000 40.359 -0.000	0 19.329 0.000	0.000 40.393 39.999	-17.301 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12400.000	90.000	179 657	11363 997	19.454 0.000 40.437 -0.000	0 19.454 0.000	0.000 40.472 40.006	-16.329 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12500.000	90.000	179.657	11363.997	19.589 0.000 40.523 -0.000	0 19.589 0.000	0.000 40.559 40.014	-15.417 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12600.000	90.000	179.657	11363.997	19.733 0.000 40.617 -0.000	0 19.733 0.000	0.000 40.655 40.023	-14.570 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12700.000	90.000	179.657	11363.997	19.886 0.000 40.719 -0.000	0 19.886 0.000	0.000 40.758 40.032	-13.790 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12800.000	90.000	179.657	11363.997	20.049 0.000 40.829 -0.000	0 20.049 0.000	0.000 40.868 40.043	-13.075 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	12900.000	90.000	179.657	11363.997	20.220 0.000 40.947 -0.000	0 20.220 0.000	0.000 40.987 40.054	-12.419 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
	13000.000	90.000	179.657	11363.997	20.400 0.000 41.073 -0.000	0 20.400 0.000	0.000 41.113 40.066	-11.819 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22

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	-11.268 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-10.762 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-10.297 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-9.868 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-9.471 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-9.105 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-8.764 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-8.448 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-8.154 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-7.879 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-7.622 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-7.381 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-7.155 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-6.943 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-6.743 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-6.554 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-6.376 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-6.208 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-6.049 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.897 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.754 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.617 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.487 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.363 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.245 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.132 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-5.025 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.922 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.823 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.728 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.637 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.550 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.467 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	-4.386 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
Well Plan Report	0.000 41.248 40.079	0.000 41.389 40.093	0.000 41.539 40.107	0.000 41.696 40.122	0.000 41.860 40.138	0.000 42.032 40.154	0.000 42.210 40.171	0.000 42.397 40.189	0.000 42.590 40.208	0.000 42.790 40.227	0.000 42.997 40.247	0.000 43.211 40.267	0.000 43.432 40.289	0.000 43.659 40.311	0.000 43.892 40.333	0.000 44.133 40.357	0.000 44.379 40.381	0.000 44.632 40.405	0.000 44.890 40.431	0.000 45.155 40.456	0.000 45.426 40.483	0.000 45.702 40.510	0.000 45.984 40.538	0.000 46.272 40.567	0.000 46.565 40.596	0,000 46.863 40.626	0.000 47.167 40.656	0.000 47.476 40.688	0.000 47.790 40.719	0.000 48.109 40.752	0.000 48.432 40.785	0.000 48.761 40.819	0.000 49.094 40.853	0.000 49.432 40.888
Well	20.589 0.000	20.785 0.000	20.990 0.000	21.203 0.000	21.423 0.000	21.650 0.000	21.885 0.000	22.126 0.000	22.374 0.000	22.628 0.000	22.889 0.000	23.155 0.000	23.428 0.000	23.706 0.000	23.989 0.000	24.277 0.000	24.571 0.000	24.869 0.000	25.172 0.000	25.480 0.000	25.792 0.000	26.108 0.000	26.428 0.000	26.752 0.000	27.079 0.000	27.411 0.000	27.746 0.000	28.084 0.000	28.425 0.000	28.770 0.000	29.117 0.000	29.468 0.000	29.821 0.000	30.177 0.000
	41.206 -0.000	41.348 -0.000	41.497 -0.000	41.653 -0.000	41.817 -0.000	41.989 -0.000	42.168 -0.000	42.354 -0.000	42.547 -0.000	42.747 -0.000	42.954 -0.000	43.168 -0.000	43.389 -0.000	43.616 -0.000	43.850 -0.000	44.090 -0.000	44.337 -0.000	44.590 -0.000	44.848 -0.000	45.113 -0.000	45.384 -0.000	45.661 -0.000	45.943 -0.000	46.231 -0.000	46.524 -0.000	46.823 -0.000	47.126 -0.000	47.436 -0.000	47.750 -0.000	48.069 -0.000	48.393 -0.000	48.722 -0.000	49.055 -0.000	49.393 -0.000
	20.589 0.000	20.785 0.000	20.990 0.000	21.203 0.000	21.423 0.000	21.650 0.000	21.885 0.000	22.126 0.000	22.374 0.000	22.628 0.000	22.889 0.000	23.155 0.000	23.428 0.000	23.706 0.000	23.989 0.000	24.277 0.000	24.571 0.000	24.869 0.000	25.172 0.000	25.480 0.000	25.792 0.000	26.108 0.000	26.428 0.000	26.752 0.000	27.079 0.000	27.411 0.000	27.746 0.000	28.084 0.000	28.425 0.000	28.770 0.000	29.117 0.000	29.468 0.000	29.821 0.000	30.177 0.000
	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363,997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363,997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997	57 11363.997
	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179,657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657	0 179.657
	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000	90.000
3/4/24, 9:24 PM	13100.000	13200.000	13300.000	13400.000	13500 000	13600.000	13700 000	13800.000	13900,000	14000.000	14100.000	14200.000	14300.000	14400.000	14500.000	14600.000	14700 000	14800.000	14900 000	15000.000	15100.000	15200.000	15300.000	15400.000	15500,000	15600.000	15700.000	15800.000	15900 000	16000.000	16100.000	16200.000	16300.000	16400.000
	eleas	ed t	o In	nagi	ng:	11/.	15/2	024	7:4	1:12	2 A1	И																						

	4 40.924 -4.309 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 40.960 -4.234 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 40.997 -4.162 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 41.035 -4.093 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 41.073 -4.026 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	0 41.112 -3.962 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 41.151 -3.899 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 41.191 -3.839 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	4 41.232 -3.781 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 41.273 -3.724 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	5 41.315 -3.670 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 41.357 -3.617 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	0 41.400 -3.566 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 41.444 -3.516 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 41.489 -3.468 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	8 41.533 -3.421 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 41.579 -3.376 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 41.625 -3.332 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	6 41.672 -3.289 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 41.719 -3.248 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 41.767 -3.207 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	0 41.816 -3.168 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	0 41.865 -3.130 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 41.915 -3.093 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 41.965 -3.056 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 42.016 -3.021 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	8 42.067 -2.986 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 42.119 -2.953 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	8 42.172 -2.920 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	6 42.225 -2.888 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 42.279 -2.857 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	0 42.333 -2.827 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	5 42.388 -2.797 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 42.444 -2.768 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22
Well Plan Report	0.000 49.774	0.000 50.121	0.000 50.472	0.000 50.827	0.000 51.187	0.000 51.550	0.000 51.917	0.000 52.289	0.000 52.664	0.000 53.042	0.000 53.425	0.000 53.811	0.000 54.200	0.000 54.593	0.000 54.989	0.000 55.388	0.000 55.791	0.000 56.197	0.000 56.606	0.000 57.017	0.000 57.432	0.000 57.850	0.000 58.270	0.000 58.693	0.000 59.119	0.000 59.547	0.000 59.978	0.000 60.412	0.000 60.848	0.000 61.286	0.000 61.727	0.000 62.170	0.000 62.615	0.000 63.062
We	30.536 0.000	30.897 0.000	31.260 0.000	31.626 0.000	31.994 0.000	32.365 0.000	32.737 0.000	33.112 0.000	33.488 0.000	33.867 0.000	34.247 0.000	34.629 0.000	35.013 0.000	35.398 0.000	35.785 0.000	36.174 0.000	36.564 0.000	36.955 0.000	37.348 0.000	37.743 0.000	38.139 0.000	38.536 0.000	38.934 0.000	39.334 0.000	39.734 0.000	0 40,136 0,000	000.0 40.539 0.000	0 40.943 0.000	0 41.348 0.000	0 41.754 0.000	) 42.161 0.000	) 42.569 0.000	) 42.978 0.000	) 43.388 0.000
	30.536 0.000 49.736 -0.000	30.897 0.000 50.083 -0.000	31.260 0.000 50.434 -0.000	31.626 0.000 50.789 -0.000	31.994 0.000 51.149 -0.000	32.365 0.000 51.513 -0.000	32.737 0.000 51.880 -0.000	33.112 0.000 52.252 -0.000	33.488 0.000 52.627 -0.000	33.867 0.000 53.006 -0.000	34.247 0.000 53.389 -0.000	34.629 0.000 53.775 -0.000	35.013 0.000 54.164 -0.000	35.398 0.000 54.557 -0.000	35.785 0.000 54.954 -0.000	36.174 0.000 55.353 -0.000	36.564 0.000 55.756 -0.000	36.955 0.000 56.162 -0.000	37.348 0.000 56.571 -0.000	37.743 0.000 56.983 -0.000	38.139 0.000 57.398 -0.000	38.536 0.000 57.816 -0.000	38.934 0.000 58.237 -0.000	39.334 0.000 58.660 -0.000	39.734 0.000 59.086 -0.000	40,136 0,000 59,515 -0,000	40.539 0.000 59.946 -0.000	40.943 0.000 60.379 -0.000	41.348 0.000 60.816 -0.000	41.754 0.000 61.254 -0.000	42.161 0.000 61.695 -0.000	42.569 0.000 62.138 -0.000	42.978 0.000 62.584 -0.000	43.388 0.000 63.032 -0.000
	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179,657 11363,997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997	179.657 11363.997
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3/4/24, 9:24 PM	16500.000	16600.000	16700,000	16800.000	16900.000	17000.000	17100.000	17200.000	17300.000	17400.000	17500.000	17600.000	17700.000	17800.000	17900.000	18000.000	18100.000	18200.000	18300.000	18400.000	18500.000	18600.000	18700.000	18800.000	18900.000	19000,000	19100.000	19200.000	19300.000	19400.000	19500.000	19600.000	19700.000	19800.000
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	0 -2.740 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_	6 -2.712 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	4 -2.685 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 -2.659 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	.0 -2.633 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.608 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	8 -2.583 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	8 -2.559 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	8 -2.535 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.512 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 -2.489 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 -2.467 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	6 -2.445 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.424 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 -2.403 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 -2.383 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 -2.363 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	7 -2.343 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 -2.324 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.305 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	6 -2.286 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	4 -2.268 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 -2.250 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	.0 -2.232 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.215 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.198 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.182 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.165 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	0 -2.149 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	1 -2.133 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	3 -2.118 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	6 -2.103 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	9 -2.088 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22	2 -2.073 MWD+IFR1+SAG+MS+GS XTO PLUDTD 22
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**<u>Subject:</u>** Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

XTO Energy requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

# **Background**

Onshore Oil and Gas Order CFR Title 43 Part 3170, Drilling Operations, Sections III.A.2.i.iv.B states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. CFR Title 43 Part 3170 states, "Some situation may exist either on a well-by- well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this order. This situation can be resolved by requesting a variance...". XTO Energy feels the break testing the BOPE is such a situation. Therefore, as per CFR Title 43 Part 3170, XTO Energy submits this request for the variance.

# **Supporting Documentation**

CFR Title 43 Part 3170 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time there have been significant changes in drilling technology. BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since CFR Title 43 Part 3170 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.



Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. CFR Title 43 Part 3170recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

Tal	ole C.4—Initial Pressure Te	esting, Surface BOP Stacks	
	Pressure Test—Low	Pressure Test—	-High Pressureac
Component to be Pressure Tested	Pressure Test—Low Pressure <sup>ac</sup> psig (MPa)	Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer <sup>b</sup>	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers <sup>bd</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes <sup>e</sup>	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokese	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or N whichever is lower	MASP for the well program,
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	
<sup>b</sup> Annular(s) and VBR(s) shall be pre-	during the evaluation period. The passure tested on the largest and sm	pressure shall not decrease below the allest OD drill pipe to be used in well	program.
	from one wellhead to another within when the integrity of a pressure se	in the 21 days, pressure testing is requal is broken.	uired for pressure-containing an
	land operations, the ram BOPs sha	sted with the ram locks engaged and all be pressure tested with the ram lo	

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after

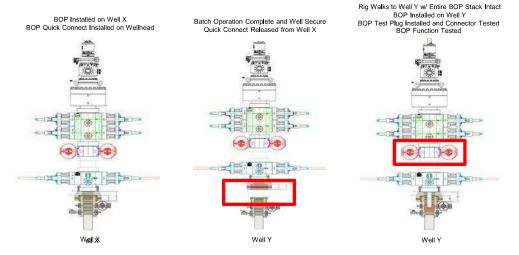
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

# **Procedures**

- 1. XTO Energy will use this document for our break testing plan for New Mexico Delaware basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
- 2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
  - a. A full BOP test will be conducted on the first well on the pad.
  - b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
    - Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
    - ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
  - c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
  - d. A full BOP test will be required prior to drilling any production hole.
- 3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
  - a. Between the HCV valve and choke line connection
  - b. Between the BOP quick connect and the wellhead
- 4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
- 5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
- 6. The connections mentioned in 3a and 3b will then be reconnected.
- 7. Install test plug into the wellhead using test joint or drill pipe.
- 8. A shell test is performed against the upper pipe rams testing the two breaks.
- 9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
- 10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

- 11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
- 12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



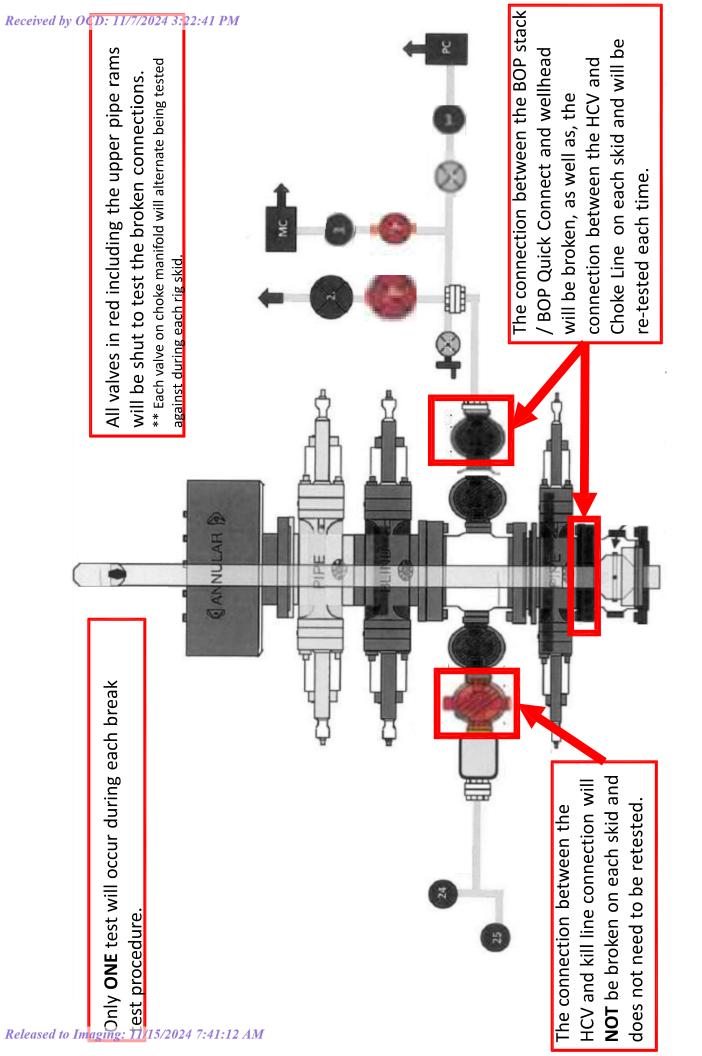
# **Summary**

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.

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, 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. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
- 3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
- 4. Full BOP test will be required prior to drilling the production hole.



# 10,000 PSI Annular BOP Variance Request

XTO Energy/XTO Permian Op. request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOPL).

# 1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

	8-1/2" Production Hole Section  10M psi Requirement											
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP							
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M							
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M							
Jars	6.500"	Annular	5M	-	-							
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-							
Mud Motor	6.750"-8.000"	Annular	5M	-	-							
Production Casing	5-1/2"	Annular	5M	-	-							
Open-Hole	-	Blind Rams	10M	-	-							

# 2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per 43.CFR.3172 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

# General Procedure While Drilling

- 1. Sound alarm (alert crew)
- 2. Space out drill string
- 3. Shut down pumps (stop pumps and rotary)
- 4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
- 8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

# **General Procedure While Tripping**

- 1. Sound alarm (alert crew)
- 2. Stab full-opening safety valve & close
- 3. Space out drill string
- 4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- 5. Confirm shut-in
- 6. Notify toolpusher/company representative
- 7. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
- 8. Regroup and identify forward plan
- 9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

# **General Procedure While Running Production Casing**

- a. Sound alarm (alert crew)
- b. Stab crossover and full-opening safety valve and close
- c. Space out string
- d. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- e. Confirm shut-in
- f. Notify toolpusher/company representative
- g. Read and record the following:
  - a. SIDPP & SICP
  - b. Pit gain
  - c. Time
- h. Regroup and identify forward plan
- i. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

# General Procedure With No Pipe In Hole (Open Hole)

- 1. Sound alarm (alert crew)
- 2. Shut-in with blind rams (HCR & choke will already be in the closed position)
- 3. Confirm shut-in
- 4. Notify toolpusher/company representative
- 5. Read and record the following:
  - a. SICP
  - b. Pit gain
  - c. Time
- 6. Regroup and identify forward plan

# General Procedures While Pulling BHA Through Stack

- 1. PRIOR to pulling last joint of drillpipe through stack:
  - a. Perform flow check. If flowing, continue to (b).
  - b. Sound alarm (alert crew)
  - c. Stab full-opening safety valve and close
  - d. Space out drill string with tool joint just beneath the upper variable bore rams
  - e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
  - f. Confirm shut-in
  - g. Notify toolpusher/company representative
  - h. Read and record the following:
    - i. SIDPP & SICP
    - ii. Pit gain
    - iii. Time
  - i. Regroup and identify forward plan
- 2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
  - a. Sound alarm (alert crew)
  - b. Stab crossover and full-opening safety valve and close
  - c. Space out drill string with upset just beneath the upper variable bore rams
  - d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
  - e. Confirm shut-in
  - f. Notify toolpusher/company representative
  - g. Read and record the following:
    - i. SIDPP & SICP
    - ii. Pit gain
    - iii. Time

- h. Regroup and identify forward plan
- 3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
  - a. Sound alarm (alert crew)
  - b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
  - c. If impossible to pull string clear of the stack:
  - d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
  - e. Space out drill string with tooljoint just beneath the upper variable bore ram
  - f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
  - g. Confirm shut-in
  - h. Notify toolpusher/company representative
  - i. Read and record the following:
    - i. SIDPP & SICP
    - ii. Pit gain
    - iii. Time
  - j. Regroup and identify forward plan

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 400519

# **CONDITIONS**

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	400519
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

# CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.	11/15/2024
ward.rikala	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	11/15/2024
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	11/15/2024