reivWPbvNVCDP970/18727024 1:05:51 PM

Type of Well: CONVENTIONAL GAS

Allottee or Tribe Name:

Lease Number: NMNM068905

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number: 3001549888** 

**Operator: XTO PERMIAN OPERATING** 

LLC

# **Notice of Intent**

**Sundry ID: 2785996** 

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 04/19/2024 Time Sundry Submitted: 01:35

Date proposed operation will begin: 05/03/2024

Procedure Description: POKER LAKE UNIT 22 DTD 185H SUNDRY LANGUAGE 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 & 1750' FEL OF SECTION 15-T24S-R30E 100' FNL & 1323' FEL OF SECTION 22-T24S-R30E LTP: 328' FNL & 1750' FEL OF SECTION 3-T24S-R30E 2537' FNL & 1322' FEL OF SECTION 34-T24S-R30E BHL: 198' FNL & 1750' FEL OF SECTION 3-T24S-R30E 2627' FNL & 1322' FEL OF SECTION 34-T24S-R30E The proposed total depth is changing from 28092' MD; 12233' TVD (Jennings/WOLFCAMP (Gas)) to 22469' MD; 9673' TVD (Bone Spring 2 Sand). See attached Drilling Plan for updated cement and casing program. A saturated salt brine will be utilized while drilling through the salt formations. Attachments: C-102, Drilling Plan, Directional Plan, MBS

# **NOI Attachments**

# **Procedure Description**

PLU\_22\_DTD\_185H\_Sundry\_Documents\_20240806082224.pdf

**US Well Number:** 3001549888

**Operator: XTO PERMIAN OPERATING** 

LLC

# **Conditions of Approval**

## **Additional**

Poker\_Lake\_Unit\_22\_DTD\_185H\_COA\_20241010102608.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: ADRIAN BAKER Signed on: AUG 06, 2024 08:22 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING State: TX

Phone: (432) 236-3808

Email address: ADRIAN.BAKER@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:** 10/17/2024

Signature: Chris Walls

Form 3160-5 (June 2019)

1. Type of Well

Oil Well

SEC 22/T24S/R30E/NMP

✓ Gas Well

3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)

2. Name of Operator XTO PERMIAN OPERATING LLC

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

	1	
5. Lease Serial No.	NMLC068905	

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE - Other instructions on page 2

Other

	6. If Indian, Allottee or Tribe Name
an	
sals.	
	7. If Unit of CA/Agreement, Name and/or No.
	8. Well Name and No.
	POKER LAKE UNIT 22 DTD/185H
	9. API Well No. 3001549888
code)	10. Field and Pool or Exploratory Area
	Jennings/BONE SPRING
	11. Country or Parish, State
	EDDY/NM

#### TYPE OF SUBMISSION TYPE OF ACTION Acidize Production (Start/Resume) Water Shut-Off ✓ Notice of Intent Reclamation Well Integrity Alter Casing Hydraulic Fracturing Casing Repair New Construction Recomplete Other Subsequent Report ✓ Change Plans Plug and Abandon Temporarily Abandon Final Abandonment Notice Convert to Injection Plug Back Water Disposal

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

3b. Phone No. (include area

(432) 683-2277

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

POKER LAKE UNIT 22 DTD 185H

SUNDRY LANGUAGE

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 & 1750' FEL OF SECTION 15-T24S-R30E 100' FNL & 1323' FEL OF SECTION 22-T24S-R30E LTP: 328' FNL & 1750' FEL OF SECTION 3-T24S-R30E 2537' FNL & 1322' FEL OF SECTION 34-T24S-R30E BHL: 198' FNL & 1750' FEL OF SECTION 3-T24S-R30E 2627' FNL & 1322' 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> )  ADRIAN BAKER / Ph: (432) 236-3808	Regulatory Analyst Title	
(Electronic Submission)	Date	08/06/2024

#### THE SPACE FOR FEDERAL OR STATE OFICE USE

Approved by

CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Petroleum Engineer

Title

Office CARLSBAD

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

Released to Imaging: 10/24/2024 7:49:21 AM

#### **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**

The proposed total depth is changing from 28092 MD; 12233 TVD (Jennings/WOLFCAMP (Gas)) to 22469 MD; 9673 TVD (Bone Spring 2 Sand).

See attached Drilling Plan for updated cement and casing program.

A saturated salt brine will be utilized while drilling through the salt formations.

Attachments: C-102, Drilling Plan, Directional Plan, MBS

#### **Location of Well**

0. SHL: NWNE / 414 FNL / 1856 FEL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.209432 / LONG: -103.866281 ( 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: 12233 feet, MD: 15200 feet ) PPP: SWSE / 100 FSL / 2237 FEL / TWSP: 24S / RANGE: 30E / SECTION: 15 / LAT: 32.210847 / LONG: -103.865935 ( TVD: 12233 feet, MD: 12560 feet ) PPP: NWNE / 300 FNL / 313 FWL / TWSP: 24S / RANGE: 30E / SECTION: 10 / LAT: 32.253158 / LONG: -103.876545 ( TVD: 12233 feet, MD: 17840 feet ) BHL: LOT 2 / 198 FNL / 1750 FEL / TWSP: 24S / RANGE: 30E / SECTION: 3 / LAT: 32.253543 / LONG: -103.865909 ( TVD: 12233 feet, MD: 28092 feet )

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO
LEASE NO.: NMLC 068905
LOCATION: Sec. 22, T.24 S, R 30 E

COUNTY: Eddy County, New Mexico

WELL NAME & NO.: Poker Lake Unit 22 DTD 185H
SURFACE HOLE FOOTAGE: 414'/S & 1856'/E
BOTTOM HOLE FOOTAGE: 2627'/N & 1322'/E

Changes approved through engineering via **Sundry 2785996** on \_9-13-2024\_\_. Any previous COAs not addressed within the updated COAs still apply.

COA

$H_2S$	•	No	0	Yes
Potash /	None	<ul><li>Secretary</li></ul>	○ R-111-Q	Open Annulus
WIPP	Choose	e an option (including bla	nk option.)	□ WIPP
Cave / Karst	Low	Medium	🖰 High	Critical
Wellhead	Conventional	<ul><li>Multibowl</li></ul>	O Both	Diverter
Cementing	Primary Squeeze	Cont. Squeeze	EchoMeter	DV Tool
Special Req	Capitan Reef	Water Disposal	☐ COM	Unit
Waste Prev.	C Self-Certification	C Waste Min. Plan	• APD Submitted p	prior to 06/10/2024
Additional	Flex Hose	Casing Clearance	Pilot Hole	Break Testing
Language	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 <u>8 hours</u> or <u>500 pounds compressive strength</u>, 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 Intermediate 1 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 10/10/2024** 575-234-5998 / zstevens@blm.gov

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

	WELL EOCHTON AND ACKEAGE DEDICATION LEAT									
<sup>1</sup> API Numbe	r	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name							
30-015-	49888	97798	WILDCAT G-06 S243026M; BONE SPRING							
4 Property Code		<sup>5</sup> P	roperty Name	<sup>6</sup> Well Number						
333192		POKER L	AKE UNIT 22 DTD	185H						
<sup>7</sup> OGRID No.		80	perator Name	<sup>9</sup> Elevation						
373075		XTO PERMI	AN OPERATING, LLC	3,413'						

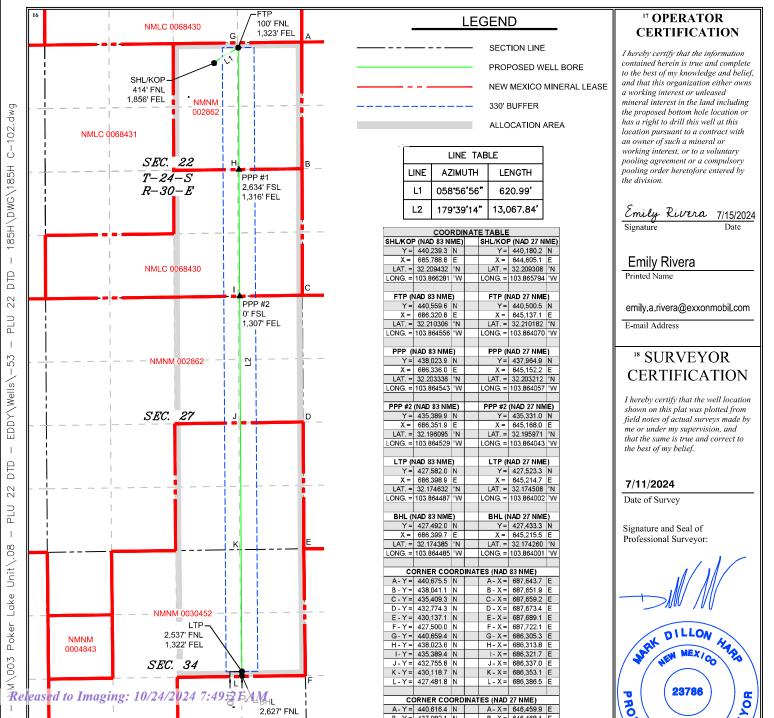
<sup>10</sup> Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	22	24S	30E		414	NORTH	1,856	EAST	EDDY

"Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
н	34	24S	30E		2,627	NORTH	1,322	EAST	EDDY
12 Dedicated Acres	<sup>13</sup> Joint or	Infill 14Co	onsolidation (	Code 15 Ord	ler No.		•	1	
800.00									

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



Inten	t X	As Dril	led											
API #														
-	rator Nar DPERM	<sup>me:</sup> IIAN OPI	ERATIN	NG, LL	.C	Propert POKE				IT 22	: DTI	D		Well Number 185H
Kick C	Off Point	(KOP)												
UL	Section	Township	Range	Lot	Feet	Fro	om N	/S	Feet		From	ı E/W	County	
Latitu	ıde				Longitu	ıde							NAD	
	Faka Dain	.+ /CTD\												
UL	Section	Township	Range	Lot	Feet		om N	/S	Feet			ı E/W	County	
A Latitu	22 ude	24S	30E		100 Longitu		orth		1,32	23	Eas	<u> </u>	Eddy NAD	
32.2	210306	3			-103	.86455	56						83	
Last T	ake Poin	t (LTP)												
UL H	Section 34	Township 24S	Range 30E	Lot	Feet 2,537	From N,	/S	Feet <b>1,3</b> 2		From East	E/W	Count	-	
Latitu	<sub>ide</sub> 174632	)	1		Longitu	ude 86448	37					NAD 83		
Is this	s well the	defining v	vell for tl	he Hori	zontal S <sub>l</sub>	pacing U	nit?			]				
ls this	s well an	infill well?												
	ll is yes p ng Unit.	lease prov	ide API if	<sup>-</sup> availak	ole, Opei	rator Nar	me a	and v	vell n	umber	for [	Definir	ng well fo	r Horizontal
API#														
Ope	rator Nai	ne:				Proper	ty N	ame	;					Well Number
														V7 06/20/201

KZ 06/29/2018

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

XTO Energy Inc.

POKER LAKE UNIT 22 DTD 185H

Projected TD: 22469' MD / 9673' TVD

SHL: 414' FNL & 1856' FEL , Section 22, T24S, R30E

BHL: 2627' FNL & 1322' 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
Target/Land Curve	9673'	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 8793' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 22469 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8493 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	1.89	5.12	12.80
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.00	2.92	2.14
8.75	4000' – 8793'	7.625	29.7	HC L-80	Flush Joint	New	2.18	2.72	2.85
6.75	0' – 8693'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.34	2.22
6.75	8693' - 22469'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.10	2.22

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

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

<sup>7.625</sup> Collapse analyzed using 50% evacuation based on regional experience.

<sup>5.5</sup> Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

Wellhead:

XTO will use a Multi-Bowl system which is attached.

#### 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 +/- 8793'

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: 210 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

#### <u> 2nd Stage</u>

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 +/- 22469'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8493 feet
Tail: 960 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 8993 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 surface 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. XTO will use a Multi-Bowl system which is attached.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 9.625, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week.

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. We will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

#### 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Additional Comments
						Fresh Water or
0' - 1230'	12.25	FW/Native	8.7-9.2	35-40	NC	Native Water
		No.				Fully Saturated
		Salt				salt across
1230'-3920'		Saturated	10.5-11			salado / /salt
3920' - 8793'	8.75	BDE / OBM	9-9.5	30-32	NC	N/A
				6		
8793' - 22469'	6.75	OBM	11.5-12	50-60	NC - 20	N/A

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 surface casing with Saturated Salt solution. Saturated Salt 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 160 to 180 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 5281 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 185H

Well Plan Report

Measured Depth: TVD RKB:	22468.82 ft 9673.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	440180.20 ft
Easting:	644605.10 ft
RKB:	3445.00 ft
Ground Level:	3413.00 ft
North Reference:	Grid
Convergence Angle:	0.25 Deg

Plan Sections	Po	Poker Lake Unit 22 DTD	DTD South 185H	I				
Measured			ΔΛΙ			Build	Turn	Dogleg
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate
(ft)	(Deg)	(Deg)	(#)	(#)	(#)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft) Target
00.00	00.00	00.00	0.00	00.00	00.00	0.00	00'0	0.00
1100.00	00.00	00.00	1100.00	00.00	00.00	0.00	0.00	00.00
1436.45	6.73	58.95	1435.68	10.18	16.91	2.00	0.00	2.00
6399.28	6.73	58.95	6364.32	310.12	515.09	0.00	0.00	0.00
6735.73	00.00	00.00	6700.00	320.30	532.00	-2.00	0.00	2.00
8992.53	00.00	00.00	8956.80	320.30	532.00	00.00	0.00	00.00
10117.53	00.06	179.64	9673.00	-395.88	536.45	8.00	0.00	8.00
22378.74	00.06	179.64	9673.00	-12656.86	612.63	00.00	0.00	0.00 LTP 14
22439.32	00'06	182.32	9673.00	-12717.43	611.59	00'0-	4.41	4.41
22468.82	00.06	182.32	9673.00	-12746.90	610.40	0.00	0.00	0.00 BHL 14

**Position Uncertainty** 

Poker Lake Unit 22 DTD South 185H

	inor Tool	luth Used	(,)	0.000 MWD+IFR1+MS	112.264 MWD+IFR1+MS	.711 MWD+IFR1+MS	125.469 MWD+IFR1+MS	126.713 MWD+IFR1+MS	127.419 MWD+IFR1+MS	127.873 MWD+IFR1+MS	128.190 MWD+IFR1+MS	128.423 MWD+IFR1+MS	602 MWD+IFR1+MS	744 MWD+IFR1+MS	128.859 MWD+IFR1+MS	134.746 MWD+IFR1+MS	-34.960 MWD+IFR1+MS	-29.767 MWD+IFR1+MS	-29.606 MWD+IFR1+MS	-29.530 MWD+IFR1+MS	-29.024 MWD+IFR1+MS	-28.156 MWD+IFR1+MS	-27.293 MWD+IFR1+MS	-26.436 MWD+IFR1+MS	-25.587 MWD+IFR1+MS	747 MWD+IFR1+MS	-23.918 MWD+IFR1+MS	101 MWD+IFR1+MS	-22.298 MWD+IFR1+MS	-21.509 MWD+IFR1+MS	-20.736 MWD+IFR1+MS	-19.979 MWD+IFR1+MS	-19.239 MWD+IFR1+MS
	Semi-minor	Azimuth		0	112.	122.711	125.	126.	127.	127.	128.	128.	128.602	128.744	128.	134	34	-29	-29	-29	-29	-28	-27	-26	-25	-24.747	-23	-23.101	-22	-21	-20	-19	-19
	Semi-minor S	Error	(#)	0.000	0.220	0.627	0.986	1.344	1.701	2.059	2.417	2.775	3.133	3.491	3.849	4.253	4.697	5.083	5.210	5.433	5.800	6.175	6.549	6.921	7.291	7.661	8.030	8,397	8.765	9.131	9.497	9.863	10.228
	Semi-major	Error	(#)	0.000	0.751	1.259	1.698	2.108	2.503	2.888	3.267	3.642	4.014	4.384	4.752	5.249	5.961	6.648	6.769	6.947	7.233	7.535	7.842	8.156	8.473	8.795	9.121	9,450	9.782	10.116	10.453	10.792	11.133
eport	Magnitude	of Bias	(#)	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	00000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000
Well Plan Report		Bias	<b>(£</b> )	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
We	Vertical	Error	Œ	0.000	2.300	2.310	2.325	2.347	2.375	2.407	2.444	2.486	2.532	2.582	2.636	2.692	2.752	2.818	2.838	2.879	2.949	3.021	3.096	3.173	3.252	3.333	3.417	3,502	3.588	3.676	3.766	3.858	3.950
		Bias	(£	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
	Lateral	Error	<b>(£</b> )	0.000	0.350	0.861	1.271	1.658	2.034	2.405	2.773	3.138	3.502	3.865	4.228	4.319	4.703	5.084	5.211	5.434	5.802	6.179	6.555	6.929	7.303	9/9.7	8.047	8.419	8.789	9.160	9.529	668.6	10.268
	_	Bias	<b>(</b>	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
	Highside	Error	(#)	0.000	00.700	1.112	1.497	1.871	2.240	2.607	2.971	3.334	3 696	4.058	4.419	5 192	5.946	6.627	6.740	6.918	7.206	7.508	7 816	8.129	8 447	8.768	9.093	9.421	9.752	10.086	10.422	10.760	11.100
	TVD	RKB	(#)	0.000	100.000	200.000	300.000	400.000	200,000	000.009	700.000	800 000	000 006	1000.000	1100.000	1199 980	1299.838	1399.452	1435.677	1498.790	1598 101	1697.413	1796 724	1896.035	1995 346	2094.657	2193.968	2293.279	2392.591	2491 902	2591.213	2690 524	2789.835
		Azimuth	<b>©</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	58 949	58 949	58.949	58.949	58.949	58 949	58.949	58 949	58.949	58 949	58.949	58.949	58.949	58.949	58 949	58 949	58 949	58.949
_		Inclination /	<b>(</b> )	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	00009	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729
3/13/24, 12:24 AM	Measured	Depth	(ft)	0.000	100.000	200.000	300.000	400.000	200.000	000.009	700.000	800,000	900.000	1000.000	1100.000	1200.000	1300.000	1400.000	1436.449	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
E Pa	lone	od t	o In	ıaai	na.	10/2	1/21	024	7.40	0.21	4 M	r																					

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	-18.518 MWD+IFR1+MS	-17.814 MWD+IFR1+MS	-17.129 MWD+IFR1+MS	-16.464 MWD+IFR1+MS	-15.817 MWD+IFR1+MS	-15.189 MWD+IFR1+MS	-14.580 MWD+IFR1+MS	-13.991 MWD+IFR1+MS	-13.420 MWD+IFR1+MS	-12.868 MWD+IFR1+MS	-12.334 MWD+IFR1+MS	-11.818 MWD+IFR1+MS	-11.319 MWD+IFR1+MS	-10.839 MWD+IFR1+MS	-10.374 MWD+IFR1+MS	-9.927 MWD+IFR1+MS	-9.495 MWD+IFR1+MS	-9.079 MWD+IFR1+MS	-8.679 MWD+IFR1+MS	-8.293 MWD+IFR1+MS	-7.921 MWD+IFR1+MS	-7.563 MWD+IFR1+MS	-7.219 MWD+IFR1+MS	-6.888 MWD+IFR1+MS	-6.569 MWD+IFR1+MS	-6.263 MWD+IFR1+MS	-5.968 MWD+IFR1+MS	-5.685 MWD+IFR1+MS	-5.414 MWD+IFR1+MS	-5.152 MWD+IFR1+MS	-4.902 MWD+IFR1+MS	-4.661 MWD+IFR1+MS	-4.430 MWD+IFR1+MS
	10.593	10.958	11.323	11.687	12.051	12.415	12.779	13.143	13.507	13.871	14.235	14.598	14.962	15.326	15.689	16.053	16.417	16.780	17.144	17.508	17.871	18.235	18.599	18.963	19.327	19.691	20.055	20.419	20.783	21.147	21.511	21.875	22.239
	11 476	11.820	12.166	12.513	12.862	13.211	13.562	13.913	14.265	14.618	14.971	15.326	15.681	16.036	16.392	16.748	17.105	17.462	17.820	18.177	18.536	18.894	19.253	19.612	19.971	20.331	20.691	21.051	21.411	21.771	22.131	22.492	22.853
oort	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	0.000	0.000
Well Plan Report	4.045 0.000	4.140 0.000	4.237 0.000	4.336 0.000	4.435 0.000	4.537 0.000	4.639 0.000	4.743 0.000	4.849 0.000	4.955 0.000	5.064 0.000	5.173 0.000	5.284 0.000	5.397 0.000	5.511 0.000	5.627 0.000	5.744 0.000	5.863 0.000	5.984 0.000	6.106 0.000	6.230 0.000	6.356 0.000	6.484 0.000	6.613 0.000	6.744 0.000	6.877 0.000	7.012 0.000	7.149 0.000	7.288 0.000	7.429 0.000	7.572 0.000	7.717 0.000	7.864 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	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.000	0.000
	10.637	11,005	11.373	11.741	12.109	12.477	12.844	13.211	13.578	13.945	14.312	14.679	15.046	15.412	15.779	16.145	16.511	16.877	17.244	17.610	17 976	18.342	18.707	19.073	19.439	19.805	20.170	20.536	20.902	21.267	21.633	21.998	22.364
	0.000	0000	000'0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.000	0.000
	11.441	11.785	12.129	12.475	12.823	13.171	13.520	13.871	14.222	14.574	14.927	15.281	15.635	15.990	16.345	16.701	17.058	17.415	17.772	18.130	18.488	18.847	19.206	19.565	19.925	20.285	20.645	21,005	21.366	21.727	22.088	22.450	22.811
	49 2889 146	49 2988.457	49 3087.769	49 3187.080	49 3286.391	49 3385.702	49 3485.013	49 3584.324	49 3683.636	49 3782.947	49 3882.258	49 3981,569	49 4080.880	49 4180.191	49 4279.502	49 4378.814	49 4478.125	49 4577.436	49 4676.747	49 4776.058	49 4875.369	49 4974.680	49 5073.992	49 5173.303	49 5272.614	49 5371.925	49 5471.236	49 5570,547	49 5669.858	49 5769.170	49 5868.481	49 5967.792	49 6067.103
	58.949	58 949	58 949	58 949	58 949	58.949	58 949	58.949	58.949	58.949	58.949	58.949	58 949	58.949	58.949	58.949	58.949	58.949	58.949	58.949	58.949	58.949	58 949	58.949	58.949	58.949	58.949	58.949	58.949	58.949	58.949	58.949	58.949
	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729	6.729
3/13/24, 12:24 AM	2900.000	3000.000	3100.000	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	5000.000	5100.000	5200.000	5300.000	5400.000	5500.000	5600,000	5700.000	5800.000	2900.000	000.0009	6100.000
	eleas	ed t	o In	ıagi	ng:	10/2	24/2	024	7:49	2:21	AM	r																					

	-4.209 MWD+IFR1+MS	-3.997 MWD+IFR1+MS	-3.801 MWD+IFR1+MS	-4.398 MWD+IFR1+MS	-6.451 MWD+IFR1+MS	-7.953 MWD+IFR1+MS	-8.111 MWD+IFR1+MS	-8.246 MWD+IFR1+MS	-8.591 MWD+IFR1+MS	-9.097 MWD+IFR1+MS	-9.605 MWD+IFR1+MS	-10.114 MWD+IFR1+MS	-10.626 MWD+IFR1+MS	-11.138 MWD+IFR1+MS	-11.651 MWD+IFR1+MS	-12.165 MWD+IFR1+MS	-12.679 MWD+IFR1+MS	-13.193 MWD+IFR1+MS	-13.707 MWD+IFR1+MS	-14.220 MWD+IFR1+MS	-14.731 MWD+IFR1+MS	-15.241 MWD+IFR1+MS	-15.750 MWD+IFR1+MS	-16.256 MWD+IFR1+MS	-16.761 MWD+IFR1+MS	-17.262 MWD+IFR1+MS	-17.761 MWD+IFR1+MS	-18.256 MWD+IFR1+MS	-18.748 MWD+IFR1+MS	-19.148 MWD+IFR1+MS	-19.150 MWD+IFR1+MS	-37.031 MWD+IFR1+MS	103.609 MWD+IFR1+MS
	22.604	22.968	23 330	23.693	24 055	24.410	24.535	24.760	25.109	25.460	25.810	26.161	26.512	26.863	27.215	27.566	27.917	28.269	28.620	28.972	29.323	29.675	30.026	30.378	30.730	31.082	31 434	31.786	32.137	32.463	32.488	33.081	33.598
	23.214	23.575	23.933	24 334	24 790	25.239	25.362	25.574	25.909	26.247	26.586	26.926	27.266	27.607	27.948	28.290	28.632	28.975	29.319	29.663	30.007	30.352	30.697	31.042	31 388	31.735	32.081	32.428	32.776	33.096	33.121	33.525	34.811
oort	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	0.000	0.000
Well Plan Report	8.014 0.000	8.165 0.000	8.318 0.000	8.475 0.000	8.632 0.000	8.786 0.000	8.840 0.000	8.939 0.000	9.094 0.000	9.252 0.000	9.412 0.000	9.575 0.000	9.741 0.000	0000 6066	10.080 0.000	10.254 0.000	10.431 0.000	10.610 0.000	10.792 0.000	10.977 0.000	11.165 0.000	11.356 0.000	11.549 0.000	11.745 0.000	11.945 0.000	12.147 0.000	12.352 0.000	12.560 0.000	12.770 0.000	12.968 0.000	12.984 0.000	13.214 0.000	13.567 0.000
	0.000	0000	0.000	0.000	0.000	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	0000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	000'0	-0.000	-0.000	-0.000
	22.729	23.095	23 457	23.824	24 184	24.540	25.346	25.558	25.891	26.228	26.565	26.903	27.241	27 579	27.919	28.258	28.598	28.939	29.280	29.621	29.963	30,305	30.648	30.991	31.334	31.678	32.022	32,366	32.710	33.029	33.056	33.367	33.670
	0.000	0.000	0000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000.0	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	0000	0.000	0.000	0.000
	23.173	23.535	23 895	24 300	24 736	25 138	24 552	24.777	25.127	25.480	25.832	26.185	26 538	26 892	27.245	27.598	27.952	28.306	28 660	29.014	29.368	29 722	30 076	30 431	30 785	31 140	31 494	31.849	32.204	32.532	32.542	32.792	33.433
	6166.414	6265.725	6364.323	6464.534	6564.319	6664.269	6700.000	6764.268	6864.268	6964.268	7064.268	7164.268	7264.268	7364.268	7464.268	7564.268	7664.268	7764.268	7864.268	7964.268	8064.268	8164.268	8264.268	8364.268	8464.268	8564.268	8664.268	8764,268	8864.268	8956,800	8964.268	9063.865	9161.379
	58.949	58.949	58 949	58 949	58 949	58 949	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	179.644	179.644	179.644
	6.729	6.729	6.729	4 715	2.715	0.715	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	0000	0.000	0.000	0.597	8.597	16.597
3/13/24, 12:24 AM	6200.000	6300.000	6399.282	6500.000	000.0099	6700.000	6735.732	6800.000	000.0069	7000.000	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	8992.532	9000.0006	9100.000	9200.000
	eleas	ed t	o In	agi	ng:	10/2	24/20	924	7:49	0:21	AM	r																					

	98.795 MWD+IFR1+MS	97.328 MWD+IFR1+MS	96.766 MWD+IFR1+MS	96.612 MWD+IFR1+MS	96.706 MWD+IFR1+MS	96.979 MWD+IFR1+MS	97.389 MWD+IFR1+MS	97.893 MWD+IFR1+MS	98.424 MWD+IFR1+MS	98.508 MWD+IFR1+MS	98.928 MWD+IFR1+MS	99,481 MWD+IFR1+MS	100.084 MWD+IFR1+MS	100.741 MWD+IFR1+MS	101.461 MWD+IFR1+MS	102.255 MWD+IFR1+MS	103.134 MWD+IFR1+MS	104.112 MWD+IFR1+MS	105.207 MWD+IFR1+MS	106.438 MWD+IFR1+MS	107.829 MWD+IFR1+MS	109.406 MWD+IFR1+MS	111.200 MWD+IFR1+MS	113.244 MWD+IFR1+MS	115.570 MWD+IFR1+MS	118.204 MWD+IFR1+MS	121.161 MWD+IFR1+MS	124,432 MWD+IFR1+MS	127.973 MWD+IFR1+MS	131.703 MWD+IFR1+MS	-44.494 MWD+IFR1+MS	-40.747 MWD+IFR1+MS	-37.175 MWD+IFR1+MS
	33 899	34 166	34.408	34.625	34.816	34.981	35.118	35.228	35.310	35.320	35.373	35.455	35.553	35.666	35.792	35.932	36.085	36.251	36.428	36.616	36.813	37.019	37.231	37.448	37.668	37.888	38.104	38.313	38.512	38.697	38.867	39.020	39.155
	36.123	37.252	38.176	38.895	39.419	39.767	39.969	40.063	40.095	40.098	40.111	40.127	40.146	40.167	40.190	40.215	40.243	40.275	40.311	40.351	40.396	40.448	40.508	40.577	40.657	40.752	40.862	40.993	41.146	41.326	41.533	41.769	42.034
ort	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	0.000	0.000
Well Plan Report	14.135 0.000	14.979 0.000	16.112 0.000	17.511 0.000	19.124 0.000	20.887 0.000	22.732 0.000	24.596 0.000	26.419 0.000	26.462 0.000	26.606 0.000	26.788 0.000	26.993 0.000	27.220 0.000	27.467 0.000	27.733 0.000	28.020 0.000	28.325 0.000	28.648 0.000	28.989 0.000	29.347 0.000	29.722 0.000	30.112 0.000	30.517 0.000	30.937 0.000	31.371 0.000	31.819 0.000	32.279 0.000	32.752 0.000	33.237 0.000	33.732 0.000	34.239 0.000	34.756 0.000
	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	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	-0.000
	33.957	34.224	34.469	34.692	34.891	35.064	35.212	35.334	35.428	35.441	35.504	35.600	35.713	35.842	35.987	36.148	36.324	36.515	36.721	36.942	37.177	37.427	37.690	37.967	38.258	38.561	38.877	39,205	39.546	39.898	40.262	40.637	41.023
	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	0.000	0.000
	33.541	33 171	32 395	31.314	30 026	28.777	27.665	26.914	26.702	26.462	26.606	26 788	26 993	27.220	27.467	27 733	28.020	28.325	28.648	28.989	29.347	29.722	30 112	30.517	30.937	31.371	31.819	32.279	32 752	33.237	33.732	34.239	34.756
	9254.910	9342.639	9422.858	9494 006	9554 698	9603.753	9640.215	9663.375	9672.783	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672,997	9672.997	9672.997	9672.997	9672.997	9672.997
	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644
	24.597	32.597	40.597	48.597	56.597	64 597	72.597	80.597	88.597	90.000	90.000	90.000	90.000	000.06	90.000	90.000	90.000	90.000	90.000	000'06	90.000	000'06	90.000	000.06	90.000	90.000	90.000	000'06	000.06	000.06	90.000	90.000	90.000
3/13/24, 12:24 AM	9300.000	9400,000	9200,000	9600.000	9700.000	9800.000	9900.000	10000.000	10100.000	10117.530	10200.000	10300.000	10400.000	10500.000	10600.000	10700.000	10800.000	10900.000	11000.000	11100.000	11200.000	11300,000	11400.000	11500.000	11600.000	11700.000	11800.000	11900,000	12000.000	12100.000	12200.000	12300.000	12400.000
	eleas	ed t	o In	ıagi	ng:	10/2	24/2	024	7:49	0:21	AM	r																					

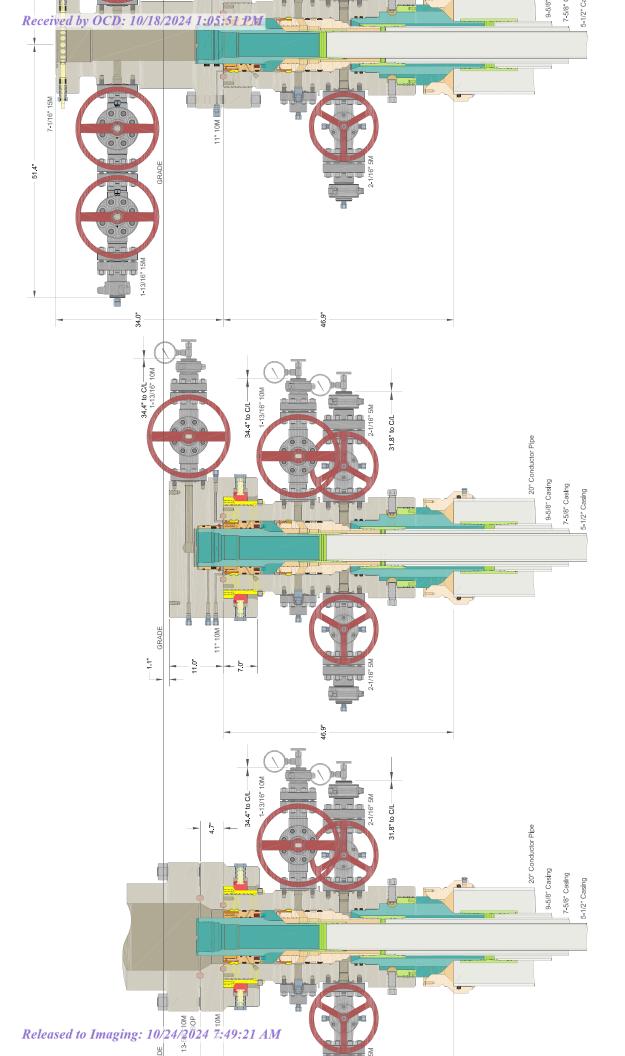
	-33.866 MWD+IFR1+MS	-30.868 MWD+IFR1+MS	-28.194 MWD+IFR1+MS	-25.834 MWD+IFR1+MS	-23.761 MWD+IFR1+MS	-21.944 MWD+IFR1+MS	-20.349 MWD+IFR1+MS	-18.947 MWD+IFR1+MS	-17.710 MWD+IFR1+MS	-16.614 MWD+IFR1+MS	-15.638 MWD+IFR1+MS	-14.766 MWD+IFR1+MS	-13.984 MWD+IFR1+MS	-13.278 MWD+IFR1+MS	-12.640 MWD+IFR1+MS	-12.059 MWD+IFR1+MS	-11.530 MWD+IFR1+MS	-11.046 MWD+IFR1+MS	-10.601 MWD+IFR1+MS	-10.191 MWD+IFR1+MS	-9.812 MWD+IFR1+MS	-9.461 MWD+IFR1+MS	-9.136 MWD+IFR1+MS	-8.832 MWD+IFR1+MS	-8.549 MWD+IFR1+MS	-8.284 MWD+IFR1+MS	-8.036 MWD+IFR1+MS	-7.803 MWD+IFR1+MS	-7.583 MWD+IFR1+MS	-7.377 MWD+IFR1+MS	-7.181 MWD+IFR1+MS	-6.997 MWD+IFR1+MS	-6.822 MWD+IFR1+MS
	39.274	39.378	39.470	39 551	39.623	39 688	39 747	39.801	39.851	39.898	39.943	39 985	40.026	40.065	40.104	40 141	40.178	40.214	40.250	40 285	40.320	40 355	40.390	40 425	40 460	40.496	40.531	40.566	40.602	40.638	40.674	40.710	40.747
	42.326	42.643	42.984	43 346	43 726	44 124	44 536	44 963	45.402	45.853	46.315	46 787	47 268	47 759	48.258	48 765	49.280	49.802	50.331	50.866	51 408	51 957	52.511	53.070	53 636	54.206	54.781	55.362	55.947	56.536	57.130	57.728	58.330
oort	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	0.000	0.000
Well Plan Report	35.283 0.000	35.819 0.000	36.364 0.000	36.918 0.000	37.481 0.000	38.051 0.000	38.628 0.000	39.213 0.000	39.805 0.000	40.403 0.000	41.008 0.000	41.618 0.000	42.235 0.000	42.856 0.000	43.484 0.000	44.116 0.000	44.753 0.000	45.394 0.000	46.040 0.000	46.691 0.000	47.345 0.000	48.003 0.000	48.665 0.000	49.331 0.000	50.000 0.000	50.673 0.000	51.348 0.000	52.027 0.000	52.709 0.000	53.393 0.000	54.080 0.000	54.770 0.000	55.462 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	-0.000	0.000	-0.000
	41.419	41.826	42.243	42.669	43 105	43.549	44.003	44.465	44.936	45.414	45.901	46 394	46.895	47.404	47.919	48.440	48.968	49.503	50.043	50.589	51.141	51.698	52.260	52.828	53 400	53.978	54.560	55.146	55.737	56.332	56.931	57 534	58.141
	0.000	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	000'0	0.000	000'0	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000
	35.283	35.819	36.364	36.918	37 481	38.051	38.628	39.213	39 805	40.403	41.008	41.618	42.235	42.856	43.484	44.116	44.753	45.394	46.040	46.691	47 345	48.003	48.665	49 331	50 000	50.673	51.348	52.027	52.709	53.393	54.080	54 770	55.462
	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672.997	9672,997	9672.997	9672.997	9672.997	9672.997	9672.997
	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644	179.644
	90.000	000'06	000'06	000.06	000.06	000.06	90.000	90.000	000.06	90.000	90.000	000'06	000.06	000.06	000.06	000.06	000.06	90.000	000.06	000'06	000.06	000'06	90.000	000.06	000.06	90.000	90.000	000'06	000.06	000.06	90.000	000'06	90.000
3/13/24, 12:24 AM	12500.000	12600.000	12700.000	12800.000	12900.000	13000.000	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
	eleas	ed t	o In	ıagi	ng:	10/2	24/2	024	7:49	0:21	AM	r																					

3/13/24, 12:24 AM								Well Plan Report	sport			
15800.000	90.000	179.644	9672.997	56.157	0.000	58.751	-0.000	56.157 0.000	0.000	58.936	40.783	-6.656 MWD+IFR1+MS
15900.000	000 06	179.644	9672.997	56.854	0.000	59.365	-0.000	56.854 0.000	0.000	59.546	40.821	-6.499 MWD+IFR1+MS
16000.000	000.06	179.644	9672.997	57.554	0.000	59.983	-0.000	57.554 0.000	0.000	60.160	40.858	-6.349 MWD+IFR1+MS
16100.000	90.000	179.644	9672.997	58.255	0.000	60.604	-0.000	58.255 0.000	0.000	60.777	40.896	-6.207 MWD+IFR1+MS
16200.000	90.000	179.644	9672.997	58.959	0.000	61.228	-0.000	58.959 0.000	0.000	61.398	40.934	-6.071 MWD+IFR1+MS
16300.000	000.06	179.644	9672.997	59.664	0.000	61.856	-0.000	59.664 0.000	0.000	62.021	40.973	-5.941 MWD+IFR1+MS
16400.000	90.000	179.644	9672.997	60.372	0.000	62.486	-0.000	60.372 0.000	0.000	62.649	41.012	-5.818 MWD+IFR1+MS
16500.000	90.000	179.644	9672.997	61.082	0.000	63.120	-0.000	61.082 0.000	0.000	63.279	41.051	-5.699 MWD+IFR1+MS
16600.000	90.000	179.644	9672.997	61.793	0.000	63.756	-0.000	61.793 0.000	0.000	63.912	41.090	-5.586 MWD+IFR1+MS
16700.000	90.000	179.644	9672.997	62.506	0.000	64.395	-0.000	62.506 0.000	0.000	64.548	41.130	-5.477 MWD+IFR1+MS
16800.000	90.000	179.644	9672.997	63.221	0.000	65.037	-0.000	63.221 0.000	0.000	65.187	41.171	-5.373 MWD+IFR1+MS
16900.000	90.000	179.644	9672.997	63.937	0.000	65.682	0.000	63 937 0 000	0.000	62.829	41.212	-5.274 MWD+IFR1+MS
17000.000	90.000	179.644	9672.997	64.655	0.000	66.329	0.000	64 655 0 000	0.000	66.474	41.253	-5.178 MWD+IFR1+MS
17100.000	90.000	179.644	9672.997	65.375	0.000	66.979	-0.000	65.375 0.000	0.000	67.121	41.295	-5.085 MWD+IFR1+MS
17200.000	90.000	179.644	9672.997	960.99	0.000	67.631	-0.000	000.0 960.99	0.000	67.770	41.337	-4.997 MWD+IFR1+MS
17300.000	90.000	179.644	9672.997	66.818	0.000	68.285	-0.000	66.818 0.000	0.000	68.422	41.379	-4.911 MWD+IFR1+MS
17400.000	90.000	179.644	9672.997	67.542	0.000	68.942	-0.000	67.542 0.000	0.000	69.077	41.422	-4.829 MWD+IFR1+MS
17500.000	90.000	179.644	9672.997	68.267	0.000	69.601	-0.000	68.267 0.000	0.000	69.733	41.465	-4.750 MWD+IFR1+MS
17600.000	90.000	179.644	9672.997	68.994	0.000	70.262	-0.000	68.994 0.000	0.000	70.392	41.509	-4.673 MWD+IFR1+MS
17700.000	000'06	179.644	9672,997	69.721	0.000	70.925	-0.000	69 721 0 000	0.000	71.053	41.553	-4.599 MWD+IFR1+MS
17800.000	90.000	179.644	9672.997	70.450	0.000	71.591	-0.000	70.450 0.000	0.000	71.717	41.597	-4.528 MWD+IFR1+MS
17900.000	000'06	179.644	9672.997	71.181	0.000	72.258	-0.000	71.181 0.000	0.000	72.382	41.642	-4.459 MWD+IFR1+MS
18000.000	90.000	179.644	9672.997	71.912	0.000	72.927	-0.000	71.912 0.000	0.000	73.049	41.687	-4.392 MWD+IFR1+MS
18100.000	000.06	179.644	9672.997	72.644	0.000	73.598	-0.000	72.644 0.000	0.000	73.718	41.733	-4.328 MWD+IFR1+MS
18200.000	90.000	179.644	9672.997	73.378	0.000	74.271	-0.000	73.378 0.000	0.000	74.390	41.779	-4.265 MWD+IFR1+MS
18300.000	90.000	179.644	9672.997	74.113	0.000	74.946	-0.000	74.113 0.000	0.000	75.062	41.826	-4.205 MWD+IFR1+MS
18400.000	90.000	179.644	9672.997	74.848	0.000	75.622	-0.000	74.848 0.000	0.000	75.737	41.873	-4.146 MWD+IFR1+MS
18500,000	000'06	179.644	9672,997	75.585	0.000	76.300	-0.000	75.585 0.000	000'0	76,414	41.920	-4.089 MWD+IFR1+MS
18600.000	90.000	179.644	9672.997	76.322	0.000	76.980	-0.000	76.322 0.000	0.000	77.092	41.968	-4.034 MWD+IFR1+MS
18700.000	000'06	179.644	9672,997	77.061	0.000	77.661	-0.000	77 061 0 000	0.000	77.771	42.016	-3.980 MWD+IFR1+MS
18800.000	90.000	179.644	9672.997	77.800	0.000	78.344	-0.000	77.800 0.000	0.000	78.453	42.065	-3.928 MWD+IFR1+MS
18900.000	90.000	179.644	9672.997	78.540	0.000	79.029	-0.000	78.540 0.000	0.000	79.136	42.114	-3.878 MWD+IFR1+MS
19000.000	90.000	179.644	9672.997	79.282	0.000	79.715	-0.000	79.282 0.000	0.000	79.820	42.164	-3.829 MWD+IFR1+MS

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3/13/24, 12:24 AM								>	Well Plan Report	Ę				
22378.740	90.000		179.644 9672.997	104.696	0.000	103.547 -0.000 104.696 0.000	-0.000	104.696	0.000	0.000	103.619	44.082	-2.721 MWD+IFR1+MS	
22400.000	89.999	180,582	9672.997	104.858 -0.000	-0.000	103.631 0.000 104.858 0.000	0.000	104.858	0.000	0.000	103,771	44.096	-2.716 MWD+IFR1+MS	
22439.322	89.997	182.318	9672.999	105.156	-0.000	103.726	0000	105.156	0.000	0.000	104.053	44.121	-2.702 MWD+IFR1+MS	
22468.819	89 997	182.318	9673.000	105.380	-0.000	103.937	0.000	0.000 105.380	0.000	0.000	104 263	44.140	-2.690 MWD+IFR1+MS	
Plan Targets		_	Poker Lake Unit 22 DTD South	Unit 22 DTI	D South	185H								
			2	Measured Depth	<b>Depth</b>		Grid	<b>Grid Northing</b>	ס	Grid Easting	sting	TVD MSL	TVD MSL Target Shape	
Target Name					(£			(ft)	<b>(</b> )		<b>(£</b> )	(t)		
FTP 14				66	9901.44		7	440500.50	0	6451	645137.10	6228.00	6228.00 RECTANGLE	
SHL 8				102	10248.30		`	440181.61	_	6445	644590.96	6096.91	6096.91 RECTANGLE	
LTP 14				223	22378.79		7	427523.30	0	6452	645217.70	6228.00	6228.00 RECTANGLE	
BHL 14				224	22468.82		`	427433.30	0	6452	645215.50	6228.00	6228.00 RECTANGLE	





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

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 <sup>®</sup>	
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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# 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	lb	
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.	<u></u>
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).
- $2. \quad \text{Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.} \\$
- 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.).
- 5. 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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# 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



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NEW CHOKE HOSE

INSTAUED 02-10-2024

# CERTIFICATE OF CONFORMANCE

This is to verify that the items detailed below meet the requirements of the Customer's Purchase Order referenced herein, and are in Conformance with applicable specifications, and that Records of Required Tests are on file and subject to examination. The following items were inspected and hydrostatically tested at **Gates Engineering & Services North America** facilities in Houston, TX, USA.

CU	ST	ON	ER:	
	-			

NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA

CUSTOMER P.O.#:

15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)

CUSTOMER P/N:

IMR RETEST SN 74621 ASSET #66-1531

PART DESCRIPTION:

RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K

FLANGES

SALES ORDER #:

529480

QUANTITY:

1

SERIAL #:

74621 H3-012524-1

SIGNATURE: 7. CUSTUSE

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

# H3-15/16



1/25/2024 11:48:06 AM

# TEST REPORT

CUSTOMER

Company: Nabors Industries Inc. TEST OBJECT

Serial number: H3-012524-1

Lot number:

Production description: 74621/66-1531 Description:

74621/66-1531

Sales order #:

529480 FG1213

Hose ID:

3" 16C CK

Part number:

TEST INFORMATION

Customer reference:

Test procedure:

GTS-04-053

Fitting 1:

Test pressure:

15000.00 psi 3600.00 sec Part number:

3.0 x 4-1/16 10K

Test pressure hold: Work pressure:

Description:

Work pressure hold:

Length difference:

Pressure test result:

10000.00

psi

Fitting 2:

3.0 x 4-1/16 10K

Length difference:

900.00 0.00 0.00

sec % inch

Part number:

Description:

Visual check:

PASS

Length measurement result:

Length:

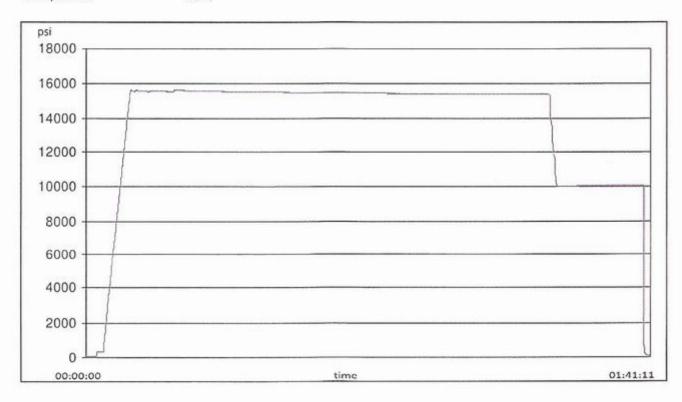
45

feet

n. . . . 1/2

Test operator:

Travis





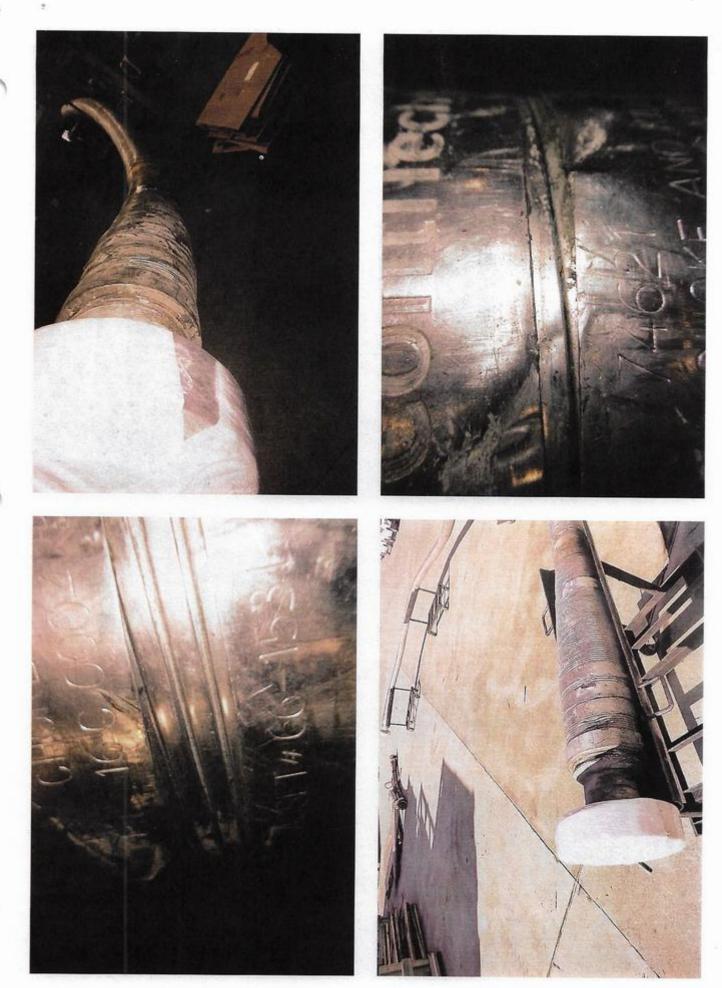
H3-15/16

1/25/2024 11:48:06 AM

# **TEST REPORT**

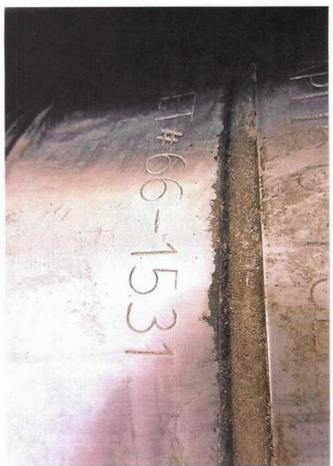
# **GAUGE TRACEABILITY**

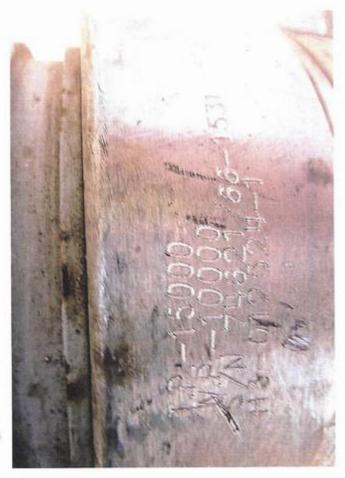
Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16
Comment			



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

CONDITIONS

Action 393855

# **CONDITIONS**

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	393855
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	10/24/2024