Type of Well: CONVENTIONAL GAS

WĖL

Allottee or Tribe Name:

Page 1 of 48

Lease Number: NMLC0068431 Unit or CA Name: POKER LAKE UNIT

UNIT Unit or CA Number:

NMNM71016X

LLC

### **Notice of Intent**

**Sundry ID:** 2784390

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/10/2024 Time Sundry Submitted: 02:45

Date proposed operation will begin: 04/30/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, FTP, LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation (Pool). FROM: TO: SHL: 1557' FNL & 1455' FEL OF SECTION 21-T24S-R30E 1367' FNL & 1456' FEL OF SECTION 21-T24S-R30E FTP: 383' FNL & 2396' FWL OF SECTION 21-T24S-R30E 100' FNL & 2211' FEL OF SECTION 21-T24S-R30E LTP: 330' FNL & 2391' FWL OF SECTION 33-T23S-R30E 2539' FNL & 2207' FEL OF SECTION 33-T24S-R30E BHL: 200' FNL & 2391' FWL OF SECTION 33-T23S-R30E 2629' FNL & 2208' FEL OF SECTION 33-T24S-R30E The proposed total depth is changing from 33784' MD; 11986' TVD (Wolfcamp) to 22424' MD; 9324' TVD (Bone Spring 2 Sand). A saturated salt brine will be utilized while drilling through the salt formations. Previous Approved pool: 98220 / PURPLE SAGE;WOLFCAMP Proposed Pool: 97798 / WILDCAT G-06 S243026M;BONE SPRING See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

### **NOI Attachments**

**Procedure Description** 

PLU 21 DTD 154H Sundry Attachments 20240905123521.pdf

Released to Imaging: 10/2/2024 2:52:25 PM

US Well Number: 3001553254 Operator: XTO PERMIAN OPERATING

LLC

## **Conditions of Approval**

### **Additional**

Poker\_Lake\_Unit\_21\_DTD\_154H\_COA\_20240921112824.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: TERRA SEBASTIAN Signed on: SEP 05, 2024 12:35 PM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Advisor

Street Address: 6401 HOLIDAY HILL ROAD SUITE 200

City: MIDLAND State: TX

Phone: (432) 999-3107

Email address: TERRA.B.SEBASTIAN@EXXONMOBIL.COM

### **Field**

**Representative Name:** 

**Street Address:** 

City: State: Zip:

Phone:

**Email address:** 

### **BLM Point of Contact**

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234 BLM POC Email Address: cwalls@blm.gov

**Disposition:** Approved **Disposition Date:** 10/02/2024

Signature: Chris Walls

Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR DUBEAU OF LAND MANAGEMENT

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

BUR	EAU OF LAND MANAGEMENT	5. Lease Serial No.	NMLC068431			
Do not use this t	IOTICES AND REPORTS ON W form for proposals to drill or to Use Form 3160-3 (APD) for suc	6. If Indian, Allottee or Tribe Name				
SUBMIT IN	TRIPLICATE - Other instructions on pag	e 2	7. If Unit of CA/Agreement, POKER LAKE UNIT/NMNM71016			
1. Type of Well Oil Well Gas V	Vell Other		8. Well Name and No. POKER LAKE UNIT 21 DTD/154H	Λ		
2. Name of Operator XTO PERMIAN	OPERATING LLC		9. API Well No. 300155325	4		
3a. Address 6401 HOLIDAY HILL R		(include area code)	10. Field and Pool or Explora			
	(432) 683-22		PURPLE SAGE/WOLFCAMP			
4. Location of Well (Footage, Sec., T., F SEC 21/T24S/R30E/NMP	R.,M., or Survey Description)		11. Country or Parish, State EDDY/NM			
12. CHE	CK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE O	F NOTICE, REPORT OR OT	THER DATA		
TYPE OF SUBMISSION		TYPE	OF ACTION			
✓ Notice of Intent	Acidize Deep	=	Production (Start/Resume)	=		
		raulic Fracturing Construction	Reclamation Recomplete	Well Integrity Other		
Subsequent Report		and Abandon	Temporarily Abandon	Other		
Final Abandonment Notice		Back	Water Disposal			
completed. Final Abandonment No is ready for final inspection.)  XTO Permian Operating, LLC. FTP, LTP, BHL, Casing sizes,  FROM: TO: SHL: 1557' FNL & 1455' FEL G FTP: 383' FNL & 2396' FWL C LTP: 330' FNL & 2391' FWL C BHL: 200' FNL & 2391' FWL C	ons. If the operation results in a multiple contices must be filed only after all requirement respectfully requests approval to make Cement, Proposed total Depth, and form OF SECTION 21-T24S-R30E 1367' FNL OF SECTION 21-T24S-R30E 100' FNL 8 OF SECTION 33-T23S-R30E 2539' FNL OF SECTION 33-T23S-R30E 2629' FNL or	s, including reclamati the following chang mation (Pool).  & 1456' FEL OF SEC 2211' FEL OF SEC & 2207' FEL OF SE & 2208' FEL OF SE olfcamp) to 22424 M	on, have been completed and les to the approved APD. C ECTION 21-T24S-R30E CTION 21-T24S-R30E ECTION 33-T24S-R30E ECTION 33-T24S-R30E	the operator has detennined that the site changes to include SHL,		
1 0	true and correct. Name (Printed/Typed)					
TERRA SEBASTIAN / Ph: (432) 99	99-3107	Regulatory A	dvisor			
Signature (Electronic Submission	on)	Date	09/05/2	2024		
	THE SPACE FOR FED	ERAL OR STAT	E OFICE USE			
Approved by						
CHRISTOPHER WALLS / Ph: (57	5) 234-2234 / Approved	Petroleu Title	um Engineer	10/02/2024 Date		
	hed. Approval of this notice does not warran equitable title to those rights in the subject leaduct operations thereon.		SBAD			
Title 18 U.S.C. Section 1001 and Title 4	3 U.S.C Section 1212, make it a crime for a	ıv nerson knowingly a	and willfully to make to any o	lepartment or agency of the United States		

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 State 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**

Previous Approved pool: 98220 / PURPLE SAGE; WOLFCAMP Proposed Pool: 97798 / WILDCAT G-06 S243026M; BONE SPRING

See attached Drilling Plan for updated cement and casing program.

Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

### **Location of Well**

0. SHL: SWNE / 1557 FNL / 1455 FEL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.206206 / LONG: -103.882294 ( TVD: 0 feet, MD: 0 feet )

PPP: NENW / 383 FNL / 2396 FWL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.20942 / LONG: -103.887137 ( TVD: 11986 feet, MD: 12500 feet )

BHL: NENW / 200 FNL / 2391 FEL / TWSP: 23S / RANGE: 30E / SECTION: 33 / LAT: 32.268079 / LONG: -103.887148 ( TVD: 11986 feet, MD: 33784 feet )

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO
LEASE NO.: NMLC068431
LOCATION: Sec. 21, T.24 S, R 30 E

COUNTY: Eddy County, New Mexico

WELL NAME & NO.: Poker Lake Unit 21 DTD 154H

SURFACE HOLE FOOTAGE: 1367'/N & 1456'/E

**BOTTOM HOLE FOOTAGE:** 2629'/N & 2208'/E

Changes approved through engineering via **Sundry 27843920**\_ on 9-21-2024\_. Any previous COAs not addressed within the updated COAs still apply.

 $\mathbf{COA}$ 

H <sub>2</sub> S	•	No	C	Yes
Potash /	None	Secretary	○ R-111-Q	Open Annulus
WIPP	Choos	e an option (including bla	nk option.)	■ WIPP
Cave / Karst	C Low	Medium	Ü High	Critical
Wellhead	<ul> <li>Conventional</li> </ul>	• Multibowl	O Both	O Diverter
Cementing	Primary Squeeze	Cont. Squeeze	EchoMeter	DV Tool
Special Req	Capitan Reef	Water Disposal	COM	Unit
Waste Prev.	C Self-Certification	O Waste Min. Plan	• APD Submitted p	prior to 06/10/2024
Additional	Flex Hose	Casing Clearance	Pilot Hole	Break Testing
Language	Four-String	Offline Cementing	Fluid-Filled	

### A. HYDROGEN SULFIDE

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

### **B. CASING**

- 1. The 13-3/8 inch surface casing shall be set at approximately 1104 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 9-5/8 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 6340.
  - 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.

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down Surface X Intermediate 1 annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the Surface casing to tieback requirements listed above after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

### C. PRESSURE CONTROL

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

### D. SPECIAL REQUIREMENT (S)

### **Unit Wells**

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

### **Commercial Well Determination**

A commercial well determination shall be submitted after production has been established for at least six months. (This is not necessary for secondary recovery unit wells)

### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

### **Offline Cementing**

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

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

### **Casing Clearance**

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

# GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

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

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

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - i. Notify the BLM when moving in and removing the Spudder Rig.
    - ii. Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2<sup>nd</sup> Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

### A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

### **B. PRESSURE CONTROL**

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

- open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

### C. DRILLING MUD

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

### D. WASTE MATERIAL AND FLUIDS

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

disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**Approved by Zota Stevens on 9/21/2024** 575-234-5998 / zstevens@blm.gov

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

XTO Energy Inc. POKER LAKE UNIT 21 DTD 154H Projected TD: 22714' MD / 9725' TVD

SHL: 1367' FNL & 1456' FEL , Section 21, T24S, R30E BHL: 2629' FNL & 2208' FEL , Section 33, T23S, 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	1004'	Water
Top of Salt	1407'	Water
Base of Salt	3600'	Water
Delaware	3794'	Water
Brushy Canyon	6340'	Water/Oil/Gas
Bone Spring	7664'	Water
Avalon	8357'	Water/Oil/Gas
1st Bone Spring	8373'	Water/Oil/Gas
2nd Bone Spring	8958'	Water/Oil/Gas
Target/Land Curve	9725'	Water/Oil/Gas

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 9.625 inch casing @ 1104' (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 9019' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 22714 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 8719 feet).

### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1104'	9.625	40	J-55	втс	New	1.84	5.70	14,27
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.98	2.92	2.08
8.75	4000' — 9019'	7.625	29.7	HC L-80	Flush Joint	New	2.17	2.65	2.72
6.75	0' – 8919'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.28	2.18
6.75	8919' - 22714'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.09	7.40

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

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

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

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

Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

XTO requests the option to use 5" BTC Float equipment for the the production casing

### Wellhead:

Permanent Wellhead – Multibowl System

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

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

Wellhead will be installed by manufacturer's representatives.

- Manufacturer will monitor welding process to ensure appropriate temperature of seal.

### 4. Cement Program

### Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 1104'

Lead: 260 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 +/- 9019'

Ist Stage

Optional Lead: 340 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 240 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6340

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

<u> 2nd Stage</u>

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water) Tail: 710 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 (6340') 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 +/- 22714'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8719 feet
Tail: 970 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9219 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

### 5. Pressure Control Equipment

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 3170 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

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

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

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

hole on each of the wells.

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

### 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Tible Size	Mud Type	(ppg)	(sec/qt)	(cc)
0' - 1104'	12.25	FW/Native	8.4-8.9	35-40	NC
1104' - 9019'	8.75	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
9019' - 22714'	6.75	ОВМ	10.5-11	50-60	NC - 20

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

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

### 7. Auxiliary Well Control and Monitoring Equipment

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

### 8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

### 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5310 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.

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

11/8/2023 1:08:50 PM

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

### **Notes**

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

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

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

[4]

[4]

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

### 11/29/2021 4:16:04 PM

### **MECHANICAL PROPERTIES** USS-TALON HTQ™ RD **Pipe** [6] Minimum Yield Strength 110,000 psi Maximum Yield Strength 125,000 psi Minimum Tensile Strength 125,000 psi **USS-TALON HTQ™ RD DIMENSIONS Pipe** 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** USS-TALON HTQ™ RD **Pipe** Critical Area 5.828 5.828 sq. in. Joint Efficiency 100.0 % [2] **PERFORMANCE USS-TALON HTQ™ RD Pipe** 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 641,000 Compression Rating lb Reference Length 21,370 ft [5] Maximum Uniaxial Bend Rating 91.7 deg/100 ft USS-TALON HTQ™ RD MAKE-UP DATA Pipe Make-Up Loss 5.58 in. ft-Ib Minimum Make-Up Torque 17,000 [4]

### **Notes**

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).

20,000

39,500

- 2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.
- 3. Uniaxial bend rating shown is structural only.

Maximum Make-Up Torque

Maximum Operating Torque

- 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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ft-Ib

ft-Ib

### WELL LOCATION AND ACREAGE DEDICATION PLAT

	WELL EOCATION AND ACKLAGE DEDICATION LEAT							
<sup>1</sup> API Numbe	r							
<b>30-015-</b> 53254		97798 WILDCAT G-06 S243026M;BONE						
<sup>4</sup> Property Code		<sup>5</sup> Property Name						
333571		POKER L	AKE UNIT 21 DTD	154H				
<sup>7</sup> OGRID No.		<sup>9</sup> Elevation						
373075		3,377'						

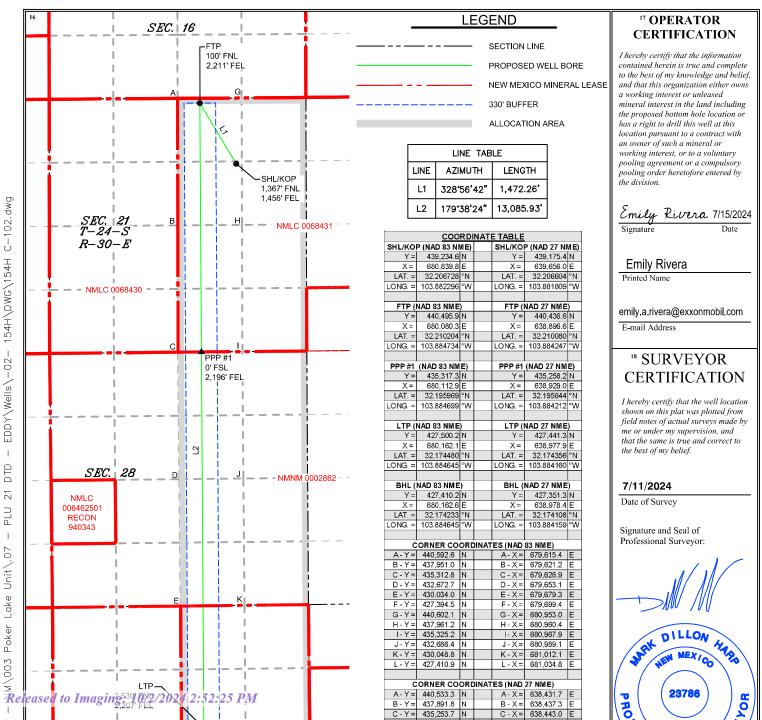
"Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	21	248	30E		1,367	NORTH	1,456	EAST	EDDY

"Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	33	24S	30E		2,629	NORTH	2,208	EAST	EDDY
12 Dedicated Acres	<sup>13</sup> Joint or	Infill 14Co	onsolidation (	Code 15 Oro	ler No.				
800.00									

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



Inten	t X	As Dril	led											
API #														
-	rator Nai D PERM	<sup>me:</sup> IAIN OPI	ERATIN	G, LL	C.	Proper POKE	-			IT 21	DTI	D		Well Number 154H
	Off Point	1	T _					-	1 _	ı		-6		
UL	Section	Township	Range	Lot	Feet		om N,	/S	Feet		From	ı E/W	County	
Latit	ude				Longitu	ıde							NAD	
First <sup>*</sup>	Take Poir	nt (FTP)												
UL B	Section 21	Township 24S	Range 30E	Lot	Feet 100		om N, ORT		Feet <b>2,21</b>		From EAS	i E/W ST	County EDDY	
Latiti	ude 210204	1	1		Longitu	ude 88473	34		ı				NAD 83	
Last 1 UL G Latiti	Section 33	t (LTP)  Township 24S	Range 30E	Lot	Feet 2,539	From N NOR1		Feet 2,2(		From E EAST		Count EDD NAD		
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Spaci	ng Unit.	lease prov	ide API if	availab	ole, Ope	rator Na	me a	ınd v	vell nı	umber	for [	Definir	ng well fo	r Horizontal
API#	ŧ													
Ope	rator Nai	me:	•			Proper	ty Na	ame	:					Well Number
						l								V7 06 /20 /2019

KZ 06/29/2018

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

XTO Energy Inc.
POKER LAKE UNIT 21 DTD 154H
Projected TD: 22714' MD / 9725' TVD
SHL: 1367' FNL & 1456' FEL , Section 21, T24S, R30E
BHL: 2629' FNL & 2208' FEL , Section 33, T23S, 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	1004'	Water
Top of Salt	1407'	Water
Base of Salt	3600'	Water
Delaware	3794'	Water
Brushy Canyon	6340'	Water/Oil/Gas
Bone Spring	7664'	Water
Avalon	8357'	Water/Oil/Gas
1st Bone Spring	8373'	Water/Oil/Gas
2nd Bone Spring	8958'	Water/Oil/Gas
Target/Land Curve	9725'	Water/Oil/Gas
raige/Land Curve	9123	Water/Oil/Gas

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 1382' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3700' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 8809' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 22714 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 8509 feet) per Potash regulations.

### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1382'	13.375	54.5	J-55	BTC	New	3.12	1.87	12.07
12.25	0' – 3700'	9.625	40	J-55	втс	New	1.89	3.07	4.26
8.75	0' – 3800'	7.625	29.7	RY P-110	Flush Joint	New	2.98	3.08	2.13
8.75	3800' – 8809'	7.625	29.7	HC L-80	Flush Joint	New	2.17	3.86	2.73
6.75	0' – 8709'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.33	2.18
6.75	8709' - 22714'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.09	5.37

<sup>·</sup> Production casing meets the clearance requirements as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1

- $\cdot$  9.625 Collapse analyzed using 50% evacuation based on regional experience.
- 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- $\cdot$  5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

 $Wellhead: \mbox{XTO will use a Multibowl system which is attached.} \label{eq:Wellhead}$ 

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

<sup>·</sup> XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

### 4. Cement Program

### Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1382'

Optional Lead: 1130 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft3/sx, 10.13 gal/sx water)

Tail: 310 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

### 1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3700'

Lead: 770 sxs Class C (mixed at 14.8 ppg, 2.06 ft3/sx, 10.13 gal/sx water)

Tail: 60 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 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 +/- 8809'

st Stage

Optional Lead: 140 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: 3400

Tail: 260 sxs Class C (mixed at 14.8 ppg, 1.27 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6340

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

### 2nd Stage - bradenhead contingency

Tail: 140 sxs Class C (mixed at 14.8 ppg, 2.77 ft3/sx, 6.39 gal/sx water)

Top of Cement: 3400

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 (6340') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement to surface. 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 wellhead provider 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 +/- 22714'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8509 feet
Tail: 850 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9219 feet
Compressives: 12-hr = 1375 psi 24 hr = 2285 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

All BOP testing will be done by an independent service company. Annular pressure tests will be conducted to at least 50% of the rated working pressure. When nippling up on the 13.375, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week

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

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

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

### 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Tible Size	waa rype	(ppg)	(sec/qt)	(cc)
0' - 1382'	17.5	FW/Native	8.4-8.9	35-40	NC
1382' - 3700'	12.25	Saturated brine for salt interval / Direct Emulsion	10 - 10.5	30-32	NC
3700' to 8809'	8.75	BDE/OBM or Brine	9- 9.5	30-32	NC
8809' to 22714'	6.75	ОВМ	10.5-11	50-60	NC - 20

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

Spud with fresh water/native mud. Drill out from under 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 13.375 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 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5310 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 21 DTD South 154H

Well Plan Report

Measured Depth:	22713.77 ft
TVD RKB:	9725.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439175.40 ft
Easting:	639656.00 ft
RKB:	3409.00 ft
Ground Level:	3377.00 ft
North Reference:	Grid
Convergence Angle:	0.24 Deg

	Semi-minor Tool
	Semi-minor
	Semi-major
	Magnitude
	Vertical
South 154H	Lateral
Poker Lake Unit 21 DTD Sou	TVD Highside
Position Uncertainty	Measured

	Azimuth Used	(,)	0.000 MWD+IFR1+MS	112.264 MWD+IFR1+MS	122.711 MWD+IFR1+MS	125.469 MWD+IFR1+MS	126.713 MWD+IFR1+MS	127.419 MWD+IFR1+MS	127.873 MWD+IFR1+MS	128.190 MWD+IFR1+MS	128.423 MWD+IFR1+MS	128.602 MWD+IFR1+MS	128.744 MWD+IFR1+MS	128.859 MWD+IFR1+MS	121.210 MWD+IFR1+MS	102.872 MWD+IFR1+MS	92.320 MWD+IFR1+MS	86.966 MWD+IFR1+MS	83.965 MWD+IFR1+MS	82.111 MWD+IFR1+MS	80.885 MWD+IFR1+MS	80.042 MWD+IFR1+MS	79.881 MWD+IFR1+MS	79.917 MWD+IFR1+MS	80.243 MWD+IFR1+MS	80.762 MWD+IFR1+MS	81.277 MWD+IFR1+MS	81.787 MWD+IFR1+MS	82.294 MWD+IFR1+MS	82.795 MWD+IFR1+MS	83.292 MWD+IFR1+MS	83.784 MWD+IFR1+MS	84.271 MWD+IFR1+MS
	Error	(#)	0.000	0.220	0.627	0.986	1 344	1.701	2.059	2.417	2.775	3.133	3.491	3.849	4.293	4.871	5.288	5.652	5.999	6.341	6.682	7 025	7.247	7.368	7.719	8.079	8.442	8.808	9.177	9.547	9.920	10.295	10.671
	Error	<b>(#</b> )	0.000	0.751	1.259	1.698	2.108	2.503	2.888	3.267	3.642	4.014	4.384	4.752	5.181	5.796	6.471	7.134	7.766	8.368	8.943	9.495	9.743	9.841	10.121	10.423	10.733	11.048	11.369	11.696	12.027	12.363	12.703
oort	of Bias	(#t)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report	Error Bias	(ft) (ft)	0.000 0.000	2.300 0.000	2.310 0.000	2.325 0.000	2.347 0.000	2.374 0.000	2.407 0.000	2.444 0.000	2.486 0.000	2.532 0.000	2.581 0.000	2.635 0.000	2.691 0.000	2.751 0.000	2.817 0.000	2.890 0.000	2.973 0.000	3.067 0.000	3.175 0.000	3.299 0.000	3.360 0.000	3.388 0.000	3.481 0.000	3.582 0.000	3.686 0.000	3.795 0.000	3.908 0.000	4.023 0.000	4.142 0.000	4.264 0.000	4.388 0.000
	Bias	#)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000
	Error	(#)	0.000	0.350	0.861	1.271	1.658	2.034	2.405	2.773	3.138	3.502	3.865	4.228	5.002	5.336	5.672	6.010	6.351	6.695	7.041	7.392	7.611	7.729	8.077	8.442	8.810	9.181	9.554	9.930	10.309	10.689	11.071
	Error Bias	(ft) (ft)	0.000 0.000	0.700 0.000	1.112 0.000	1.497 0.000	1.871 0.000	2.240 0.000	2.607 0.000	2.971 0.000	3.334 0.000	3.696 0.000	4.058 0.000	4.419 0.000	4.498 0.000	5.363 0.000	6.121 0.000	6.806 0.000	7.438 0.000	8.028 0.000	8.583 0.000	9.109 0.000	9.331 0.000	9.432 0.000	9.721 0.000	10.028 0.000	10.343 0.000	10.665 0.000	10.993 0.000	11.327 0.000	11.667 0.000	12.011 0.000	12.359 0.000
	RKB	(#)	0.000	100.000	200.000	300 000	400.000	200.000	000'009	700.000	800.000	000.006	1000.000	1100.000	1199.980	1299.838	1399.452	1498.702	1597.465	1695.623	1793.055	1889.643	1951.569	1985.334	2080.814	2176.294	2271.774	2367.254	2462.733	2558.213	2653.693	2749.173	2844.653
	Azimuth	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947
	Inclination	<b>(.)</b>	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	2.000	4.000	000'9	8.000	10.000	12.000	14.000	16.000	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293
3/20/24, 10:42 AM	Depth	(#)	0.000	100.000	200.000	300.000	400.000	500.000	000'009	700.000	800.000	000'006	1000.000	1100.000	1200.000	1300.000	1400.000	1500.000	1600.000	1700.000	1800.000	1900.000	1964.636	2000,000	2100.000	2200.000	2300.000	2400,000	2500.000	2600.000	2700.000	2800.000	2900.000
	eleas	ed to	o In	agi	ng:	10/2	2/202	24 2	:52:	25 I	PM																						

	84.753 MWD+IFR1+MS	85.230 MWD+IFR1+MS	85.701 MWD+IFR1+MS	86.166 MWD+IFR1+MS	86.626 MWD+IFR1+MS	87.080 MWD+IFR1+MS	87.528 MWD+IFR1+MS	87.970 MWD+IFR1+MS	88.406 MWD+IFR1+MS	88.836 MWD+IFR1+MS	89.260 MWD+IFR1+MS	89.678 MWD+IFR1+MS	90.089 MWD+IFR1+MS	90.494 MWD+IFR1+MS	90.893 MWD+IFR1+MS	91.285 MWD+IFR1+MS	91.671 MWD+IFR1+MS	92.050 MWD+IFR1+MS	92.424 MWD+IFR1+MS	92.790 MWD+IFR1+MS	93.151 MWD+IFR1+MS	93.505 MWD+IFR1+MS	93.852 MWD+IFR1+MS	94.194 MWD+IFR1+MS	94.529 MWD+IFR1+MS	94.857 MWD+IFR1+MS	95.180 MWD+IFR1+MS	95,496 MWD+IFR1+MS	95.806 MWD+IFR1+MS	96.110 MWD+IFR1+MS	96.408 MWD+IFR1+MS	96.513 MWD+IFR1+MS	96.591 MWD+IFR1+MS
	11.049	11.428	11.808	12.189	12.571	12.954	13.338	13.722	14.108	14.494	14.880	15.267	15.654	16.042	16.430	16.819	17.208	17.598	17.987	18.377	18.768	19.158	19.549	19.941	20.332	20.724	21.115	21.507	21.900	22.292	22.685	22.865	23.076
	13.047	13.394	13.744	14.098	14 454	14.813	15.174	15.538	15.903	16.271	16.640	17.011	17.384	17.758	18.133	18.510	18.888	19.268	19.648	20.030	20.412	20.796	21 180	21 565	21 951	22.338	22.725	23,113	23.502	23.891	24.281	24.456	24.662
port	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.00
Well Plan Report	4.515 0.000	4.645 0.000	4.776 0.000	4.910 0.000	5.046 0.000	5.184 0.000	5.324 0.000	5.466 0.000	2.609 0.000	5.754 0.000	5.901 0.000	6.049 0.000	6.199 0.000	6.351 0.000	6.504 0.000	6.658 0.000	6.814 0.000	6.972 0.000	7.131 0.000	7.292 0.000	7.454 0.000	7.618 0.000	7.783 0.000	7.950 0.000	8.118 0.000	8.288 0.000	8.459 0.000	8.632 0.000	8.806 0.000	8.982 0.000	9.159 0.000	9.241 0.000	9.338 0.000
	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	11.454	11 839	12.225	12.612	13.000	13 390	13.780	14.171	14.562	14.955	15.347	15.741	16 135	16.530	16 925	17.320	17.716	18.112	18.509	18.905	19.303	19.700	20 098	20 496	20 894	21.293	21.691	22.090	22.489	22 889	23.288	23.469	23.680
	12.712 0.000	13.068 0.000	13.428 0.000	13.791 0.000	14.156 0.000	14.525 0.000	14.896 0.000	15.269 0.000	15.644 0.000	16.022 0.000	16.401 0.000	16.782 0.000	17.165 0.000	17.549 0.000	17.935 0.000	18.322 0.000	18.710 0.000	19.099 0.000	19.489 0.000	19.881 0.000	20.273 0.000	20.667 0.000	21.061 0.000	21.456 0.000	21.852 0.000	22.248 0.000	22.645 0.000	23.043 0.000	23.442 0.000	23.841 0.000	24.241 0.000	24.422 0.000	24.661 0.000
	2940.133	3035.613	3131.092	3226.572	3322.052	3417.532	3513.012	3608.492	3703.972	3799.451	3894.931	3990.411	4085.891	4181.371	4276.851	4372.331	4467.810	4563.290	4658.770	4754.250	4849.730	4945.210	5040.690	5136.169	5231.649	5327.129	5422.609	5518,089	5613.569	5709.049	5804.528	5848.431	5900.156
	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947
	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17.293	17,293	17.293	17.293	17.293	17.293	16.212
3/20/24, 10:42 AM	3000.000	3100.000	3200.000	3300.000	3400.000	3500.000	3600.000	3700.000	3800.000	3900.000	4000.000	4100.000	4200.000	4300.000	4400.000	4500.000	4600.000	4700.000	4800.000	4900.000	5000.000	5100.000	5200.000	5300.000	5400.000	5500.000	2600.000	5700,000	5800.000	2900,000	000.0009	6045.981	6100.000
Re	eleas	ed t	o In	ıagi	ng:	10/2	2/202	24 2	:52:	25 1	PM																						

	95.927 MWD+IFR1+MS	94.726 MWD+IFR1+MS	93.594 MWD+IFR1+MS	92.537 MWD+IFR1+MS	91.561 MWD+IFR1+MS	90.668 MWD+IFR1+MS	89.856 MWD+IFR1+MS	89.126 MWD+IFR1+MS	89.135 MWD+IFR1+MS	89.292 MWD+IFR1+MS	89.578 MWD+IFR1+MS	89.883 MWD+IFR1+MS	90.185 MWD+IFR1+MS	90.487 MWD+IFR1+MS	90.788 MWD+IFR1+MS	91.087 MWD+IFR1+MS	91.385 MWD+IFR1+MS	91.682 MWD+IFR1+MS	91.977 MWD+IFR1+MS	92.271 MWD+IFR1+MS	92.563 MWD+IFR1+MS	92.854 MWD+IFR1+MS	93.143 MWD+IFR1+MS	93.431 MWD+IFR1+MS	93.716 MWD+IFR1+MS	94.000 MWD+IFR1+MS	94.282 MWD+IFR1+MS	94,563 MWD+IFR1+MS	94.841 MWD+IFR1+MS	95.118 MWD+IFR1+MS	95.393 MWD+IFR1+MS	95.665 MWD+IFR1+MS	95.687 MWD+IFR1+MS
	23.471	23.865	24.249	24 623	24 988	25 342	25.686	26.020	26.054	26.341	26.668	26 996	27 325	27 654	27.984	28.315	28.646	28.977	29.310	29.642	29.975	30.309	30.643	30.978	31.313	31.648	31.984	32.320	32.657	32.994	33.331	33.669	33.734
	25.087	25 544	25.993	26 434	26 867	27 289	27.701	28 103	28.135	28.405	28.711	29.019	29 329	29 640	29.952	30.265	30.579	30.894	31.211	31.528	31.846	32.165	32.485	32.806	33.128	33.451	33.774	34,099	34.424	34 750	35 076	35.403	35.466
oort	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report	9.523 0.000	9.705 0.000	9.875 0.000	10.034 0.000	10.184 0.000	10.327 0.000	10.463 0.000	10.594 0.000	10.607 0.000	10.723 0.000	10.855 0.000	10.990 0.000	11.128 0.000	11.269 0.000	11.413 0.000	11.560 0.000	11.709 0.000	11.863 0.000	12.019 0.000	12.178 0.000	12.340 0.000	12.506 0.000	12.675 0.000	12.846 0.000	13.022 0.000	13.200 0.000	13.381 0.000	13.566 0.000	13.754 0.000	13.945 0.000	14.140 0.000	14.338 0.000	14.376 0.000
	0.000	000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000.0	0.000	0000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000
	24.068	24.452	24.826	25.192	25.548	25.895	26.233	26.562	26.055	26.342	26.668	26.996	27.325	27.654	27.985	28.315	28.647	28.979	29.312	29.645	29.979	30.314	30.649	30.985	31.321	31.657	31.994	32,332	32.670	33.008	33.347	33.686	33.751
	25.135 0.000	25.612 0.000	26.049 0.000	26.445 0.000	26.799 0.000	27.111 0.000	27.382 0.000	27.612 0.000	28.134 0.000	28.404 0.000	28.711 0.000	29.019 0.000	29.329 0.000	29.640 0.000	29.951 0.000	30.264 0.000	30.578 0.000	30.893 0.000	31.208 0.000	31.525 0.000	31.842 0.000	32.161 0.000	32.480 0.000	32.800 0.000	33.121 0.000	33.442 0.000	33.765 0.000	34.088 0.000	34.411 0.000	34.736 0.000	35.061 0.000	35.387 0.000	35.449 0.000
	5996.648	966'8609	6192.082	6290.787	6389.991	6489.572	6589.410	6689.383	6700.000	6789.383	6889.383	6989.383	7089.383	7189.383	7289.383	7389.383	7489.383	7589.383	7689.383	7789.383	7889.383	7989.383	8089.383	8189.383	8289.383	8389.383	8489.383	8589.383	8689.383	8789.383	8889.383	8989.383	9008.800
	328.947	328.947	328.947	328.947	328.947	328.947	328.947	328.947	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	14 212	12.212	10.212	8.212	6.212	4.212	2.212	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3/20/24, 10:42 AM	6200.000	6300.000	6400.000	6500.000	000'0099	6700.000	000.0089	000.0069	6910.617	7000.000	7100.000	7200.000	7300.000	7400.000	7500.000	7600.000	7700.000	7800.000	7900.000	8000,000	8100.000	8200.000	8300.000	8400.000	8500.000	8600.000	8700.000	8800,000	8900.000	000'0006	9100.000	9200.000	9219.417
	eleas	ed t	o In	agi	ng:	10/2	2/202	24 2	:52:	25 I	PM																						

	95.597 MWD+IFR1+MS	95.018 MWD+IFR1+MS	94.779 MWD+IFR1+MS	94.749 MWD+IFR1+MS	94.814 MWD+IFR1+MS	94.925 MWD+IFR1+MS	95.050 MWD+IFR1+MS	95.159 MWD+IFR1+MS	95.220 MWD+IFR1+MS	95.192 MWD+IFR1+MS	95.029 MWD+IFR1+MS	94.893 MWD+IFR1+MS	94.709 MWD+IFR1+MS	94.390 MWD+IFR1+MS	94.081 MWD+IFR1+MS	93.779 MWD+IFR1+MS	93.483 MWD+IFR1+MS	93.191 MWD+IFR1+MS	92.900 MWD+IFR1+MS	92.609 MWD+IFR1+MS	92.315 MWD+IFR1+MS	92.017 MWD+IFR1+MS	91.712 MWD+IFR1+MS	91.397 MWD+IFR1+MS	91.068 MWD+IFR1+MS	90.723 MWD+IFR1+MS	90.355 MWD+IFR1+MS	89,960 MWD+IFR1+MS	89.531 MWD+IFR1+MS	89.058 MWD+IFR1+MS	88.528 MWD+IFR1+MS	87.928 MWD+IFR1+MS	87.233 MWD+IFR1+MS
	33.985	34 261	34.507	34 722	34.906	35.057	35.178	35.269	35.331	35.367	35.376	35 370	35.361	35.362	35.381	35.416	35.467	35.534	35.617	35.716	35.831	35.961	36.106	36.267	36.443	36.633	36.838	37.057	37.290	37.537	37.797	38 069	38.354
	35.824	37.001	38.237	39.287	40.142	40.800	41.272	41.576	41.742	41.807	41.813	41.810	41.806	41.800	41.795	41.791	41.788	41.786	41.784	41.784	41.784	41.785	41.787	41.790	41.794	41.799	41.804	41,811	41.818	41.827	41.836	41.847	41.860
oort	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Well Plan Report	14.537 0.000	14.806 0.000	15.265 0.000	15.975 0.000	16.970 0.000	18.243 0.000	19.756 0.000	21.450 0.000	23.259 0.000	25.116 0.000	26.957 0.000	27.218 0.000	27.372 0.000	27.618 0.000	27.887 0.000	28.175 0.000	28.481 0.000	28.806 0.000	29.148 0.000	29.507 0.000	29.883 0.000	30.274 0.000	30.680 0.000	31.101 0.000	31.535 0.000	31.983 0.000	32.444 0.000	32.917 0.000	33.402 0.000	33.898 0.000	34.404 0.000	34.921 0.000	35.448 0.000
	34.005 -0.000	34.286 -0.000	34.538 -0.000	34.761 -0.000	34.951 -0.000	35.110 -0.000	35.237 -0.000	35.332 -0.000	35.397 -0.000	35.432 -0.000	35.438 -0.000	35.429 -0.000	35.416 -0.000	35.410 -0.000	35.423 -0.000	35.452 -0.000	35.498 -0.000	35.560 -0.000	35.639 -0.000	35.734 -0.000	35.845 -0.000	35.971 -0.000	36.114 -0.000	36.272 -0.000	36.446 -0.000	36.635 -0.000	36.839 -0.000	37.057 -0.000	37.290 -0.000	37.537 -0.000	37.798 -0.000	38.073 -0.000	38.361 -0.000
	35.089 0.000	34.951 0.000	34.514 0.000	33.626 0.000	32.393 0.000	30.952 0.000	29.473 0.000	28.164 0.000	27.246 0.000	26.925 0.000	27.332 0.000	27.218 0.000	27.372 0.000	27.618 0.000	27.887 0.000	28.175 0.000	28.481 0.000	28.806 0.000	29.148 0.000	29.507 0.000	29.883 0.000	30.274 0.000	30.680 0.000	31.101 0.000	31.535 0.000	31.983 0.000	32.444 0.000	32.917 0.000	33.402 0.000	33.898 0.000	34.404 0.000	34.921 0.000	35.448 0.000
	9089.213	9187.475	9282.260	9371.722	9454.121	9527.851	9591.479	9643.766	9683.694	9710.486	9723.620	9724 997	9724 997	9724 997	9724.997	9724 997	9724.997	9724.997	9724.997	9724 997	9724.997	9724.997	9724.997	9724 997	9724.997	9724.997	9724.997	9724.997	9724.997	9724 997	9724.997	9724 997	9724.997
	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642
	6.447	14 447	22.447	30.447	38.447	46.447	54.447	62.447	70.447	78.447	86.447	000 06	000 06	000 06	90.000	000.06	90.000	90.000	90.000	000.06	90.000	000.06	90.000	000 06	90.000	90.000	90.000	000.06	90.000	000.06	90.000	000 06	90.000
3/20/24, 10:42 AM	9300.000	9400.000	9500.000	9600.000	9700.000	9800.000	9900.000	10000.000	10100.000	10200.000	10300.000	10344.417	10400.000	10500.000	10600.000	10700.000	10800.000	10900.000	11000.000	11100.000	11200.000	11300.000	11400.000	11500.000	11600.000	11700.000	11800.000	11900.000	12000.000	12100.000	12200.000	12300.000	12400.000
	eleas	ed t	o In	agi	ng:	10/2	2/202	24 2	:52:	25 1	PM																						

	86.415 MWD+IFR1+MS	85.429 MWD+IFR1+MS	84.208 MWD+IFR1+MS	82.651 MWD+IFR1+MS	80.593 MWD+IFR1+MS	77.755 MWD+IFR1+MS	73.661 MWD+IFR1+MS	67.533 MWD+IFR1+MS	58.472 MWD+IFR1+MS	46.843 MWD+IFR1+MS	35.644 MWD+IFR1+MS	27.345 MWD+IFR1+MS	21.802 MWD+IFR1+MS	18.082 MWD+IFR1+MS	15.484 MWD+IFR1+MS	13.589 MWD+IFR1+MS	12.153 MWD+IFR1+MS	11.029 MWD+IFR1+MS	10.125 MWD+IFR1+MS	9.382 MWD+IFR1+MS	8.760 MWD+IFR1+MS	8,230 MWD+IFR1+MS	7.774 MWD+IFR1+MS	7.375 MWD+IFR1+MS	7.024 MWD+IFR1+MS	6.711 MWD+IFR1+MS	6.431 MWD+IFR1+MS	6.178 MWD+IFR1+MS	5.948 MWD+IFR1+MS	5.738 MWD+IFR1+MS	5.545 MWD+IFR1+MS	5.368 MWD+IFR1+MS	5.203 MWD+IFR1+MS
	38.651	38 959	39.277	39.604	39 939	40.277	40.614	40.939	41.232	41.466	41 626	41.727	41.793	41.842	41.880	41 912	41.941	41.968	41.993	42.018	42.042	42.066	42.090	42.113	42 138	42.162	42.186	42.211	42.237	42.262	42.288	42.314	42.341
	41.874	41.890	41.909	41.931	41.958	41.994	42.042	42.114	42.228	42.413	42.683	43.021	43.403	43.814	44.244	44.689	45.146	45.614	46.091	46.578	47.072	47.575	48.085	48.602	49.125	49.656	50.192	50.735	51.283	51.837	52.397	52.961	53.531
oort	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000
Well Plan Report	35.985 0.000	36.530 0.000	37.084 0.000	37.646 0.000	38.216 0.000	38.793 0.000	39.378 0.000	39.969 0.000	40.567 0.000	41.171 0.000	41.782 0.000	42.398 0.000	43.019 0.000	43.646 0.000	44.278 0.000	44.915 0.000	45.556 0.000	46.202 0.000	46.852 0.000	47.506 0.000	48.163 0.000	48.825 0.000	49.490 0.000	50.159 0.000	50.831 0.000	51.506 0.000	52.185 0.000	52.866 0.000	53.550 0.000	54.237 0.000	54.926 0.000	55.618 0.000	56.313 0.000
	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
	38.662	38.975	39 302	39 640	39 990	40.351	40.724	41.107	41.502	41.906	42.320	42.744	43.178	43.621	44.072	44.532	45.001	45.477	45.961	46.453	46.952	47.459	47.972	48.492	49.018	49.551	50.089	50.634	51 184	51.739	52.300	52.866	53.437
	0.000	0000	000.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0000	0.000	0.000	0.000
	35.985	36.530	37 084	37 646	38.216	38.793	39.378	39.969	40.567	41.171	41.782	42.398	43.019	43.646	44.278	44.915	45.556	46.202	46.852	47.506	48.163	48.825	49.490	50.159	50.831	51.506	52.185	52.866	53 550	54.237	54.926	55.618	56.313
	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997
	179.642	179 642	179 642	179 642	179 642	179.642	179.642	179.642	179.642	179.642	179 642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179 642	179.642	179.642	179.642	179 642	179.642	179.642	179.642	179.642
	90.000	000 06	000 06	000 06	000 06	90.000	90.000	90.000	90.000	90.000	000 06	000.06	000'06	90.000	90.000	000.06	90.000	90.000	90.000	000.06	90.000	000.06	90.000	90.000	000.06	90.000	000.06	000'06	000 06	000.06	90.000	90.000	90.000
3/20/24, 10:42 AM	12500.000	12600.000	12700.000	12800.000	12900.000	13000.000	13100.000	13200.000	13300.000	13400.000	13500.000	13600.000	13700.000	13800.000	13900.000	14000.000	14100.000	14200.000	14300.000	14400.000	14500.000	14600.000	14700.000	14800.000	14900.000	15000.000	15100.000	15200,000	15300.000	15400.000	15500.000	15600.000	15700.000
	eleas	ed t	o In	agi	ng:	10/2	2/202	24 2	:52:	25 1	PM																						

	5.050 MWD+IFR1+MS	4.908 MWD+IFR1+MS	4.775 MWD+IFR1+MS	4.649 MWD+IFR1+MS	4.532 MWD+IFR1+MS	4.421 MWD+IFR1+MS	4.316 MWD+IFR1+MS	4.217 MWD+IFR1+MS	4.123 MWD+IFR1+MS	4.033 MWD+IFR1+MS	3.948 MWD+IFR1+MS	3.866 MWD+IFR1+MS	3.789 MWD+IFR1+MS	3.714 MWD+IFR1+MS	3.643 MWD+IFR1+MS	3.575 MWD+IFR1+MS	3.509 MWD+IFR1+MS	3.447 MWD+IFR1+MS	3.386 MWD+IFR1+MS	3.328 MWD+IFR1+MS	3.271 MWD+IFR1+MS	3.217 MWD+IFR1+MS	3.165 MWD+IFR1+MS	3.114 MWD+IFR1+MS	3.065 MWD+IFR1+MS	3.017 MWD+IFR1+MS	2.972 MWD+IFR1+MS	2.927 MWD+IFR1+MS	2.884 MWD+IFR1+MS	2.842 MWD+IFR1+MS	2.801 MWD+IFR1+MS	2.762 MWD+IFR1+MS	2.723 MWD+IFR1+MS
	42.368	42.396	42.424	42.453	42.482	42.511	42.541	42.572	42.603	42.634	42.666	42.698	42.731	42.764	42.798	42.832	42.867	42.902	42.937	42.973	43.010	43.047	43.085	43.123	43.161	43.200	43.239	43.279	43.319	43.360	43.401	43,443	43.485
	54 106	54.685	55.269	55.858	56.450	57.047	57.648	58.253	58.861	59.473	60.09	60.708	61.330	61.956	62.584	63.216	63.851	64.488	65.129	65.772	66.417	67.065	67.716	68.369	69.024	69.681	70.341	71.003	71.667	72.333	73.001	73.670	74.342
port	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	000'0	0.000	0.000	0.000	0.000	0.000
Well Plan Report	57.009 0.000	57.708 0.000	58.410 0.000	59.113 0.000	59.818 0.000	60.525 0.000	61.235 0.000	61.946 0.000	62.658 0.000	63.373 0.000	64.089 0.000	64.807 0.000	65.526 0.000	66.247 0.000	000.0 696.99	67.692 0.000	68.417 0.000	69.143 0.000	69.871 0.000	70.599 0.000	71.329 0.000	72.060 0.000	72.793 0.000	73.526 0.000	74.260 0.000	74.995 0.000	75.732 0.000	76.469 0.000	77.207 0.000	77.946 0.000	78.686 0.000	79.427 0.000	80.169 0.000
	54.013 -0.000	54.593 -0.000	55.178 -0.000	55.768 -0.000	56.361 -0.000	56.959 -0.000	57.561 -0.000	58.166 -0.000	58.775 -0.000	59.388 -0.000	000.0- 200.09	60.624 -0.000	61.248 -0.000	61.874 -0.000	62.503 -0.000	63.136 -0.000	63.771 -0.000	64.409 -0.000	65.050 -0.000	65.694 -0.000	66.340 -0.000	000.0- 886.99	67.640 -0.000	68.293 -0.000	68.949 -0.000	000.0- 709.69	70.267 -0.000	70.930 -0.000	71.594 -0.000	72.260 -0.000	72.929 -0.000	73.599 -0.000	74.271 -0.000
	57.009 0.000	57.708 0.000	58.410 0.000	59.113 0.000	59.818 0.000	60.525 0.000	61.235 0.000	61.946 0.000	62.658 0.000	63.373 0.000	64.089 0.000	64.807 0.000	65.526 0.000	66.247 0.000	000.0 696.99	67.692 0.000	68.417 0.000	69.143 0.000	69.871 0.000	70.599 0.000	71.329 0.000	72.060 0.000	72.793 0.000	73.526 0.000	74.260 0.000	74.995 0.000	75.732 0.000	76.469 0.000	77.207 0.000	77.946 0.000	78.686 0.000	79.427 0.000	80.169 0.000
	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997	9724.997
	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642	179.642
	000 06	000 06	000 06	000 06	90.000	000.06	90.000	000 06	90.000	000 06	000.06	000 06	000.06	000'06	90.000	000.06	000 06	90.000	90.000	000.06	90.000	000.06	000.06	000.06	000 06	000 06	90.000	000'06	000 06	000 06	90.000	000.06	90.000
3/20/24, 10:42 AM	15800.000	15900,000	16000.000	16100.000	16200.000	16300.000	16400.000	16500.000	16600.000	16700.000	16800.000	16900,000	17000.000	17100.000	17200.000	17300.000	17400.000	17500.000	17600.000	17700.000	17800.000	17900.000	18000.000	18100.000	18200.000	18300.000	18400.000	18500.000	18600.000	18700,000	18800.000	18900.000	19000.000
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19100.000	000.06	179.642	9724.997	80.911 0.000	74.945 -0.000	80.911 0.000	0.000	75.015	43.528	2.686 MWD+IFR1+MS
19200.000	90.000	179.642	9724.997	81.655 0.000	75.621 -0.000	81.655 0.000	0.000	75.690	43.571	2.649 MWD+IFR1+MS
19300.000	000 06	179.642	9724.997	82.399 0.000	76.298 -0.000	82.399 0.000	0.000	76.367	43.615	2.614 MWD+IFR1+MS
19400.000	000.06	179.642	9724.997	83.144 0.000	76.977 -0.000	83.144 0.000	0.000	77.046	43.659	2.580 MWD+IFR1+MS
9500.000	000.06	179.642	9724.997	83.889 0.000	77.658 -0.000	83.889 0.000	0.000	77.726	43.703	2.546 MWD+IFR1+MS
19600.000	90.000	179.642	9724.997	84.636 0.000	78.340 -0.000	84.636 0.000	0.000	78.408	43.748	2.513 MWD+IFR1+MS
9700.000	90.000	179.642	9724.997	85.382 0.000	79.024 -0.000	85.382 0.000	0.000	79.091	43.793	2.481 MWD+IFR1+MS
19800.000	90.000	179.642	9724.997	86.130 0.000	79.709 -0.000	86.130 0.000	0.000	79.776	43.839	2.450 MWD+IFR1+MS
19900.000	90.000	179.642	9724.997	86.878 0.000	80.396 -0.000	86.878 0.000	0.000	80.462	43.886	2.420 MWD+IFR1+MS
20000.000	90.000	179.642	9724.997	87.627 0.000	81.084 -0.000	87.627 0.000	0.000	81.150	43.932	2.390 MWD+IFR1+MS
20100.000	90.000	179.642	9724.997	88.377 0.000	81.773 -0.000	88.377 0.000	0.000	81.839	43.979	2.361 MWD+IFR1+MS
20200.000	000.06	179.642	9724.997	89.127 0.000	82.464 -0.000	89.127 0.000	0.000	82.529	44.027	2.333 MWD+IFR1+MS
20300.000	000'06	179.642	9724.997	89.878 0.000	83.156 -0.000	89.878 0.000	000.0	83,221	44.075	2.305 MWD+IFR1+MS
20400.000	90.000	179.642	9724.997	90.629 0.000	83.849 -0.000	90.629 0.000	0.000	83.914	44.124	2.278 MWD+IFR1+MS
20500.000	90.000	179.642	9724.997	91.381 0.000	84.544 -0.000	91.381 0.000	0.000	84.608	44.173	2.251 MWD+IFR1+MS
20600.000	000 06	179.642	9724.997	92.133 0.000	85.240 -0.000	92.133 0.000	0.000	85.303	44.222	2.225 MWD+IFR1+MS
20700.000	000 06	179.642	9724.997	92.886 0.000	85.937 -0.000	92.886 0.000	0.000	86.000	44.272	2.200 MWD+IFR1+MS
20800.000	000 06	179.642	9724.997	93.640 0.000	86.635 -0.000	93.640 0.000	0.000	86.698	44.322	2.175 MWD+IFR1+MS
20900.000	000 06	179.642	9724.997	94.394 0.000	87.334 -0.000	94.394 0.000	0.000	87.397	44.373	2.151 MWD+IFR1+MS
21000.000	000 06	179.642	9724.997	95.148 0.000	88.035 -0.000	95.148 0.000	0.000	88.097	44.424	2.127 MWD+IFR1+MS
21100.000	90.000	179.642	9724.997	95.903 0.000	88.736 -0.000	95.903 0.000	0.000	88.798	44.476	2.104 MWD+IFR1+MS
21200.000	000 06	179.642	9724.997	96.659 0.000	89.439 -0.000	96.659 0.000	0.000	89.500	44.528	2.081 MWD+IFR1+MS
21300.000	90.000	179.642	9724.997	97.415 0.000	90.142 -0.000	97.415 0.000	0.000	90.203	44.580	2.058 MWD+IFR1+MS
21400.000	90.000	179.642	9724.997	98.171 0.000	90.847 -0.000	98.171 0.000	0.000	206.06	44.633	2.037 MWD+IFR1+MS
21500.000	90.000	179.642	9724.997	98.928 0.000	91.553 -0.000	98.928 0.000	0.000	91.612	44.686	2.015 MWD+IFR1+MS
21600.000	90.000	179.642	9724.997	99.685 0.000	92.259 -0.000	99.685 0.000	0.000	92.319	44.740	1.994 MWD+IFR1+MS
21700.000	000 06	179.642	9724.997	100.443 0.000	92.967 -0.000	100.443 0.000	0.000	93.026	44.794	1.973 MWD+IFR1+MS
21800.000	000'06	179,642	9724.997	101.201 0.000	93.675 -0.000	101.201 0.000	000'0	93,734	44.849	1,953 MWD+IFR1+MS
21900.000	90.000	179.642	9724.997	101.959 0.000	94.384 -0.000	101.959 0.000	0.000	94.443	44.904	1.933 MWD+IFR1+MS
22000.000	000 06	179.642	9724.997	102.718 0.000	95.094 -0.000	102.718 0.000	0.000	95.152	44.959	1.913 MWD+IFR1+MS
22100.000	90.000	179.642	9724.997	103.478 0.000	95.805 -0.000	103.478 0.000	0.000	95.863	45.015	1.894 MWD+IFR1+MS
22200.000	000'06	179.642	9724.997	104.237 0.000	96.517 -0.000	104.237 0.000	0.000	96.575	45.071	1.875 MWD+IFR1+MS
22300.000	90.000	179.642	9724.997	104.997 0.000	97.230 -0.000	104.997 0.000	0.000	97.287	45.128	1.856 MWD+IFR1+MS

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3/20/24, 10:42 AM							We	Well Plan Report	+			
22400.000	90.000	179.642	90.000 179.642 9724.997	105.758 0.000		-0.000	97.943 -0.000 105.758 0.000	0.000	0.000	98.000	45.185	1.838 MWD+IFR1+MS
22500,000	000'06	179.642	9724.997	106.518 0.000		-0.000	98.658 -0.000 106.518 0.000	0.000	0.000	98.714	45.242	1.820 MWD+IFR1+MS
22600.000	000'06	179.642	9724.997	107.279 0.000		-0.000	99.373 -0.000 107.279	0.000	0.000	99,429	45.300	1.803 MWD+IFR1+MS
22623.912	90.000	179.642	9724.997	107.461 0.000		-0.000	99.543 -0.000 107.461	0.000	0.000	66.599	45.314	1.799 MWD+IFR1+MS
22700.000	90.000		179.642 9724.997	108.039 0.000		-0.000	100.086 -0.000 108.039	0.000	0.000	100.142	45.359	1.786 MWD+IFR1+MS
22713.773	90.000	179 642	9724 997	108.144 0.000		-0.000	100.184 -0.000 108.144	0.000	0.000	100.240	45.367	1.783 MWD+IFR1+MS
Plan Targets		- <b>-</b>	Poker Lake L	Poker Lake Unit 21 DTD South	th 154H							
			Σ	Measured Depth		Gric	<b>Grid Northing</b>		<b>Grid Easting</b>	sting	TVD MSL Target Shape	arget Shape
Target Name				(#)			(#)			(ft)	(¥)	
FTP 17				10097.44			440436.60		638896.60	09'96	6316.00 R	6316.00 RECTANGLE
SHL 23				12532.77			439142.92		639718.93	18.93	7731.00 R	7731.00 RECTANGLE
LTP 17				22623.77			427441.30	_	638977.90	77.90	6316.00 R	6316.00 RECTANGLE
BHL 17				22713.81			427351.30	_	638978.40	78.40	6316.00 R	6316.00 RECTANGLE



XTO respectfully requests approval to utilize a spudder rig to pre-set surface casing.

### **Description of Operations:**

- 1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
  - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
  - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
- 2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
- 3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
  - a. A means for intervention will be maintained while the drilling rig is not over the well.
- 4. Spudder rig operations are expected to take 2-3 days per well on the pad.
- 5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
- 6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled up and tested on the wellhead before drilling operations resume on each well.
  - a. The larger rig will move back onto the location within 90 days from the point at which the wells are secured and the spudder rig is moved off location.
  - b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
- 7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
- 8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.

# 361" Wall) P110 RY USS-FREEDOM HTQ $^{ exttt{R}}$

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

### **Notes**

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

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# 5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-TALON HTQ™ RD

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000	_	psi	_
Maximum Yield Strength	125,000	_	psi	_
Minimum Tensile Strength	125,000	_	psi	-
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		_
Outside Diameter	5.500	5.900	in.	_
Wall Thickness	0.361	<b></b>	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]

### **Notes**

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

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NEW CHOKE HOSE

INSTAUED 02-10-2024

# CERTIFICATE OF CONFORMANCE

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

CU	ST	ON	ER:	
	-			

NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA

CUSTOMER P.O.#:

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

CUSTOMER P/N:

IMR RETEST SN 74621 ASSET #66-1531

PART DESCRIPTION:

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

FLANGES

SALES ORDER #:

529480

QUANTITY:

- 1

SERIAL #:

74621 H3-012524-1

SIGNATURE: 7. CUSTUSE

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

## H3-15/16



1/25/2024 11:48:06 AM

# TEST REPORT

CUSTOMER

Company:

Nabors Industries Inc.

TEST OBJECT

Serial number: H3-012524-1

Lot number:

Production description:

74621/66-1531

Description:

74621/66-1531

Sales order #:

529480

Customer reference:

FG1213

Hose ID:

3" 16C CK

TEST INFORMATION

Test procedure:

GTS-04-053

Fitting 1:

Test pressure:

15000.00 3600.00

Part number:

3.0 x 4-1/16 10K

Test pressure hold:

10000.00

Description:

Part number:

Work pressure:

psi

Fitting 2:

3.0 x 4-1/16 10K

Work pressure hold: Length difference:

Length difference:

Pressure test result:

900.00 0.00

sec % inch

psi

sec

Part number:

Description:

Visual check:

PASS

0.00

Length:

45

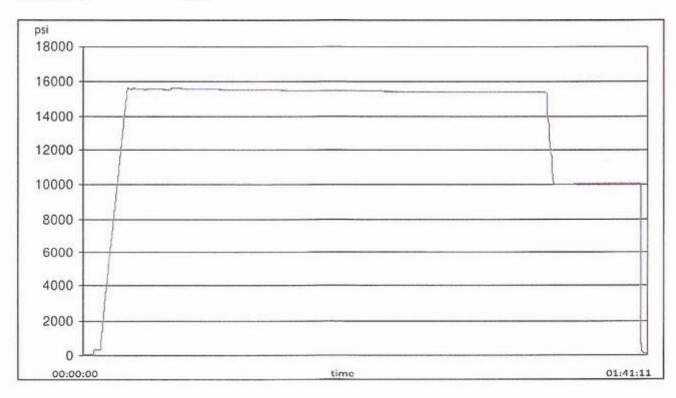
feet

n. . . . 1/2

Length measurement result:

Test operator:

Travis





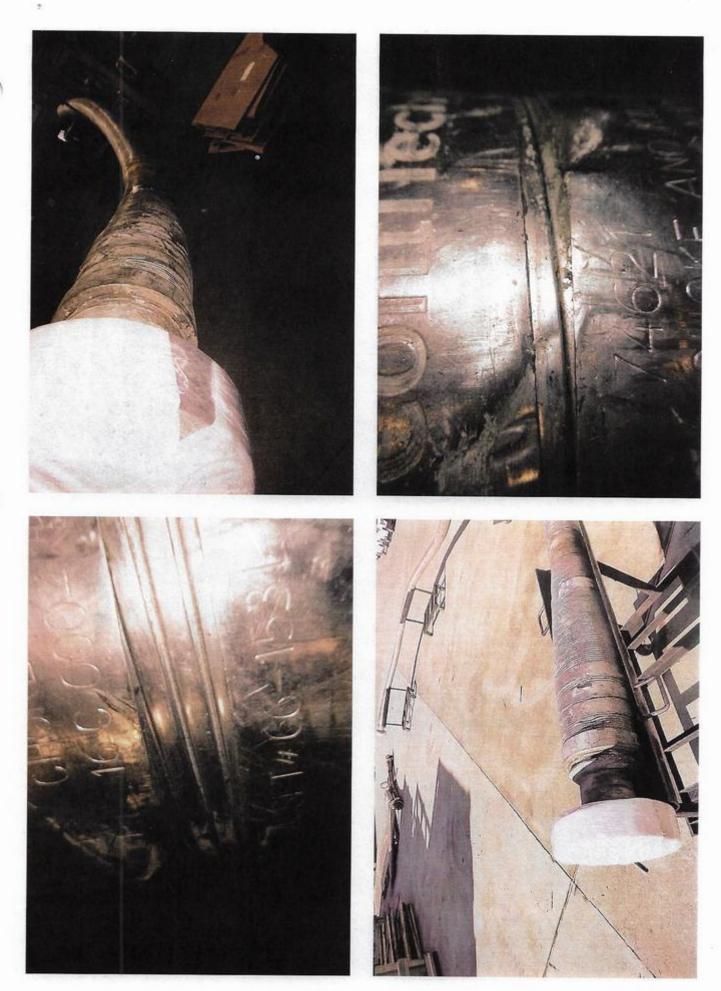
H3-15/16

1/25/2024 11:48:06 AM

# **TEST REPORT**

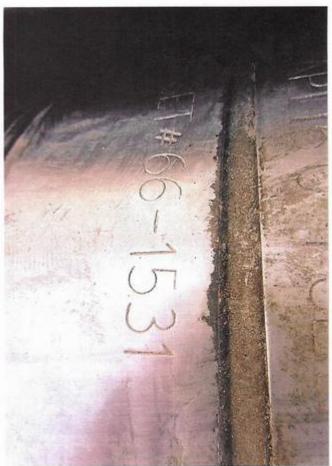
## **GAUGE TRACEABILITY**

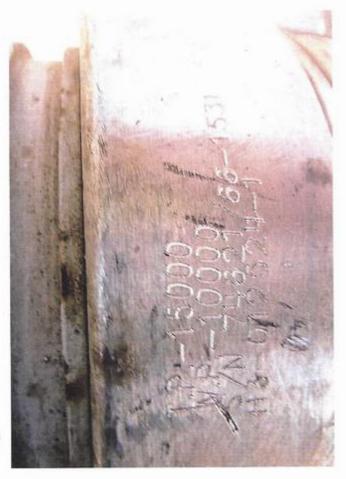
Serial number	Calibration date	Calibration due date
110D3PHO	2023-06-06	2024-06-06
110IQWDG	2023-05-16	2024-05-16
	110D3PHO	110D3PHO 2023-06-06



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

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

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

CONDITIONS

Action 389135

### **CONDITIONS**

Operator:	OGRID:		
XTO PERMIAN OPERATING LLC.	373075		
6401 HOLIDAY HILL ROAD	Action Number:		
MIDLAND, TX 79707	389135		
	Action Type:		
	[C-103] NOI Change of Plans (C-103A)		

#### CONDITIONS

Created	Ву	Condition	Condition Date
ward.r	ikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	10/2/2024