

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

Well Name: POKER LAKE UNIT 22 DTD	Well Location: T24S / R30E / SEC 22 / NWE / 32.20942 / -103.86806	County or Parish/State: EDDY / NM
Well Number: 174H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMNM068905	Unit or CA Name:	Unit or CA Number:
US Well Number: 3001549880	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2786005

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/19/2024

Time Sundry Submitted: 02:02

Date proposed operation will begin: 05/03/2024

Procedure Description: POKER LAKE UNIT 22 DTD 174H 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 & 2610' FEL OF SECTION 15-T24S-R30E 100' FNL & 2371' FWL OF SECTION 22-T24S-R30E LTP: 327' FNL & 2610' FEL OF SECTION 3-T24S-R30E 2537' FNL & 2371' FWL OF SECTION 34-T24S-R30E BHL: 198' FNL & 2610' FEL OF SECTION 3-T24S-R30E 2627' FNL & 2371' FWL OF SECTION 34-T24S-R30E The proposed total depth is changing from 27098' MD; 11233' TVD (Jennings/WOLFCAMP (GAS)) to 24784' MD; 11957' TVD (Wolfcamp C). A saturated salt brine will be utilized while drilling through the salt formations. See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS

NOI Attachments

Procedure Description

PLU_22_DTD_174H_Sundry_Documents_20240822153124.pdf

Well Name: POKER LAKE UNIT 22
DTD

Well Location: T24S / R30E / SEC 22 /
NWNE / 32.20942 / -103.86806

County or Parish/State: EDDY /
NM

Well Number: 174H

Type of Well: CONVENTIONAL GAS
WELL

Allottee or Tribe Name:

Lease Number: NMNM068905

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001549880

Operator: XTO PERMIAN OPERATING
LLC

Conditions of Approval

Additional

Poker_Lake_Unit_22_DTD_174H_COA_20240913103204.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 22, 2024 03:31 PM

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: 09/23/2024

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

5. Lease Serial No. NMLC068905

6. If Indian, Allottee or Tribe Name

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

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator XTO PERMIAN OPERATING LLC

3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND, 3b. Phone No. (include area code) (432) 683-2277

4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) SEC 22/T24S/R30E/NMP

7. If Unit of CA/Agreement, Name and/or No.

8. Well Name and No. POKER LAKE UNIT 22 DTD/174H

9. API Well No. 3001549880

10. Field and Pool or Exploratory Area Jennings/BONE SPRING

11. Country or Parish, State EDDY/NM

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

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

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or 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 performed 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 determined that the site is ready for final inspection.)

POKER LAKE UNIT 22 DTD 174H

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 & 2610' FEL OF SECTION 15-T24S-R30E 100' FNL & 2371' FWL OF SECTION 22-T24S-R30E
LTP: 327' FNL & 2610' FEL OF SECTION 3-T24S-R30E 2537' FNL & 2371' FWL OF SECTION 34-T24S-R30E
BHL: 198' FNL & 2610' FEL OF SECTION 3-T24S-R30E 2627' FNL & 2371' FWL OF SECTION 34-T24S-R30E
Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) ADRIAN BAKER / Ph: (432) 236-3808

Regulatory Analyst

Signature (Electronic Submission)

Date 08/22/2024

THE SPACE FOR FEDERAL OR STATE OFFICE USE

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

Petroleum Engineer

Date 09/23/2024

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

Office CARLSBAD

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

Additional Information

Additional Remarks

The proposed total depth is changing from 27098 MD; 11233 TVD (Jennings/WOLFCAMP (GAS)) to 24784 MD; 11957 TVD (Wolfcamp C).

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

See attached Drilling Plan for updated cement and casing program.

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

Location of Well

0. SHL: NWNE / 414 FNL / 2406 FEL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.20942 / LONG: -103.86806 (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: 11233 feet, MD: 13298 feet)

PPP: SWSE / 100 FSL / 2610 FEL / TWSP: 24S / RANGE: 30E / SECTION: 15 / LAT: 32.210829 / LONG: -103.868716 (TVD: 11233 feet, MD: 11562 feet)

PPP: NWNE / 300 FNL / 313 FWL / TWSP: 24S / RANGE: 30E / SECTION: 10 / LAT: 32.253158 / LONG: -103.876545 (TVD: 11233 feet, MD: 15938 feet)

BHL: LOT 2 / 198 FNL / 2610 FEL / TWSP: 24S / RANGE: 30E / SECTION: 3 / LAT: 32.25536 / LONG: -103.86869 (TVD: 11233 feet, MD: 27098 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	NMNM068905
LOCATION:	Sec. 22, T.24 S, R 30 E
COUNTY:	Eddy County, New Mexico ▼
WELL NAME & NO.:	Poker Lake Unit 22 DTD 174H
SURFACE HOLE FOOTAGE:	414'/S & 2406'/E
BOTTOM HOLE FOOTAGE:	2627'/N & 2371'/W

Changes approved through engineering via **Sundry 2786005** on 9-13-2024. Any previous COAs not addressed within the updated COAs still apply.

COA

H ₂ S	<input checked="" type="radio"/> No <input type="radio"/> Yes			
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-Q	<input type="checkbox"/> Open Annulus WIPP
	Choose an option (including blank option.)			
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
Additional Language	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> Break Testing
	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> 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 6471'**
- 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 Intermediate 1 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](mailto: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 2nd 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 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. 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 9/13/2024
575-234-5998 / zstevens@blm.gov

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

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

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



WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015- 49880	² Pool Code 98220	³ Pool Name PURPLE SAGE;WOLFCAMP (GAS)
⁴ Property Code 333192	⁵ Property Name POKER LAKE UNIT 22 DTD	⁶ Well Number 174H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC	⁹ Elevation 3,418'

¹⁰ Surface Location

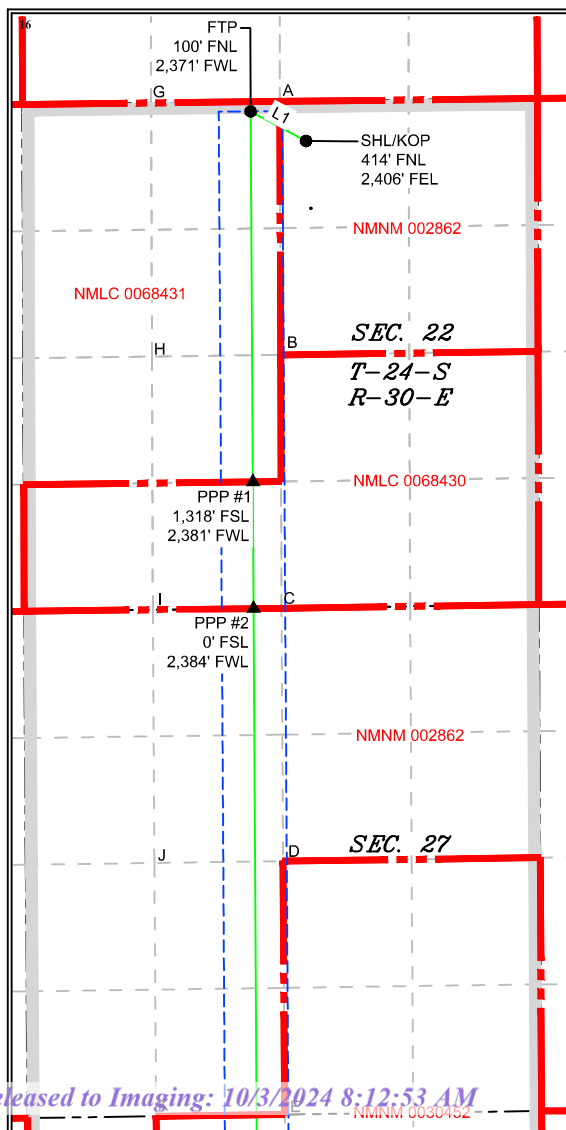
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	22	24S	30E		414	NORTH	2,406	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	34	24S	30E		2,627	NORTH	2,371	WEST	EDDY

¹² Dedicated Acres 1,600.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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



LEGEND

---	SECTION LINE
---	PROPOSED WELL BORE
---	NEW MEXICO MINERAL LEASE
---	330' BUFFER
---	ALLOCATION AREA

LINE TABLE

LINE	AZIMUTH	LENGTH
L1	298°02'33"	653.45'
L2	179°39'13"	13,070.53'

COORDINATE TABLE

SHL/KOP (NAD 83 NME)	SHL/KOP (NAD 27 NME)
Y = 440,232.5 N	Y = 440,173.5 N
X = 685,238.6 E	X = 644,054.9 E
LAT. = 32.209420 °N	LAT. = 32.209296 °N
LONG. = 103.868060 °W	LONG. = 103.867573 °W
FTP (NAD 83 NME)	FTP (NAD 27 NME)
Y = 440,539.7 N	Y = 440,480.7 N
X = 684,661.9 E	X = 643,478.1 E
LAT. = 32.210271 °N	LAT. = 32.210147 °N
LONG. = 103.869920 °W	LONG. = 103.869434 °W
PPP #1 (NAD 83 NME)	PPP #1 (NAD 27 NME)
Y = 436,684.2 N	Y = 436,625.2 N
X = 684,685.1 E	X = 643,501.2 E
LAT. = 32.199673 °N	LAT. = 32.199549 °N
LONG. = 103.869899 °W	LONG. = 103.869413 °W
PPP #2 (NAD 83 NME)	PPP #2 (NAD 27 NME)
Y = 435,366.1 N	Y = 435,307.2 N
X = 684,693.0 E	X = 643,509.1 E
LAT. = 32.198049 °N	LAT. = 32.195925 °N
LONG. = 103.869892 °W	LONG. = 103.869406 °W
LTP (NAD 83 NME)	LTP (NAD 27 NME)
Y = 427,559.4 N	Y = 427,500.7 N
X = 684,740.0 E	X = 643,555.8 E
LAT. = 32.174590 °N	LAT. = 32.174466 °N
LONG. = 103.869849 °W	LONG. = 103.869364 °W
BHL (NAD 83 NME)	BHL (NAD 27 NME)
Y = 427,469.4 N	Y = 427,410.7 N
X = 684,740.9 E	X = 643,556.7 E
LAT. = 32.174342 °N	LAT. = 32.174218 °N
LONG. = 103.869847 °W	LONG. = 103.869362 °W
CORNER COORDINATES (NAD 83 NME)	CORNER COORDINATES (NAD 27 NME)
Y = 427,469.4 N	Y = 427,410.7 N
X = 684,740.9 E	X = 643,556.7 E
LAT. = 32.174342 °N	LAT. = 32.174218 °N
LONG. = 103.869847 °W	LONG. = 103.869362 °W

¹⁷ OPERATOR CERTIFICATION

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

Emily Rivera 7/15/2024
Signature Date

Emily Rivera
Printed Name

emily.a.rivera@exxonmobil.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

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

7/11/2024
Date of Survey

Signature and Seal of
Professional Surveyor:

Intent ☒ As Drilled ☐

API # 30-015-		
Operator Name: XTO PERMIAN OPERATING, LLC	Property Name: POKER LAKE UNIT 22 DTD	Well Number 174H

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL C	Section 22	Township 24S	Range 30E	Lot	Feet 100	From N/S North	Feet 2,371	From E/W West	County Eddy
Latitude 32.210271					Longitude -103.869920				NAD 83

Last Take Point (LTP)

UL F	Section 34	Township 24S	Range 30E	Lot	Feet 2,537	From N/S North	Feet 2,371	From E/W West	County Eddy
Latitude 32.174590					Longitude -103.869849				NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

XTO Energy Inc.
POKER LAKE UNIT 22 DTD 174H
Projected TD: 24784' MD / 11957' TVD
SHL: 414' FNL & 2406' FEL , Section 22, T24S, R30E
BHL: 2627' FNL & 2371' FWL , 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	1135'	Water
Top of Salt	1538'	Water
Base of Salt	3731'	Water
Delaware	3925'	Water
Brushy Canyon	6471'	Water/Oil/Gas
Bone Spring	7795'	Water
Avalon	8488'	Water/Oil/Gas
1st Bone Spring	8504'	Water/Oil/Gas
2nd Bone Spring	9089'	Water/Oil/Gas
3rd Bone Spring	9915'	Water/Oil/Gas
Wolfcamp	11100'	Water/Oil/Gas
Wolfcamp X	11121'	Water/Oil/Gas
Wolfcamp Y	11202'	Water/Oil/Gas
Wolfcamp A	11249'	Water/Oil/Gas
Wolfcamp B	11632'	Water/Oil/Gas
Wolfcamp C	11837'	Water/Oil/Gas
Target/Land Curve	11957'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 1235' (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 11105' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 24784 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10805 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1235'	9.625	40	J-55	BTC	New	1.50	5.10	12.75
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.09	2.92	1.69
8.75	4000' – 11105'	7.625	29.7	HC L-80	Flush Joint	New	1.52	2.15	1.92
6.75	0' – 11005'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.69	1.91
6.75	11005' - 24784'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.55	1.91

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

· 7.625 Collapse analyzed using 50% evacuation based on regional experience.

· 7.625 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 +/- 1235'

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 +/- 11105'

1st Stage

Optional Lead: 350 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 430 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6471

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 (6471') 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 +/- 24784'

Lead: 20 sxs NeoCem (mixed at 13.2 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 10805 feet

Tail: 960 sxs VersaCem (mixed at 14.5 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 11305 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 Pipe Ram and 10M Blind 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 nipping up on the 9.625, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping 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.

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).

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Additional Comments
0' - 1235'	12.25	FW/Native	8.7-9.2	35-40	NC	Fresh Water or Native Water
1235'-3925'		Salt Saturated	10.5-11			Fully Saturated salt across salado / /salt
3925' - 11105'	8.75	BDE / OBM	9-9.5	30-32	NC	N/A
11105' - 24784'	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 185 to 205 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 7150 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 174H

Measured Depth: 24783.60 ft
TVD RKB: 11957.00 ft
Location
Cartographic Reference System: New Mexico East - NAD 27
Northing: 440173.50 ft
Easting: 644054.90 ft
RKB: 3450.00 ft
Ground Level: 3418.00 ft
North Reference: Grid
Convergence Angle: 0.25 Deg

Plan Sections Poker Lake Unit 22 DTD South 174H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD		Y Offset (ft)	X Offset (ft)	Build		Turn Rate (Deg/100ft)	Dogleg	
			RKB (ft)	Rate (Deg/100ft)			Rate (Deg/100ft)	Rate (Deg/100ft)		Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1694.60	11.89	298.04	1690.34	2.00	28.90	-54.27	2.00	0.00	0.00	2.00	2.00
4269.18	11.89	298.04	4209.66	0.00	278.30	-522.53	0.00	0.00	0.00	0.00	0.00
4863.78	0.00	0.00	4800.00	-2.00	307.20	-576.80	-2.00	0.00	0.00	2.00	2.00
11304.58	0.00	0.00	11240.80	0.00	307.20	-576.80	0.00	0.00	0.00	0.00	0.00
12429.58	90.00	179.66	11957.00	8.00	-408.98	-572.51	8.00	0.00	0.00	8.00	8.00
24693.62	90.00	179.66	11957.00	0.00	-12672.81	-499.09	0.00	0.00	0.00	0.00	LTP 10
24783.60	90.00	179.66	11957.00	0.00	-12762.79	-498.56	0.00	0.00	0.00	0.00	BHL 10

Position Uncertainty Poker Lake Unit 22 DTD South 174H

Measured	Depth	Inclination	Azimuth	TVD		Highside		Lateral		Vertical		Magnitude		Semi-major		Semi-minor		Tool Used
				RKB	Error	Bias	Error	Bias	Error	Bias	Error	Bias	Error	Bias	Error	Bias	Error	

Well Plan Report

3/4/24, 9:38 PM

(ft)	(°)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	100.000	0.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264 MWD+IFR1+MS
200.000	0.000	200.000	0.000	1.112	0.000	0.861	0.000	2.310	0.000	0.000	1.259	0.627	122.711 MWD+IFR1+MS
300.000	0.000	300.000	0.000	1.497	0.000	1.271	0.000	2.326	0.000	0.000	1.698	0.986	125.469 MWD+IFR1+MS
400.000	0.000	400.000	0.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713 MWD+IFR1+MS
500.000	0.000	500.000	0.000	2.240	0.000	2.034	0.000	2.375	0.000	0.000	2.503	1.701	127.419 MWD+IFR1+MS
600.000	0.000	600.000	0.000	2.607	0.000	2.405	0.000	2.407	0.000	0.000	2.888	2.059	127.873 MWD+IFR1+MS
700.000	0.000	700.000	0.000	2.971	0.000	2.773	0.000	2.444	0.000	0.000	3.267	2.417	128.190 MWD+IFR1+MS
800.000	0.000	800.000	0.000	3.334	0.000	3.138	0.000	2.486	0.000	0.000	3.642	2.775	128.423 MWD+IFR1+MS
900.000	0.000	900.000	0.000	3.696	0.000	3.502	0.000	2.532	0.000	0.000	4.014	3.133	128.602 MWD+IFR1+MS
1000.000	0.000	1000.000	0.000	4.058	0.000	3.865	0.000	2.582	0.000	0.000	4.384	3.491	128.744 MWD+IFR1+MS
1100.000	0.000	1100.000	0.000	4.419	0.000	4.228	0.000	2.636	0.000	0.000	4.752	3.849	128.859 MWD+IFR1+MS
1200.000	2.000	1199.980	298.039	4.356	0.000	5.069	0.000	2.692	0.000	0.000	5.075	4.351	123.449 MWD+IFR1+MS
1300.000	4.000	1299.838	298.039	5.233	0.000	5.401	0.000	2.752	0.000	0.000	5.431	5.209	96.130 MWD+IFR1+MS
1400.000	6.000	1399.452	298.039	5.998	0.000	5.736	0.000	2.818	0.000	0.000	6.110	5.633	55.225 MWD+IFR1+MS
1500.000	8.000	1498.702	298.039	6.688	0.000	6.074	0.000	2.891	0.000	0.000	6.822	5.953	49.238 MWD+IFR1+MS
1600.000	10.000	1597.465	298.039	7.323	0.000	6.416	0.000	2.974	0.000	0.000	7.486	6.273	47.315 MWD+IFR1+MS
1694.600	11.892	1690.340	298.039	7.850	0.000	6.740	0.000	3.060	0.000	0.000	8.043	6.578	46.552 MWD+IFR1+MS
1700.000	11.892	1695.624	298.039	7.864	0.000	6.757	0.000	3.059	0.000	0.000	8.059	6.596	46.541 MWD+IFR1+MS
1800.000	11.892	1793.478	298.039	8.142	0.000	7.088	0.000	3.135	0.000	0.000	8.336	6.925	47.098 MWD+IFR1+MS
1900.000	11.892	1891.332	298.039	8.443	0.000	7.442	0.000	3.217	0.000	0.000	8.644	7.265	48.190 MWD+IFR1+MS
2000.000	11.892	1989.186	298.039	8.751	0.000	7.798	0.000	3.302	0.000	0.000	8.960	7.608	49.253 MWD+IFR1+MS
2100.000	11.892	2087.039	298.039	9.066	0.000	8.157	0.000	3.390	0.000	0.000	9.281	7.954	50.285 MWD+IFR1+MS
2200.000	11.892	2184.893	298.039	9.385	0.000	8.518	0.000	3.481	0.000	0.000	9.607	8.301	51.287 MWD+IFR1+MS
2300.000	11.892	2282.747	298.039	9.710	0.000	8.881	0.000	3.575	0.000	0.000	9.938	8.651	52.256 MWD+IFR1+MS
2400.000	11.892	2380.601	298.039	10.039	0.000	9.245	0.000	3.670	0.000	0.000	10.273	9.002	53.192 MWD+IFR1+MS
2500.000	11.892	2478.454	298.039	10.372	0.000	9.610	0.000	3.768	0.000	0.000	10.612	9.355	54.095 MWD+IFR1+MS
2600.000	11.892	2576.308	298.039	10.709	0.000	9.977	0.000	3.868	0.000	0.000	10.954	9.710	54.966 MWD+IFR1+MS
2700.000	11.892	2674.162	298.039	11.049	0.000	10.345	0.000	3.970	0.000	0.000	11.300	10.065	55.804 MWD+IFR1+MS
2800.000	11.892	2772.016	298.039	11.392	0.000	10.715	0.000	4.074	0.000	0.000	11.648	10.422	56.610 MWD+IFR1+MS
2900.000	11.892	2869.870	298.039	11.737	0.000	11.085	0.000	4.180	0.000	0.000	11.999	10.779	57.385 MWD+IFR1+MS
3000.000	11.892	2967.723	298.039	12.086	0.000	11.455	0.000	4.288	0.000	0.000	12.352	11.138	58.130 MWD+IFR1+MS
3100.000	11.892	3065.577	298.039	12.436	0.000	11.827	0.000	4.397	0.000	0.000	12.707	11.498	58.844 MWD+IFR1+MS

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3200.000	11.892	298.039	3163.431	12.789	0.000	12.199	0.000	4.508	0.000	0.000	13.064	11.858	59.530	MWD+IFR1+MS
3300.000	11.892	298.039	3261.285	13.144	0.000	12.572	0.000	4.620	0.000	0.000	13.423	12.220	60.188	MWD+IFR1+MS
3400.000	11.892	298.039	3359.138	13.500	0.000	12.946	0.000	4.734	0.000	0.000	13.784	12.582	60.819	MWD+IFR1+MS
3500.000	11.892	298.039	3456.992	13.858	0.000	13.319	0.000	4.850	0.000	0.000	14.146	12.944	61.424	MWD+IFR1+MS
3600.000	11.892	298.039	3554.846	14.218	0.000	13.694	0.000	4.967	0.000	0.000	14.509	13.308	62.005	MWD+IFR1+MS
3700.000	11.892	298.039	3652.700	14.579	0.000	14.069	0.000	5.086	0.000	0.000	14.873	13.672	62.562	MWD+IFR1+MS
3800.000	11.892	298.039	3750.554	14.941	0.000	14.444	0.000	5.206	0.000	0.000	15.239	14.036	63.097	MWD+IFR1+MS
3900.000	11.892	298.039	3848.407	15.305	0.000	14.820	0.000	5.328	0.000	0.000	15.606	14.401	63.610	MWD+IFR1+MS
4000.000	11.892	298.039	3946.261	15.669	0.000	15.196	0.000	5.451	0.000	0.000	15.974	14.767	64.102	MWD+IFR1+MS
4100.000	11.892	298.039	4044.115	16.035	0.000	15.572	0.000	5.576	0.000	0.000	16.342	15.133	64.574	MWD+IFR1+MS
4200.000	11.892	298.039	4141.969	16.402	0.000	15.949	0.000	5.702	0.000	0.000	16.712	15.499	65.028	MWD+IFR1+MS
4269.176	11.892	298.039	4209.660	16.652	0.000	16.205	0.000	5.790	0.000	0.000	16.960	15.753	65.278	MWD+IFR1+MS
4300.000	11.276	298.039	4239.856	16.772	0.000	16.318	0.000	5.830	0.000	0.000	17.069	15.865	65.361	MWD+IFR1+MS
4400.000	9.276	298.039	4338.247	17.212	0.000	16.685	0.000	5.963	0.000	0.000	17.475	16.239	64.441	MWD+IFR1+MS
4500.000	7.276	298.039	4437.201	17.712	0.000	17.052	0.000	6.097	0.000	0.000	17.956	16.619	62.219	MWD+IFR1+MS
4600.000	5.276	298.039	4536.597	18.180	0.000	17.413	0.000	6.222	0.000	0.000	18.430	16.989	60.351	MWD+IFR1+MS
4700.000	3.276	298.039	4636.313	18.616	0.000	17.768	0.000	6.339	0.000	0.000	18.897	17.351	58.776	MWD+IFR1+MS
4800.000	1.276	298.039	4736.229	19.020	0.000	18.117	0.000	6.451	0.000	0.000	19.355	17.705	57.444	MWD+IFR1+MS
4863.776	0.000	0.000	4800.000	19.123	0.000	18.411	0.000	6.520	0.000	0.000	19.582	17.921	57.699	MWD+IFR1+MS
4900.000	0.000	0.000	4836.224	19.240	0.000	18.527	0.000	6.559	0.000	0.000	19.695	18.044	57.811	MWD+IFR1+MS
5000.000	0.000	0.000	4936.224	19.564	0.000	18.853	0.000	6.668	0.000	0.000	20.003	18.387	58.055	MWD+IFR1+MS
5100.000	0.000	0.000	5036.224	19.893	0.000	19.186	0.000	6.778	0.000	0.000	20.313	18.741	58.383	MWD+IFR1+MS
5200.000	0.000	0.000	5136.224	20.224	0.000	19.519	0.000	6.890	0.000	0.000	20.625	19.095	58.718	MWD+IFR1+MS
5300.000	0.000	0.000	5236.224	20.555	0.000	19.854	0.000	7.005	0.000	0.000	20.939	19.449	59.059	MWD+IFR1+MS
5400.000	0.000	0.000	5336.224	20.888	0.000	20.189	0.000	7.122	0.000	0.000	21.254	19.803	59.408	MWD+IFR1+MS
5500.000	0.000	0.000	5436.224	21.221	0.000	20.525	0.000	7.241	0.000	0.000	21.571	20.157	59.763	MWD+IFR1+MS
5600.000	0.000	0.000	5536.224	21.555	0.000	20.861	0.000	7.362	0.000	0.000	21.889	20.511	60.125	MWD+IFR1+MS
5700.000	0.000	0.000	5636.224	21.890	0.000	21.199	0.000	7.485	0.000	0.000	22.208	20.865	60.495	MWD+IFR1+MS
5800.000	0.000	0.000	5736.224	22.225	0.000	21.537	0.000	7.611	0.000	0.000	22.529	21.219	60.872	MWD+IFR1+MS
5900.000	0.000	0.000	5836.224	22.562	0.000	21.875	0.000	7.739	0.000	0.000	22.851	21.573	61.256	MWD+IFR1+MS
6000.000	0.000	0.000	5936.224	22.898	0.000	22.215	0.000	7.869	0.000	0.000	23.174	21.927	61.647	MWD+IFR1+MS
6100.000	0.000	0.000	6036.224	23.236	0.000	22.554	0.000	8.002	0.000	0.000	23.498	22.282	62.047	MWD+IFR1+MS
6200.000	0.000	0.000	6136.224	23.574	0.000	22.895	0.000	8.137	0.000	0.000	23.823	22.636	62.453	MWD+IFR1+MS
6300.000	0.000	0.000	6236.224	23.913	0.000	23.236	0.000	8.275	0.000	0.000	24.149	22.990	62.867	MWD+IFR1+MS

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6400.000	0.000	0.000	6336.224	24.252	0.000	23.577	0.000	8.415	0.000	0.000	24.477	23.344	63.289	MWD+IFR1+MS
6500.000	0.000	0.000	6436.224	24.592	0.000	23.920	0.000	8.558	0.000	0.000	24.805	23.699	63.719	MWD+IFR1+MS
6600.000	0.000	0.000	6536.224	24.933	0.000	24.262	0.000	8.703	0.000	0.000	25.135	24.053	64.156	MWD+IFR1+MS
6700.000	0.000	0.000	6636.224	25.273	0.000	24.605	0.000	8.851	0.000	0.000	25.465	24.407	64.601	MWD+IFR1+MS
6800.000	0.000	0.000	6736.224	25.615	0.000	24.948	0.000	9.001	0.000	0.000	25.796	24.761	65.054	MWD+IFR1+MS
6900.000	0.000	0.000	6836.224	25.957	0.000	25.292	0.000	9.154	0.000	0.000	26.128	25.115	65.514	MWD+IFR1+MS
7000.000	0.000	0.000	6936.224	26.299	0.000	25.636	0.000	9.310	0.000	0.000	26.461	25.470	65.982	MWD+IFR1+MS
7100.000	0.000	0.000	7036.224	26.642	0.000	25.981	0.000	9.468	0.000	0.000	26.794	25.824	66.457	MWD+IFR1+MS
7200.000	0.000	0.000	7136.224	26.985	0.000	26.326	0.000	9.629	0.000	0.000	27.128	26.178	66.940	MWD+IFR1+MS
7300.000	0.000	0.000	7236.224	27.328	0.000	26.671	0.000	9.792	0.000	0.000	27.463	26.532	67.430	MWD+IFR1+MS
7400.000	0.000	0.000	7336.224	27.672	0.000	27.017	0.000	9.959	0.000	0.000	27.799	26.886	67.927	MWD+IFR1+MS
7500.000	0.000	0.000	7436.224	28.016	0.000	27.363	0.000	10.128	0.000	0.000	28.136	27.240	68.432	MWD+IFR1+MS
7600.000	0.000	0.000	7536.224	28.361	0.000	27.709	0.000	10.300	0.000	0.000	28.473	27.594	68.943	MWD+IFR1+MS
7700.000	0.000	0.000	7636.224	28.706	0.000	28.056	0.000	10.474	0.000	0.000	28.811	27.948	69.461	MWD+IFR1+MS
7800.000	0.000	0.000	7736.224	29.051	0.000	28.403	0.000	10.652	0.000	0.000	29.149	28.302	69.985	MWD+IFR1+MS
7900.000	0.000	0.000	7836.224	29.397	0.000	28.750	0.000	10.832	0.000	0.000	29.488	28.656	70.516	MWD+IFR1+MS
8000.000	0.000	0.000	7936.224	29.743	0.000	29.097	0.000	11.015	0.000	0.000	29.828	29.010	71.053	MWD+IFR1+MS
8100.000	0.000	0.000	8036.224	30.089	0.000	29.445	0.000	11.201	0.000	0.000	30.168	29.364	71.595	MWD+IFR1+MS
8200.000	0.000	0.000	8136.224	30.435	0.000	29.793	0.000	11.389	0.000	0.000	30.509	29.718	72.143	MWD+IFR1+MS
8300.000	0.000	0.000	8236.224	30.782	0.000	30.141	0.000	11.581	0.000	0.000	30.850	30.072	72.696	MWD+IFR1+MS
8400.000	0.000	0.000	8336.224	31.129	0.000	30.490	0.000	11.776	0.000	0.000	31.192	30.426	73.253	MWD+IFR1+MS
8500.000	0.000	0.000	8436.224	31.476	0.000	30.839	0.000	11.973	0.000	0.000	31.534	30.779	73.815	MWD+IFR1+MS
8600.000	0.000	0.000	8536.224	31.824	0.000	31.188	0.000	12.173	0.000	0.000	31.877	31.133	74.381	MWD+IFR1+MS
8700.000	0.000	0.000	8636.224	32.172	0.000	31.537	0.000	12.377	0.000	0.000	32.221	31.487	74.951	MWD+IFR1+MS
8800.000	0.000	0.000	8736.224	32.520	0.000	31.886	0.000	12.583	0.000	0.000	32.564	31.840	75.523	MWD+IFR1+MS
8900.000	0.000	0.000	8836.224	32.868	0.000	32.236	0.000	12.792	0.000	0.000	32.909	32.194	76.099	MWD+IFR1+MS
9000.000	0.000	0.000	8936.224	33.216	0.000	32.585	0.000	13.004	0.000	0.000	33.253	32.547	76.676	MWD+IFR1+MS
9100.000	0.000	0.000	9036.224	33.565	0.000	32.935	0.000	13.219	0.000	0.000	33.599	32.901	77.256	MWD+IFR1+MS
9200.000	0.000	0.000	9136.224	33.914	0.000	33.285	0.000	13.437	0.000	0.000	33.944	33.254	77.837	MWD+IFR1+MS
9300.000	0.000	0.000	9236.224	34.263	0.000	33.636	0.000	13.658	0.000	0.000	34.290	33.608	78.418	MWD+IFR1+MS
9400.000	0.000	0.000	9336.224	34.612	0.000	33.986	0.000	13.882	0.000	0.000	34.636	33.961	79.001	MWD+IFR1+MS
9500.000	0.000	0.000	9436.224	34.962	0.000	34.337	0.000	14.109	0.000	0.000	34.983	34.315	79.583	MWD+IFR1+MS
9600.000	0.000	0.000	9536.224	35.311	0.000	34.687	0.000	14.339	0.000	0.000	35.330	34.668	80.164	MWD+IFR1+MS
9700.000	0.000	0.000	9636.224	35.661	0.000	35.038	0.000	14.572	0.000	0.000	35.678	35.021	80.745	MWD+IFR1+MS

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9800.000	0.000	0.000	9736.224	36.011	0.000	35.390	0.000	14.808	0.000	0.000	36.026	35.375	81.323	MWD+IFR1+MS
9900.000	0.000	0.000	9836.224	36.361	0.000	35.741	0.000	15.047	0.000	0.000	36.374	35.728	81.900	MWD+IFR1+MS
10000.000	0.000	0.000	9936.224	36.711	0.000	36.092	0.000	15.289	0.000	0.000	36.722	36.081	82.475	MWD+IFR1+MS
10100.000	0.000	0.000	10036.224	37.062	0.000	36.444	0.000	15.534	0.000	0.000	37.071	36.434	83.047	MWD+IFR1+MS
10200.000	0.000	0.000	10136.224	37.412	0.000	36.795	0.000	15.782	0.000	0.000	37.420	36.787	83.615	MWD+IFR1+MS
10300.000	0.000	0.000	10236.224	37.763	0.000	37.147	0.000	16.033	0.000	0.000	37.769	37.141	84.179	MWD+IFR1+MS
10400.000	0.000	0.000	10336.224	38.114	0.000	37.499	0.000	16.288	0.000	0.000	38.119	37.494	84.740	MWD+IFR1+MS
10500.000	0.000	0.000	10436.224	38.465	0.000	37.851	0.000	16.545	0.000	0.000	38.469	37.847	85.296	MWD+IFR1+MS
10600.000	0.000	0.000	10536.224	38.816	0.000	38.203	0.000	16.805	0.000	0.000	38.819	38.200	85.847	MWD+IFR1+MS
10700.000	0.000	0.000	10636.224	39.167	0.000	38.555	0.000	17.069	0.000	0.000	39.170	38.553	86.393	MWD+IFR1+MS
10800.000	0.000	0.000	10736.224	39.519	0.000	38.908	0.000	17.335	0.000	0.000	39.521	38.906	86.933	MWD+IFR1+MS
10900.000	0.000	0.000	10836.224	39.870	0.000	39.260	0.000	17.605	0.000	0.000	39.872	39.259	87.468	MWD+IFR1+MS
11000.000	0.000	0.000	10936.224	40.222	0.000	39.613	0.000	17.877	0.000	0.000	40.223	39.612	87.997	MWD+IFR1+MS
11100.000	0.000	0.000	11036.224	40.574	0.000	39.966	0.000	18.153	0.000	0.000	40.574	39.965	88.519	MWD+IFR1+MS
11200.000	0.000	0.000	11136.224	40.926	0.000	40.318	0.000	18.432	0.000	0.000	40.926	40.318	89.034	MWD+IFR1+MS
11304.576	0.000	0.000	11240.800	41.294	0.000	40.688	0.000	18.726	0.000	0.000	41.294	40.688	89.607	MWD+IFR1+MS
11400.000	7.634	179.657	11335.942	41.347	0.000	41.002	-0.000	19.003	0.000	0.000	41.789	41.002	89.642	MWD+IFR1+MS
11500.000	15.634	179.657	11433.808	41.566	0.000	41.307	-0.000	19.364	0.000	0.000	43.017	41.305	91.836	MWD+IFR1+MS
11600.000	23.634	179.657	11527.917	41.225	0.000	41.597	-0.000	19.868	0.000	0.000	44.164	41.590	92.549	MWD+IFR1+MS
11700.000	31.634	179.657	11616.438	40.338	0.000	41.866	-0.000	20.561	0.000	0.000	45.157	41.854	92.948	MWD+IFR1+MS
11800.000	39.634	179.657	11697.648	38.993	0.000	42.112	-0.000	21.469	0.000	0.000	45.981	42.096	93.239	MWD+IFR1+MS
11900.000	47.634	179.657	11769.965	37.310	0.000	42.333	-0.000	22.590	0.000	0.000	46.628	42.313	93.477	MWD+IFR1+MS
12000.000	55.634	179.657	11831.983	35.448	0.000	42.528	-0.000	23.900	0.000	0.000	47.104	42.504	93.677	MWD+IFR1+MS
12100.000	63.634	179.657	11882.495	33.602	0.000	42.695	-0.000	25.360	0.000	0.000	47.424	42.669	93.832	MWD+IFR1+MS
12200.000	71.634	179.657	11920.516	32.005	0.000	42.834	-0.000	26.919	0.000	0.000	47.610	42.806	93.922	MWD+IFR1+MS
12300.000	79.634	179.657	11945.308	30.909	0.000	42.943	-0.000	28.523	0.000	0.000	47.695	42.916	93.916	MWD+IFR1+MS
12400.000	87.634	179.657	11956.387	30.533	0.000	43.022	-0.000	30.120	0.000	0.000	47.718	42.997	93.769	MWD+IFR1+MS
12429.576	90.000	179.657	11956.997	30.214	0.000	43.038	-0.000	30.214	0.000	0.000	47.719	43.013	93.686	MWD+IFR1+MS
12500.000	90.000	179.657	11956.997	30.338	0.000	43.076	-0.000	30.338	0.000	0.000	47.720	43.054	93.481	MWD+IFR1+MS
12600.000	90.000	179.657	11956.997	30.506	0.000	43.145	-0.000	30.506	0.000	0.000	47.723	43.127	93.195	MWD+IFR1+MS
12700.000	90.000	179.657	11956.997	30.695	0.000	43.229	-0.000	30.695	0.000	0.000	47.727	43.214	92.910	MWD+IFR1+MS
12800.000	90.000	179.657	11956.997	30.903	0.000	43.326	-0.000	30.903	0.000	0.000	47.731	43.314	92.622	MWD+IFR1+MS
12900.000	90.000	179.657	11956.997	31.129	0.000	43.437	-0.000	31.129	0.000	0.000	47.736	43.427	92.331	MWD+IFR1+MS
13000.000	90.000	179.657	11956.997	31.373	0.000	43.560	-0.000	31.373	0.000	0.000	47.742	43.553	92.032	MWD+IFR1+MS

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13100.000	90.000	179.657	11956.997	31.635	0.000	43.697	-0.000	31.635	0.000	0.000	47.749	43.691	91.723	MWD+IFR1+MS
13200.000	90.000	179.657	11956.997	31.914	0.000	43.846	-0.000	31.914	0.000	0.000	47.757	43.843	91.399	MWD+IFR1+MS
13300.000	90.000	179.657	11956.997	32.209	0.000	44.009	-0.000	32.209	0.000	0.000	47.766	44.006	91.057	MWD+IFR1+MS
13400.000	90.000	179.657	11956.997	32.521	0.000	44.184	-0.000	32.521	0.000	0.000	47.775	44.183	90.690	MWD+IFR1+MS
13500.000	90.000	179.657	11956.997	32.849	0.000	44.372	-0.000	32.849	0.000	0.000	47.786	44.371	90.292	MWD+IFR1+MS
13600.000	90.000	179.657	11956.997	33.192	0.000	44.571	-0.000	33.192	0.000	0.000	47.797	44.571	89.852	MWD+IFR1+MS
13700.000	90.000	179.657	11956.997	33.550	0.000	44.784	-0.000	33.550	0.000	0.000	47.810	44.784	89.359	MWD+IFR1+MS
13800.000	90.000	179.657	11956.997	33.922	0.000	45.008	-0.000	33.922	0.000	0.000	47.824	45.007	88.797	MWD+IFR1+MS
13900.000	90.000	179.657	11956.997	34.308	0.000	45.244	-0.000	34.308	0.000	0.000	47.838	45.242	88.140	MWD+IFR1+MS
14000.000	90.000	179.657	11956.997	34.708	0.000	45.492	-0.000	34.708	0.000	0.000	47.855	45.488	87.355	MWD+IFR1+MS
14100.000	90.000	179.657	11956.997	35.120	0.000	45.751	-0.000	35.120	0.000	0.000	47.873	45.744	86.391	MWD+IFR1+MS
14200.000	90.000	179.657	11956.997	35.545	0.000	46.021	-0.000	35.545	0.000	0.000	47.893	46.009	85.165	MWD+IFR1+MS
14300.000	90.000	179.657	11956.997	35.983	0.000	46.303	-0.000	35.983	0.000	0.000	47.916	46.284	83.543	MWD+IFR1+MS
14400.000	90.000	179.657	11956.997	36.431	0.000	46.595	-0.000	36.431	0.000	0.000	47.943	46.566	81.287	MWD+IFR1+MS
14500.000	90.000	179.657	11956.997	36.891	0.000	46.898	-0.000	36.891	0.000	0.000	47.977	46.851	77.949	MWD+IFR1+MS
14600.000	90.000	179.657	11956.997	37.362	0.000	47.212	-0.000	37.362	0.000	0.000	48.025	47.135	72.650	MWD+IFR1+MS
14700.000	90.000	179.657	11956.997	37.844	0.000	47.536	-0.000	37.844	0.000	0.000	48.100	47.402	63.801	MWD+IFR1+MS
14800.000	90.000	179.657	11956.997	38.335	0.000	47.869	-0.000	38.335	0.000	0.000	48.232	47.623	50.231	MWD+IFR1+MS
14900.000	90.000	179.657	11956.997	38.836	0.000	48.213	-0.000	38.836	0.000	0.000	48.448	47.770	35.809	MWD+IFR1+MS
15000.000	90.000	179.657	11956.997	39.346	0.000	48.567	-0.000	39.346	0.000	0.000	48.736	47.856	25.754	MWD+IFR1+MS
15100.000	90.000	179.657	11956.997	39.866	0.000	48.929	-0.000	39.866	0.000	0.000	49.064	47.911	19.732	MWD+IFR1+MS
15200.000	90.000	179.657	11956.997	40.393	0.000	49.301	-0.000	40.393	0.000	0.000	49.416	47.952	16.013	MWD+IFR1+MS
15300.000	90.000	179.657	11956.997	40.929	0.000	49.682	-0.000	40.929	0.000	0.000	49.784	47.986	13.553	MWD+IFR1+MS
15400.000	90.000	179.657	11956.997	41.473	0.000	50.072	-0.000	41.473	0.000	0.000	50.166	48.017	11.822	MWD+IFR1+MS
15500.000	90.000	179.657	11956.997	42.025	0.000	50.471	-0.000	42.025	0.000	0.000	50.558	48.046	10.540	MWD+IFR1+MS
15600.000	90.000	179.657	11956.997	42.584	0.000	50.877	-0.000	42.584	0.000	0.000	50.960	48.074	9.553	MWD+IFR1+MS
15700.000	90.000	179.657	11956.997	43.150	0.000	51.292	-0.000	43.150	0.000	0.000	51.372	48.102	8.769	MWD+IFR1+MS
15800.000	90.000	179.657	11956.997	43.722	0.000	51.716	-0.000	43.722	0.000	0.000	51.792	48.129	8.129	MWD+IFR1+MS
15900.000	90.000	179.657	11956.997	44.301	0.000	52.146	-0.000	44.301	0.000	0.000	52.221	48.157	7.596	MWD+IFR1+MS
16000.000	90.000	179.657	11956.997	44.887	0.000	52.585	-0.000	44.887	0.000	0.000	52.658	48.184	7.144	MWD+IFR1+MS
16100.000	90.000	179.657	11956.997	45.478	0.000	53.031	-0.000	45.478	0.000	0.000	53.102	48.212	6.755	MWD+IFR1+MS
16200.000	90.000	179.657	11956.997	46.076	0.000	53.484	-0.000	46.076	0.000	0.000	53.554	48.241	6.416	MWD+IFR1+MS
16300.000	90.000	179.657	11956.997	46.678	0.000	53.944	-0.000	46.678	0.000	0.000	54.013	48.270	6.118	MWD+IFR1+MS
16400.000	90.000	179.657	11956.997	47.286	0.000	54.411	-0.000	47.286	0.000	0.000	54.479	48.299	5.853	MWD+IFR1+MS

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16500.000	90.000	179.657	11956.997	47.900	0.000	54.885	-0.000	47.900	0.000	0.000	54.952	48.328	5.615	MWD+IFR1+MS
16600.000	90.000	179.657	11956.997	48.518	0.000	55.365	-0.000	48.518	0.000	0.000	55.432	48.358	5.400	MWD+IFR1+MS
16700.000	90.000	179.657	11956.997	49.141	0.000	55.852	-0.000	49.141	0.000	0.000	55.918	48.389	5.205	MWD+IFR1+MS
16800.000	90.000	179.657	11956.997	49.768	0.000	56.345	-0.000	49.768	0.000	0.000	56.410	48.420	5.027	MWD+IFR1+MS
16900.000	90.000	179.657	11956.997	50.400	0.000	56.844	-0.000	50.400	0.000	0.000	56.908	48.452	4.863	MWD+IFR1+MS
17000.000	90.000	179.657	11956.997	51.036	0.000	57.348	-0.000	51.036	0.000	0.000	57.412	48.484	4.712	MWD+IFR1+MS
17100.000	90.000	179.657	11956.997	51.677	0.000	57.859	-0.000	51.677	0.000	0.000	57.922	48.517	4.571	MWD+IFR1+MS
17200.000	90.000	179.657	11956.997	52.321	0.000	58.375	-0.000	52.321	0.000	0.000	58.438	48.550	4.441	MWD+IFR1+MS
17300.000	90.000	179.657	11956.997	52.969	0.000	58.897	-0.000	52.969	0.000	0.000	58.959	48.584	4.319	MWD+IFR1+MS
17400.000	90.000	179.657	11956.997	53.620	0.000	59.423	-0.000	53.620	0.000	0.000	59.486	48.619	4.205	MWD+IFR1+MS
17500.000	90.000	179.657	11956.997	54.276	0.000	59.955	-0.000	54.276	0.000	0.000	60.017	48.654	4.098	MWD+IFR1+MS
17600.000	90.000	179.657	11956.997	54.934	0.000	60.492	-0.000	54.934	0.000	0.000	60.554	48.689	3.997	MWD+IFR1+MS
17700.000	90.000	179.657	11956.997	55.596	0.000	61.034	-0.000	55.596	0.000	0.000	61.095	48.725	3.902	MWD+IFR1+MS
17800.000	90.000	179.657	11956.997	56.261	0.000	61.581	-0.000	56.261	0.000	0.000	61.641	48.762	3.811	MWD+IFR1+MS
17900.000	90.000	179.657	11956.997	56.929	0.000	62.132	-0.000	56.929	0.000	0.000	62.192	48.799	3.726	MWD+IFR1+MS
18000.000	90.000	179.657	11956.997	57.600	0.000	62.688	-0.000	57.600	0.000	0.000	62.748	48.837	3.645	MWD+IFR1+MS
18100.000	90.000	179.657	11956.997	58.274	0.000	63.248	-0.000	58.274	0.000	0.000	63.307	48.876	3.567	MWD+IFR1+MS
18200.000	90.000	179.657	11956.997	58.950	0.000	63.812	-0.000	58.950	0.000	0.000	63.871	48.915	3.494	MWD+IFR1+MS
18300.000	90.000	179.657	11956.997	59.630	0.000	64.381	-0.000	59.630	0.000	0.000	64.440	48.954	3.423	MWD+IFR1+MS
18400.000	90.000	179.657	11956.997	60.311	0.000	64.953	-0.000	60.311	0.000	0.000	65.012	48.994	3.356	MWD+IFR1+MS
18500.000	90.000	179.657	11956.997	60.996	0.000	65.530	-0.000	60.996	0.000	0.000	65.588	49.035	3.291	MWD+IFR1+MS
18600.000	90.000	179.657	11956.997	61.682	0.000	66.110	-0.000	61.682	0.000	0.000	66.168	49.076	3.230	MWD+IFR1+MS
18700.000	90.000	179.657	11956.997	62.371	0.000	66.694	-0.000	62.371	0.000	0.000	66.752	49.118	3.170	MWD+IFR1+MS
18800.000	90.000	179.657	11956.997	63.063	0.000	67.282	-0.000	63.063	0.000	0.000	67.339	49.160	3.113	MWD+IFR1+MS
18900.000	90.000	179.657	11956.997	63.756	0.000	67.873	-0.000	63.756	0.000	0.000	67.930	49.203	3.058	MWD+IFR1+MS
19000.000	90.000	179.657	11956.997	64.451	0.000	68.468	-0.000	64.451	0.000	0.000	68.525	49.247	3.005	MWD+IFR1+MS
19100.000	90.000	179.657	11956.997	65.149	0.000	69.066	-0.000	65.149	0.000	0.000	69.122	49.291	2.954	MWD+IFR1+MS
19200.000	90.000	179.657	11956.997	65.848	0.000	69.668	-0.000	65.848	0.000	0.000	69.724	49.335	2.905	MWD+IFR1+MS
19300.000	90.000	179.657	11956.997	66.550	0.000	70.272	-0.000	66.550	0.000	0.000	70.328	49.380	2.858	MWD+IFR1+MS
19400.000	90.000	179.657	11956.997	67.253	0.000	70.880	-0.000	67.253	0.000	0.000	70.935	49.426	2.812	MWD+IFR1+MS
19500.000	90.000	179.657	11956.997	67.958	0.000	71.491	-0.000	67.958	0.000	0.000	71.546	49.472	2.767	MWD+IFR1+MS
19600.000	90.000	179.657	11956.997	68.665	0.000	72.104	-0.000	68.665	0.000	0.000	72.159	49.519	2.724	MWD+IFR1+MS
19700.000	90.000	179.657	11956.997	69.373	0.000	72.721	-0.000	69.373	0.000	0.000	72.775	49.566	2.683	MWD+IFR1+MS
19800.000	90.000	179.657	11956.997	70.083	0.000	73.340	-0.000	70.083	0.000	0.000	73.394	49.614	2.642	MWD+IFR1+MS

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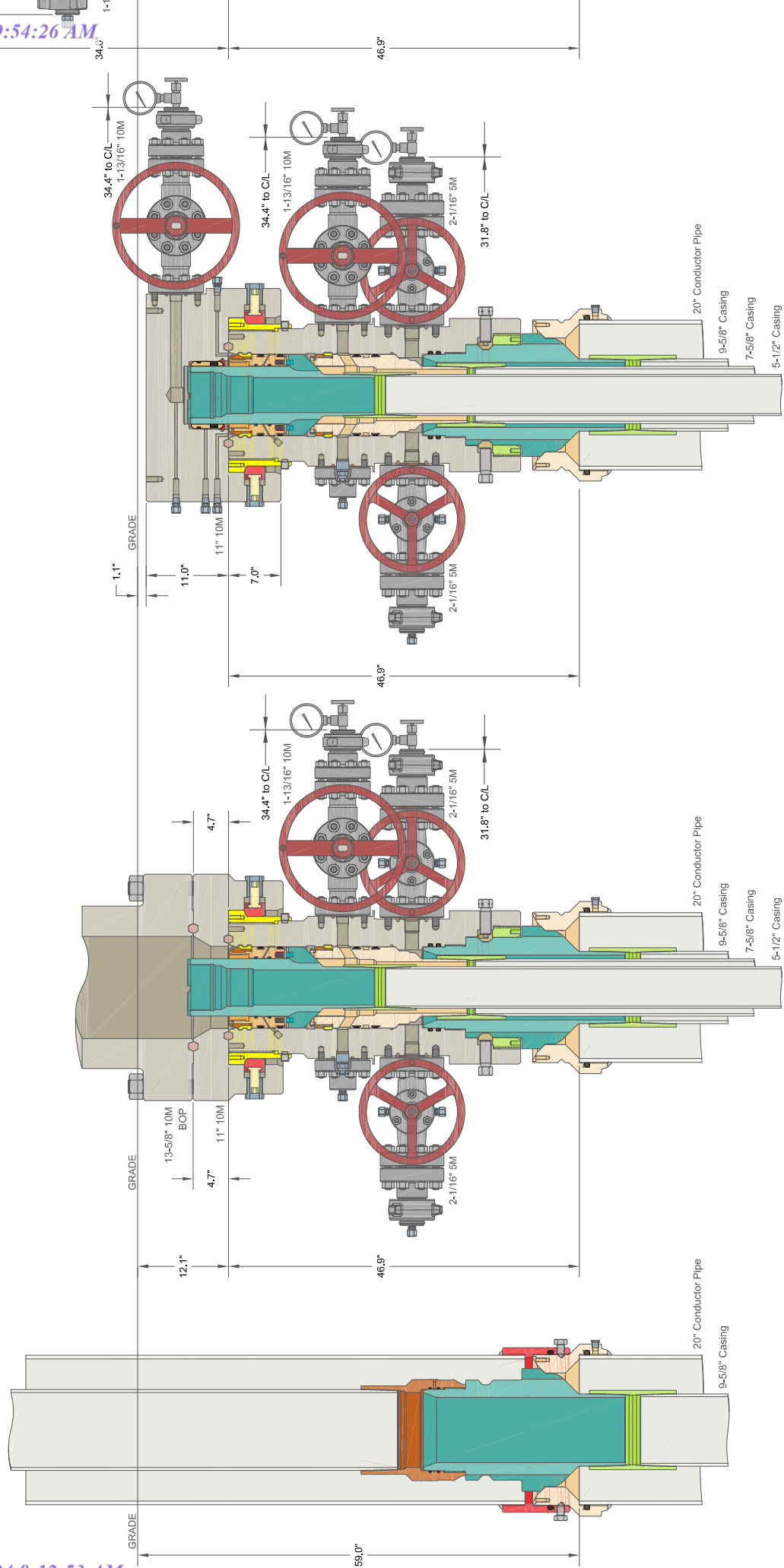
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19900.000	90.000	179.657	11956.997	70.795	0.000	73.962	-0.000	70.795	0.000	0.000	74.016	49.663	2.603	MWD+IFR1+MS
20000.000	90.000	179.657	11956.997	71.508	0.000	74.587	-0.000	71.508	0.000	0.000	74.641	49.712	2.565	MWD+IFR1+MS
20100.000	90.000	179.657	11956.997	72.223	0.000	75.215	-0.000	72.223	0.000	0.000	75.268	49.761	2.528	MWD+IFR1+MS
20200.000	90.000	179.657	11956.997	72.939	0.000	75.844	-0.000	72.939	0.000	0.000	75.897	49.811	2.493	MWD+IFR1+MS
20300.000	90.000	179.657	11956.997	73.656	0.000	76.477	-0.000	73.656	0.000	0.000	76.529	49.862	2.458	MWD+IFR1+MS
20400.000	90.000	179.657	11956.997	74.375	0.000	77.112	-0.000	74.375	0.000	0.000	77.164	49.913	2.424	MWD+IFR1+MS
20500.000	90.000	179.657	11956.997	75.095	0.000	77.749	-0.000	75.095	0.000	0.000	77.801	49.965	2.391	MWD+IFR1+MS
20600.000	90.000	179.657	11956.997	75.817	0.000	78.388	-0.000	75.817	0.000	0.000	78.440	50.017	2.359	MWD+IFR1+MS
20700.000	90.000	179.657	11956.997	76.539	0.000	79.030	-0.000	76.539	0.000	0.000	79.081	50.070	2.327	MWD+IFR1+MS
20800.000	90.000	179.657	11956.997	77.263	0.000	79.674	-0.000	77.263	0.000	0.000	79.725	50.123	2.297	MWD+IFR1+MS
20900.000	90.000	179.657	11956.997	77.988	0.000	80.320	-0.000	77.988	0.000	0.000	80.371	50.177	2.267	MWD+IFR1+MS
21000.000	90.000	179.657	11956.997	78.715	0.000	80.968	-0.000	78.715	0.000	0.000	81.019	50.231	2.238	MWD+IFR1+MS
21100.000	90.000	179.657	11956.997	79.442	0.000	81.618	-0.000	79.442	0.000	0.000	81.669	50.286	2.210	MWD+IFR1+MS
21200.000	90.000	179.657	11956.997	80.170	0.000	82.270	-0.000	80.170	0.000	0.000	82.320	50.341	2.182	MWD+IFR1+MS
21300.000	90.000	179.657	11956.997	80.900	0.000	82.924	-0.000	80.900	0.000	0.000	82.974	50.397	2.155	MWD+IFR1+MS
21400.000	90.000	179.657	11956.997	81.630	0.000	83.580	-0.000	81.630	0.000	0.000	83.630	50.454	2.129	MWD+IFR1+MS
21500.000	90.000	179.657	11956.997	82.362	0.000	84.238	-0.000	82.362	0.000	0.000	84.287	50.511	2.103	MWD+IFR1+MS
21600.000	90.000	179.657	11956.997	83.094	0.000	84.898	-0.000	83.094	0.000	0.000	84.947	50.568	2.078	MWD+IFR1+MS
21700.000	90.000	179.657	11956.997	83.828	0.000	85.559	-0.000	83.828	0.000	0.000	85.608	50.626	2.053	MWD+IFR1+MS
21800.000	90.000	179.657	11956.997	84.562	0.000	86.222	-0.000	84.562	0.000	0.000	86.271	50.685	2.029	MWD+IFR1+MS
21900.000	90.000	179.657	11956.997	85.297	0.000	86.887	-0.000	85.297	0.000	0.000	86.935	50.744	2.006	MWD+IFR1+MS
22000.000	90.000	179.657	11956.997	86.033	0.000	87.554	-0.000	86.033	0.000	0.000	87.602	50.803	1.983	MWD+IFR1+MS
22100.000	90.000	179.657	11956.997	86.770	0.000	88.222	-0.000	86.770	0.000	0.000	88.269	50.863	1.960	MWD+IFR1+MS
22200.000	90.000	179.657	11956.997	87.508	0.000	88.891	-0.000	87.508	0.000	0.000	88.939	50.924	1.938	MWD+IFR1+MS
22300.000	90.000	179.657	11956.997	87.877	0.000	89.309	-0.000	87.877	0.000	0.000	89.372	57.180	2.444	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
22400.000	90.000	179.657	11956.997	87.880	0.000	89.478	-0.000	87.880	0.000	0.000	89.540	57.261	2.441	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
22500.000	90.000	179.657	11956.997	87.884	0.000	89.650	-0.000	87.884	0.000	0.000	89.712	57.342	2.438	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
22600.000	90.000	179.657	11956.997	87.891	0.000	89.825	-0.000	87.891	0.000	0.000	89.888	57.424	2.435	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
22700.000	90.000	179.657	11956.997	87.901	0.000	90.004	-0.000	87.901	0.000	0.000	90.067	57.507	2.431	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
22800.000	90.000	179.657	11956.997	87.912	0.000	90.187	-0.000	87.912	0.000	0.000	90.249	57.590	2.427	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
22900.000	90.000	179.657	11956.997	87.927	0.000	90.372	-0.000	87.927	0.000	0.000	90.435	57.673	2.423	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23000.000	90.000	179.657	11956.997	87.943	0.000	90.561	-0.000	87.943	0.000	0.000	90.624	57.756	2.418	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23100.000	90.000	179.657	11956.997	87.962	0.000	90.754	-0.000	87.962	0.000	0.000	90.816	57.840	2.413	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23200.000	90.000	179.657	11956.997	87.983	0.000	90.949	-0.000	87.983	0.000	0.000	91.012	57.925	2.408	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22

23300.000	90.000	179.657	11956.997	88.006	0.000	91.148	-0.000	88.006	0.000	0.000	91.210	58.010	2.402	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23400.000	90.000	179.657	11956.997	88.032	0.000	91.350	-0.000	88.032	0.000	0.000	91.413	58.095	2.397	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23500.000	90.000	179.657	11956.997	88.060	0.000	91.556	-0.000	88.060	0.000	0.000	91.618	58.180	2.391	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23600.000	90.000	179.657	11956.997	88.091	0.000	91.764	-0.000	88.091	0.000	0.000	91.826	58.266	2.384	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23700.000	90.000	179.657	11956.997	88.124	0.000	91.976	-0.000	88.124	0.000	0.000	92.038	58.353	2.378	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23800.000	90.000	179.657	11956.997	88.159	0.000	92.191	-0.000	88.159	0.000	0.000	92.253	58.439	2.371	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23900.000	90.000	179.657	11956.997	88.196	0.000	92.409	-0.000	88.196	0.000	0.000	92.471	58.526	2.364	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24000.000	90.000	179.657	11956.997	88.236	0.000	92.631	-0.000	88.236	0.000	0.000	92.692	58.614	2.356	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24100.000	90.000	179.657	11956.997	88.278	0.000	92.855	-0.000	88.278	0.000	0.000	92.917	58.702	2.349	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24200.000	90.000	179.657	11956.997	88.323	0.000	93.082	-0.000	88.323	0.000	0.000	93.144	58.790	2.341	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24300.000	90.000	179.657	11956.997	88.369	0.000	93.313	-0.000	88.369	0.000	0.000	93.374	58.879	2.333	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24400.000	90.000	179.657	11956.997	88.418	0.000	93.547	-0.000	88.418	0.000	0.000	93.608	58.968	2.325	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24500.000	90.000	179.657	11956.997	88.470	0.000	93.783	-0.000	88.470	0.000	0.000	93.844	59.057	2.316	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24600.000	90.000	179.657	11956.997	88.523	0.000	94.023	-0.000	88.523	0.000	0.000	94.084	59.147	2.308	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24693.619	90.000	179.657	11956.997	88.576	0.000	94.250	-0.000	88.576	0.000	0.000	94.310	59.231	2.300	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24700.000	90.000	179.657	11956.997	88.579	0.000	94.265	-0.000	88.579	0.000	0.000	94.326	59.237	2.299	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24783.599	90.000	179.657	11956.997	88.628	0.000	94.470	-0.000	88.628	0.000	0.000	94.531	59.313	2.292	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22

Poker Lake Unit 22 DTD South 174H

Plan Targets		Measured Depth		Grid Northing		Grid Easting		TVD MSL		Target Shape	
Target Name		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)			
FTP 10		12199.23	440480.70	643478.10	8507.00	RECTANGLE					
SHL 22		12686.63	440560.22	642804.06	8574.01	RECTANGLE					
LTP 10		24693.61	427500.70	643555.80	8507.00	RECTANGLE					
BHL 10		24783.96	427410.70	643556.70	8507.00	RECTANGLE					





U. S. Steel Tubular Products

11/8/2023 1:08:50 PM

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



MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ®		--
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-FREEDOM HTQ®		--
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®		--
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	--

UNCONTROLLED

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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U. S. Steel Tubular Products

11/29/2021 4:16:04 PM

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.	--
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]

UNCONTROLLED

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.).
- 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

**BLACK GOLD®**

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NEW CHOKE HOSE
INSTALLED 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.

CUSTOMER: 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: _____

F. Cismos

TITLE: _____

QUALITY ASSURANCE

DATE: _____

1/25/2024



H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

TEST OBJECT

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

TEST INFORMATION

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K

Part number:

Description:

Fitting 2: 3.0 x 4-1/16 10K

Part number:

Description:

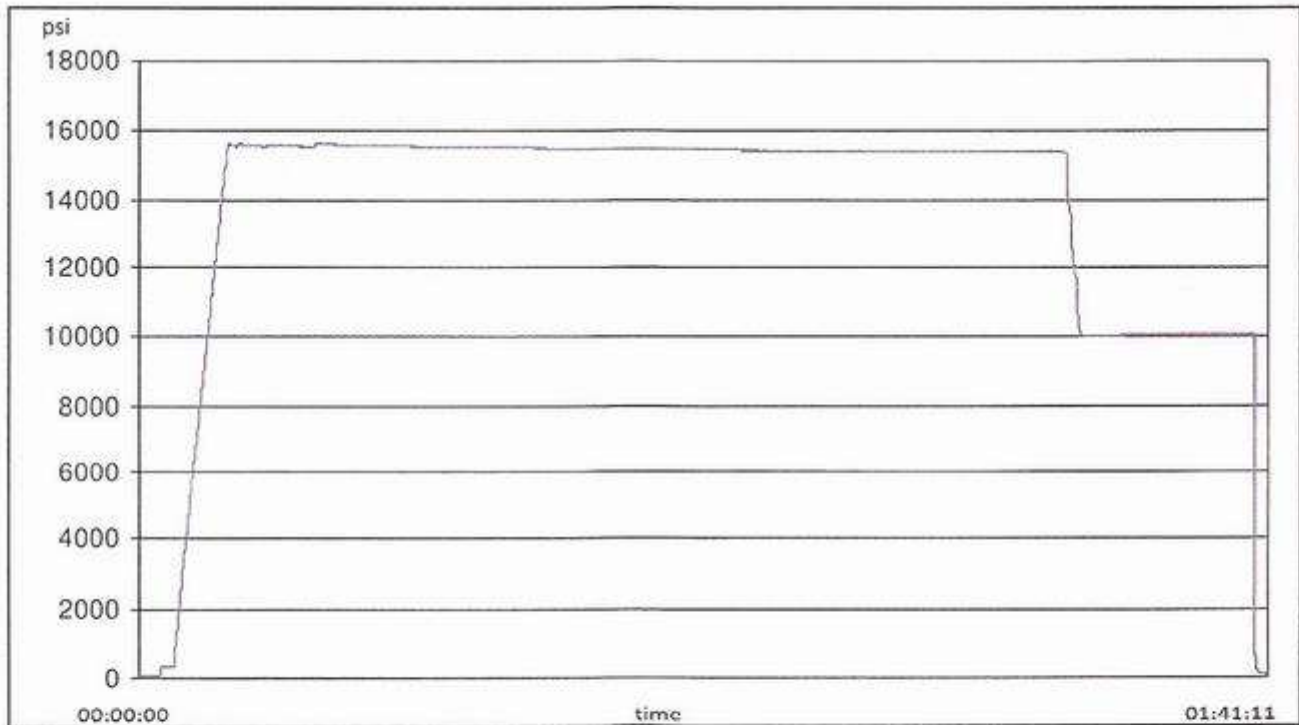
Visual check:

Length: 45 feet

Pressure test result: PASS

Length measurement result:

Test operator: Travis





H3-15/16

1/25/2024 11:48:06 AM

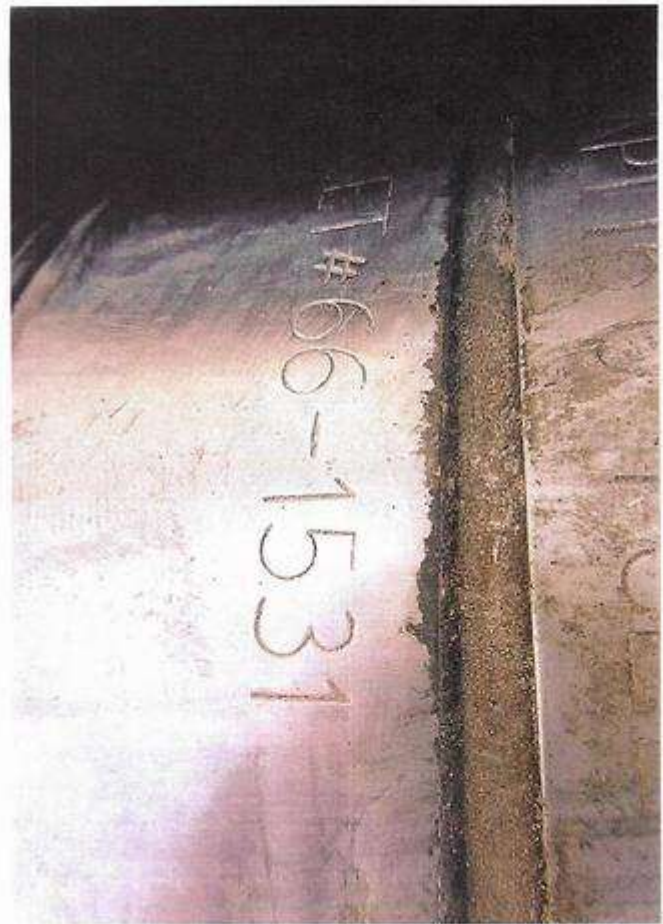
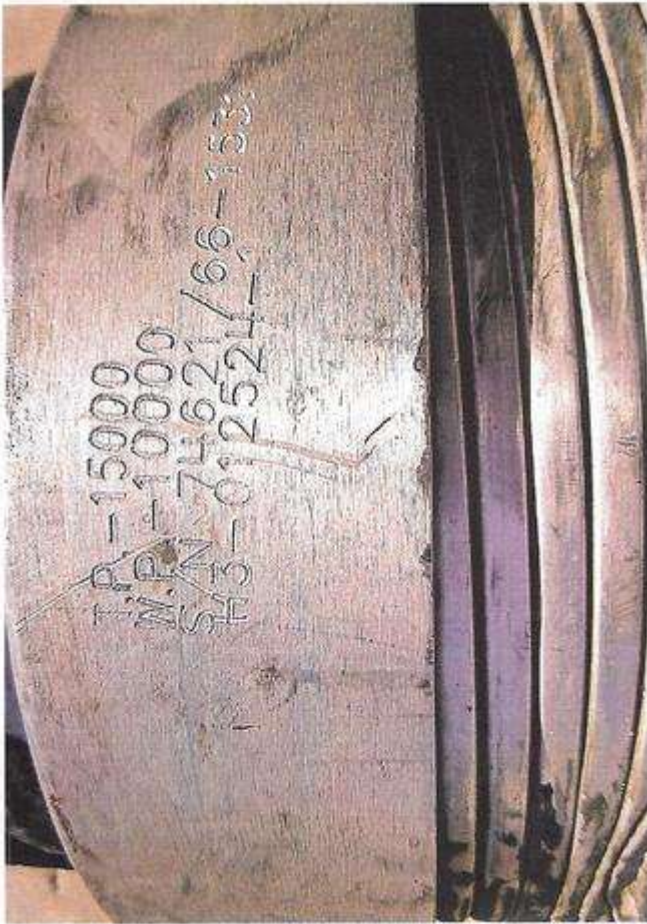
TEST REPORT

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





District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 386133

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 386133
	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.	10/3/2024