

## Sundry Print Repor

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

Well Name: POKER LAKE UNIT 28 BS Well Location: T25S / R31E / SEC 28 / County or Parish/State: EDDY /

SWNE / 32.101864 / -103.780743 NM

Well Number: 310H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMLC062140A Unit or CA Name: POKER LAKE UNIT Unit or CA Number:

NMNM71016X

US Well Number: Operator: XTO PERMIAN OPERATING

LLC

#### **Notice of Intent**

**Sundry ID: 2820283** 

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 10/31/2024 Time Sundry Submitted: 02:20

Date proposed operation will begin: 11/21/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include KOP, FTP, LTP, BHL, Proposed total Depth, and Pool Code. No additional surface disturbance. FROM: TO: KOP: 2435' FNL & 1921' FEL OF SECTION 28-T25S-R31E 2034' FNL & 1727' FEL OF SECTION 28-T25S-R31E 2551' FSL & 1723' FEL OF SECTION 28-T25S-R31E LTP: 2435' FNL & 1650' FEL OF SECTION 28-T25S-R31E 2551' FSL & 1723' FEL OF SECTION 28-T25S-R31E LTP: 100' FSL & 1650' FEL OF SECTION 4-T26S-R31E 100' FSL & 1712' FEL OF SECTION 4-T26S-R31E BHL: 50' FSL & 1650' FEL OF SECTION 4-T26S-R31E 50' FSL & 1712' FEL OF SECTION 4-T26S-R31E The proposed total depth is changing from 23750' MD; 9950' TVD (Bone Spring 2 Sand) to 24375' MD; 10818' TVD (Bone Spring 3 Shale). Pool code is changing from 97975/ WC-015 G-06 S243119C; Bone Spring to 97860/ Jennings; Bone Spring West A saturated salt brine will be utilized while drilling through the salt formations.

#### **NOI Attachments**

## **Procedure Description**

PLU\_28\_BS\_\_\_\_310H\_Sundry\_Attachments\_20241209110449.pdf

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eceived by OCD: 12/27/2024 11:30:34 AM Well Name: POKER LAKE UNIT 28 BS

Well Location: T25S / R31E / SEC 28 / SWNE / 32.101864 / -103.780743

County or Parish/State: Page 2 of

NM

Zip:

Well Number: 310H

Type of Well: OIL WELL

**Allottee or Tribe Name:** 

Lease Number: NMLC062140A

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number: NMNM71016X

**US Well Number:** 

**Operator: XTO PERMIAN OPERATING** 

LLC

## **Conditions of Approval**

### Additional

Poker Lake Unit 28 BS 309H 310H 209H 210H COA 20241215152022.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: DEC 09, 2024 11:04 AM

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

State:

#### **Field**

**Representative Name:** 

**Street Address:** 

City:

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:** 12/16/2024

Signature: Chris Walls

Page 2 of 2

Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR

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

BURI	EAU OF LAND MANAGEMENT	5. Lease Serial No.			
Do not use this f	OTICES AND REPORTS ON Worm for proposals to drill or to Use Form 3160-3 (APD) for suc	6. If Indian, Allottee or Tribe	Name		
SUBMIT IN 1	TRIPLICATE - Other instructions on pag	ne 2	7. If Unit of CA/Agreement, N	Name and/or No.	
1. Type of Well Oil Well Gas W	/ell Other		8. Well Name and No.		
2. Name of Operator			9. API Well No.		
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or Explorat	tory Area	
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish, State		
12. CHE	CK THE APPROPRIATE BOX(ES) TO IN	DICATE NATURE (	OF NOTICE, REPORT OR OTH	HER DATA	
TYPE OF SUBMISSION		TYPI	E OF ACTION		
Notice of Intent	Acidize Deep Alter Casing Hyde	nen raulic Fracturing	Production (Start/Resume) Reclamation	Water Shut-Off Well Integrity	
Subsequent Report		Construction	Recomplete	Other	
Final Abandonment Notice	= ' = '	and Abandon Back	Temporarily Abandon Water Disposal		
is ready for final inspection.)	tices must be filed only after all requirement	is, menumg recidina	non, have been completed and t	the operator has determined that the Site	
14. I hereby certify that the foregoing is	true and correct. Name (Printed/Typed)				
		Title			
Signature		Date			
	THE SPACE FOR FED	ERAL OR STA	TE OFICE USE		
Approved by					
		Title	]	Date	
	ned. Approval of this notice does not warrar equitable title to those rights in the subject led duct operations thereon.				
	B U.S.C Section 1212, make it a crime for a ents or representations as to any matter with		and willfully to make to any de	epartment or agency of the United States	

(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, 3162.3-4.

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

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

Response to this request is mandatory.

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

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

(Form 3160-5, page 2)

#### **Additional Information**

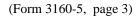
#### **Additional Remarks**

Pool code is changing from 97975/ WC-015 G-06 S243119C; Bone Spring to 97860/ Jennings; Bone Spring West

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

#### **Location of Well**

0. SHL: SWNE / 2435 FNL / 1921 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101864 / LONG: -103.780743 ( TVD: 0 feet, MD: 0 feet ) PPP: SWNE / 2435 FNL / 1650 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101863 / LONG: -103.779868 ( TVD: 9950 feet, MD: 10304 feet ) PPP: SWSE / 0 FNL / 1638 FEL / TWSP: 25S / RANGE: 31E / SECTION: 33 / LAT: 32.093984 / LONG: -103.77989 ( TVD: 9950 feet, MD: 13244 feet ) PPP: SWNE / 2650 FNL / 1649 FEL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.101272 / LONG: -103.779869 ( TVD: 9950 feet, MD: 10604 feet ) BHL: SWSE / 50 FSL / 1650 FEL / TWSP: 26S / RANGE: 31E / SECTION: 4 / LAT: 32.064903 / LONG: -103.77997 ( TVD: 9950 feet, MD: 23750 feet )



# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	XTO
LEASE NO.:	NMLC062140A
LOCATION:	Sec. 28, T.25 S, R 31 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Poker Lake Unit 28 BS 309H
SURFACE HOLE FOOTAGE:	2435'/N & 1951'/E
<b>BOTTOM HOLE FOOTAGE:</b>	50'/S & 2332'/E
WELL NAME & NO.:	Poker Lake Unit 28 BS 310H
SURFACE HOLE FOOTAGE:	2435'/N & 1921'/E
<b>BOTTOM HOLE FOOTAGE:</b>	50'/S & 1712'/E
WELL NAME & NO.:	Poker Lake Unit 28 BS 209H
SURFACE HOLE FOOTAGE:	2435'/N & 2010'/W
BOTTOM HOLE FOOTAGE:	50'/S & 1750'/W
WELL NAME & NO.:	Poker Lake Unit 28 BS 210H
SURFACE HOLE FOOTAGE:	2435'/N & 2040'/W
BOTTOM HOLE FOOTAGE:	50'/S & 2010'/W

COA

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

Changes approved through engineering via **Sundry 2820285,2820283,2820196,2820229\_** on \_12-15-2024\_. Any previous COAs not addressed within the updated COAs still apply.

#### A. HYDROGEN SULFIDE

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

#### **B. CASING**

- 1. The **9-5/8** inch surface casing shall be set at approximately **995** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8 hours</u> or <u>500 pounds compressive strength</u>, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.
  - a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon** at 6873-6900'.
  - 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 <u>High Cave/Karst Areas</u> 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 <u>Intermediate 1</u> annulus after primary cementing stage. <u>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</u>

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.

## 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
  - 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 12/15/2024 575-234-5998 / zstevens@blm.gov

## **GENERAL REQUIREMENTS**

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

- d. Spudding well (minimum of 24 hours)
- e. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- f. BOPE tests (minimum of 4 hours)

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

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- 4. 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.
- 5. 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.
- 6. 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.

#### E. 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.

#### F. 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.

#### G. 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.

#### H. 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 12/15/2024** 575-234-5998 / zstevens@blm.gov

<u>C-10</u>	)2		State of New Mexico									Revised July 9, 2024
Submit E	lectronically		Ene	••			ral Resources Department					Initial Submittal
	Permitting			O	IL CONSER	VA	TION DIVIS	ION		Submi	ittal	Amended Report
										Type:	H	As Drilled
												] As Dimed
APD	ID: 1040	0009497	2		WELL LOCATION	ON I	NFORMATION					
API No 30-0			Pool Code	97860	Pool	Name	JENNING	GS; BO	NE SPRIN	IG; W	VEST	
Proper	ty Code		Property Name	POKI	ER LAKE UNIT 28	BS					Well N	Number
ORGII 3730			Operator Name	ХТО	PERMIAN OPERA	ATINO	G, LLC.					d Level Elevation
Surface	e Owner:	State   F	ee 🗌 Tribal 🔀	Federal			Mineral Owner:	State [	] Fee [] Triba	1 📉 Fee	deral	
					Surfa	ace L	ocation					
UL G	Section 28	Townshi	p Range 31 E	Lot	Ft. from N/S 2.435' FNL		Ft. from E/W 1,921' FEL	Latitud		ongitude		County EDDY
	20	200	312		,		e Location	32.10	71003	-103.70	00742	LDD1
UL	Section	Townshi	.   .	Lot	Ft. from N/S		Ft. from E/W	Latitud		ongitude		County
0	4	26 S	31 E		50' FSL		1,712' FEL	32.06	64902	-103.78	30171	EDDY
Dedica	ited Acres	Infill or D	efining Well	Definin	g Well API		Overlapping Spacing	Unit (Y/N	) Consolida	tion Cod	le	
400			FILL		309H		NO			U		
Order 1	Numbers.		N/A			V	Well setbacks are und	der Commo	on Ownership: [	X Yes	☐ No	
					Kick (	Off P	oint (KOP)					
UL	Section	Townshi	p Range	Lot	Ft. from N/S		Ft. from E/W	Latitud		ongitude		County
G	28	25 S	31 E		2,034' FNL		1,727' FEL	32.10	02966	-103.78	30108	EDDY
UL	Section	Townshi	p Range	Lot	First Ta		Point (FTP)  Ft. from E/W	Latitud	de Lo	ongitude	:	County
J	28	25 S	31 E		2,551' FSL	- 1	1,723' FEL	I		-103.78		EDDY
						ıke P	oint (LTP)					
UL O	Section 4	Townshi 26 S	.   -	Lot	Ft. from N/S 100' FSL		Ft. from E/W 1,712' FEL	32.06		ongitude -103.78		County EDDY
Unitize	ed Area or Are	ea of Unifor	m Interest	Spacin	g Unit Type  X  Hor	rizonta	al 🗆 Vertical		Ground Floor E	Elevation	n:	
	NMNM-0			•	71 <u>M</u> 1101						3,339	<u>'</u>
OPE	RATOR C	ERTIFIC	CATIONS				SURVEYOR (	CERTIF	ICATIONS			
					e and complete to the		I hereby certify the				-	s plotted from field , and that the same
interes	t or unleased	mineral inte	rest in the land in	cluding th	either owns a workin ne proposed bottom h	ole	is true and correct	to the bes	t of my belief.			, and that the same
an own	er of such a n	nineral or w	orking interest, or	to a volı		th	I, TIM C. PAPPAS, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21209, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED  C. PAPA					C. PAPA
	•		ing order heretofe		·	_	WERE PERFORMED BY THAT I AM RESPONSIBL MEETS THE MINIMUM S	LE FOR THIS TANDARDS F	SURVEY, THAT TH OR SURVEYING IN	HIS SURVE NEW		CM MEXICO
the con	isent of at leas	st one lessee	or owner of a wo	rking inte	anization has receive rest or unleased mine	eral	MEXICO, AND THAT IS MY KNOWLEDGE AND B		) Sent :	200L	4	
					ich any part of the we v pooling form the	ell's	$\mathcal{L}^{\mathcal{N}}$		, 50p , 2			21209
completed interval will be located or obtained a compulsory pooling form the division.							TIM C. PAPPAS REGISTERED PROFESSIO	ONAL LAND S	SURVEYOR	\	BA	
Terra Sebastian 10/30/2024							STATE OF NEW MEXICO	NO. 21209	'		1.2	S/ONAL SURVE
Signature Date						Signature and Seal	of Professi	onal Surveyor				
Terr	a Sebast	ian										
Printed	l Name	<del></del>					Certificate Number		Date of Surv	vey		
terra.b.sebastian@exxonmobil.com						TIM C. PAPPAS	S 21209	9/28/20	024			
	Address			-								
	Note: No al	lowable wil	l be assigned to 1	his comp	letion until all intere	ests ha	ve been consolidate	d or a non-	standard unit l	has been	approve	ed by the division.



2821 West 7th Street., Ste 200 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBP15 Firm 10193887
www.fscinc.net
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DATE: DRAWN BY: CHECKED BY: FIELD CREW:

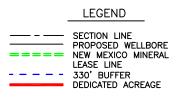
PROJECT NO: SCALE: SHEET: 9-28-2024 LM CH IR REVISION:

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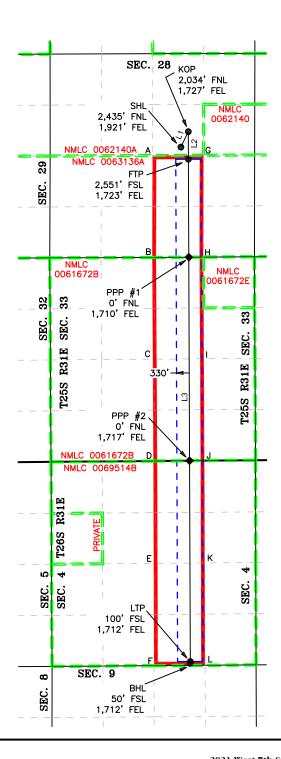
#### ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or a larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is the closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



	<u>LINE TABLE</u>										
LINE	AZIMUTH	LENGTH									
L1	25° 50'13"	445.97'									
L2	179° 46'47''	716.14'									
L3	179° 47'14"	13,130.82'									



SHL (NAD 83 NME)	COORDINATE TABLE									
X =	SH	IL (NAD 83 NN	IE)	FTP (NAD 83 NME)						
LAT. = 32.101865 °N LAT. = 32.100997 °N LONG. = 103.780742 °W LONG. = 103.780111 °W  KOP (NAD 83 NME)  Y = 401,635.0 N X = 712,640.1 E LAT. = 32.102966 °N LONG. = 103.780108 °W  LTP (NAD 83 NME)  Y = 387,838.1 N Y = 387,788.1 N X = 712,691.4 E X = 712,691.6 E LAT. = 32.065040 °N LAT. = 32.064902 °N LONG. = 103.780171 °W LONG. = 103.780171 °W  SHL (NAD 27 NME)  Y = 401,175.7 N Y = 400,860.9 N X = 671,260.0 E X = 671,457.0 E LAT. = 32.101741 °N LAT. = 32.100872 °N LONG. = 103.780265 °W LONG. = 103.779633 °W  KOP (NAD 27 NME)  Y = 401,577.1 N X = 671,454.4 E LAT. = 32.102841 °N LONG. = 103.779630 °W  LTP (NAD 27 NME)  Y = 387,780.6 N Y = 387,730.6 N X = 671,505.2 E X = 671,505.4 E LAT. = 32.064915 °N LAT. = 32.064777 °N LONG. = 103.779695 °W LONG. = 103.779695 °W PPP #1 (NAD 83 NME)  Y = 398,367.6 N Y = 398,309.8 N X = 712,652.3 E X = 671,466.5 E LAT. = 32.093984 °N LAT. = 32.093589 °N LONG. = 103.780122 °W LONG. = 103.779645 °W PPP #2 (NAD 83 NME)  Y = 393,007.2 N Y = 393,009.5 N X = 712,672.0 E X = 671,486.0 E LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =	401,233.6	N	Y =	400,918.8	N				
LONG. =   103.780742   °W   LONG. =   103.780111   °W     KOP (NAD 83 NME)     Y =	X =	712,445.7	Е		712,642.8	_				
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Y =       401,635.0       N         X =       712,640.1       E         LAT. =       32.102966       °N         LONG. =       103.780108       °W         LTP (NAD 83 NME)         BHL (NAD 83 NME)         Y =       387,838.1       N       Y =       387,788.1       N         X =       712,691.4       E       X =       712,691.6       E         LAT. =       32.065040       °N       LAT. =       32.064902       °N         LONG. =       103.780171       °W       LONG. =       103.780171       °W         SHL (NAD 27 NME)       FTP (NAD 27 NME)         Y =       401,175.7       N       Y =       400,860.9       N         X =       671,457.0       E         LAT. =       32.101741       °N       LAT. =       32.100872       °N         LONG. =       103.780265       °W       LONG. =       103.779633       °W         KOP (NAD 27 NME)         Y =       401,577.1       N       N       X =       671,505.4       E       LAT. =       32.064777       °N	LONG. =	103.780742	°W	LONG. =	103.780111	°W				
X =   712,640.1   E   LAT. =   32.102966   °N   LONG. =   103.780108   °W     ETP (NAD 83 NME)   SHL (NAD 83 NME)   Y =   387,838.1   N   Y =   387,788.1   N   X =   712,691.4   E   X =   712,691.6   E   LAT. =   32.065040   °N   LAT. =   32.064902   °N   LONG. =   103.780171   °W   LONG. =   103.780171   °W   SHL (NAD 27 NME)   FTP (NAD 27 NME)   Y =   401,175.7   N   Y =   400,860.9   N   X =   671,260.0   E   X =   671,457.0   E   LAT. =   32.101741   °N   LAT. =   32.100872   °N   LONG. =   103.780265   °W   LONG. =   103.779633   °W   WOME   WOME	KC	P (NAD 83 NN	IE)							
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LTP (NAD 83 NME)   BHL (NAD 83 NME)	LAT. =	32.102966								
Y =         387,838.1         N         Y =         387,788.1         N           X =         712,691.4         E         X =         712,691.6         E           LAT. =         32.065040         °N         LAT. =         32.064902         °N           LONG. =         103.780171         °W         LONG. =         103.780171         °W           SHL (NAD 27 NME)         FTP (NAD 27 NME)           Y =         401,175.7         N         Y =         400,860.9         N           X =         671,260.0         E         X =         671,457.0         E           LAT. =         32.101741         °N         LAT. =         32.100872         °N           LONG. =         103.780265         °W         LONG. =         103.779633         °W           KOP (NAD 27 NME)           Y =         401,577.1         N         N         X =         671,454.4         E           LAT. =         32.102841         °N         N         X =         671,505.4         E           LAT. =         32.064915         °N         LAT. =         32.064777         °N           LONG. =         103.779695         °W         L										
X =         712,691.4         E         X =         712,691.6         E           LAT. =         32.065040         °N         LAT. =         32.064902         °N           LONG. =         103.780171         °W         LONG. =         103.780171         °W           SHL (NAD 27 NME)           Y =         401,175.7         N         Y =         400,860.9         N           X =         671,260.0         E         X =         671,457.0         E           LAT. =         32.101741         °N         LAT. =         32.100872         °N           LONG. =         103.780265         °W         LONG. =         103.779633         °W           KOP (NAD 27 NME)           Y =         401,577.1         N         N         X =         671,454.4         E           LAT. =         32.102841         °N         N         X =         671,505.4         E           LAT. =         32.102841         °N         X =         671,505.4         E           LAT. =         32.064915         °N         LAT. =         32.064777         °N           LONG. =         103.779695         °W         LONG. =         103.779695	LT	P (NAD 83 NM	IE)	В	HL (NAD 83 NMI	Ε)				
LAT. = 32.065040 °N LAT. = 32.064902 °N  LONG. = 103.780171 °W LONG. = 103.780171 °W  SHL (NAD 27 NME) FTP (NAD 27 NME)  Y = 401,175.7 N Y = 400,860.9 N  X = 671,260.0 E X = 671,457.0 E  LAT. = 32.101741 °N LAT. = 32.100872 °N  LONG. = 103.780265 °W LONG. = 103.779633 °W  KOP (NAD 27 NME)  Y = 401,577.1 N  X = 671,454.4 E  LAT. = 32.102841 °N  LONG. = 103.779630 °W  LTP (NAD 27 NME)  Y = 387,780.6 N Y = 387,730.6 N  X = 671,505.2 E X = 671,505.4 E  LAT. = 32.064915 °N LAT. = 32.064777 °N  LONG. = 103.779695 °W LONG. = 103.779695 °W  PPP #1 (NAD 83 NME) PPP #1 (NAD 27 NME)  Y = 398,367.6 N Y = 398,309.8 N  X = 712,652.3 E X = 671,466.5 E  LAT. = 32.093984 °N LAT. = 32.093589 °N  LONG. = 103.780122 °W LONG. = 103.779645 °W  PPP #2 (NAD 83 NME) PPP #2 (NAD 27 NME)  Y = 393,067.2 N Y = 393,009.5 N  X = 712,672.0 E X = 671,486.0 E  LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =	387,838.1	N	Y =	387,788.1	N				
LONG. = 103.780171    °W	X =	712,691.4	Е	X =	712,691.6	_				
SHL (NAD 27 NME)         FTP (NAD 27 NME)           Y =         401,175.7         N         Y =         400,860.9         N           X =         671,260.0         E         X =         671,457.0         E           LAT. =         32.101741         °N         LAT. =         32.100872         °N           LONG. =         103.780265         °W         LONG. =         103.779633         °W           KOP (NAD 27 NME)           Y =         401,577.1         N         N         X =         671,454.4         E           LAT. =         32.102841         °N         N         LONG. =         103.779630         °W           LTP (NAD 27 NME)         BHL (NAD 27 NME)           Y =         387,780.6         N         Y =         387,730.6         N           X =         671,505.2         E         X =         671,505.4         E           LAT. =         32.064915         °N         LAT. =         32.064777         °N           LONG. =         103.779695         °W         LONG. =         103.779695         °W           Y =         398,367.6         N         Y =         398,309.8         N           X	LAT. =	32.065040		LAT. =	32.064902					
Y =       401,175.7       N       Y =       400,860.9       N         X =       671,260.0       E       X =       671,457.0       E         LAT. =       32.101741       °N       LAT. =       32.100872       °N         LONG. =       103.780265       °W       LONG. =       103.779633       °W         KOP (NAD 27 NME)         Y =       401,577.1       N       N       N       N       N       LTP (NAD 27 NME)       BHL (NAD 27 NME)       N       LDONG. =       103.779630       °W       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N       N<	LONG. =	103.780171	°W							
X =         671,260.0         E         X =         671,457.0         E           LAT. =         32.101741         °N         LAT. =         32.100872         °N           LONG. =         103.780265         °W         LONG. =         103.779633         °W           KOP (NAD 27 NME)           Y =         401,577.1         N         N         N         N         LTP (NAD 27 NME)         E         LAT. =         32.102841         °N         N         LONG. =         103.779630         °W         N         Y =         387,730.6         N         Y =         387,730.6         N         X =         671,505.4         E         LAT. =         32.064915         °N         LAT. =         32.064777         °N         N         LAT. =         32.064777         °N         LONG. =         103.779695         °W         LONG. =         103.779695         °W         PPP #1 (NAD 27 NME)         Y =         398,309.8         N         X =         712,652.3         E         X =         671,466.5         E         LAT. =         32.093589         °N           LONG. =         103.780122         °W         LONG. =         103.779645         °W         PPP #2 (NAD 27 NME)         Y =         393,009.5	SH		IE)	F	TP (NAD 27 NM	Ξ)				
LAT. = 32.101741 °N LAT. = 32.100872 °N LONG. = 103.780265 °W LONG. = 103.779633 °W  KOP (NAD 27 NME)  Y = 401,577.1 N  X = 671,454.4 E  LAT. = 32.102841 °N  LONG. = 103.779630 °W  ETP (NAD 27 NME)  Y = 387,780.6 N Y = 387,730.6 N  X = 671,505.2 E X = 671,505.4 E  LAT. = 32.064915 °N LAT. = 32.064777 °N  LONG. = 103.779695 °W LONG. = 103.779695 °W  PPP #1 (NAD 83 NME)  Y = 398,367.6 N Y = 398,309.8 N  X = 712,652.3 E X = 671,466.5 E  LAT. = 32.093984 °N LAT. = 32.093589 °N  LONG. = 103.780122 °W LONG. = 103.779645 °W  PPP #2 (NAD 83 NME)  Y = 393,067.2 N Y = 393,009.5 N  X = 712,672.0 E X = 671,486.0 E  LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =	401,175.7	N	Y =	400,860.9	N				
LONG. = 103.780265	X =	671,260.0	Е	X =	671,457.0	Е				
KOP (NAD 27 NME)           Y =         401,577.1         N           X =         671,454.4         E           LAT. =         32.102841         °N           LONG. =         103.779630         °W           LTP (NAD 27 NME)           Y =         387,780.6         N           X =         671,505.2         E           LAT. =         32.064915         °N           LAT. =         32.064777         °N           LONG. =         103.779695         °W           LONG. =         103.779695         °W           PPP #1 (NAD 83 NME)         PPP #1 (NAD 27 NME)           Y =         398,367.6         N         Y =         398,309.8         N           X =         712,652.3         E         X =         671,466.5         E           LAT. =         32.093984         °N         LAT. =         32.093589         °N           LONG. =         103.780122         °W         LONG. =         103.779645         °W           PPP #2 (NAD 83 NME)         PPP #2 (NAD 27 NME)         Y =         393,009.5         N           X =         712,672.0         E         X =         671,486.0         E </td <td>LAT. =</td> <td>32.101741</td> <td>°N</td> <td>LAT. =</td> <td>32.100872</td> <td>°N</td>	LAT. =	32.101741	°N	LAT. =	32.100872	°N				
Y =       401,577.1       N         X =       671,454.4       E         LAT. =       32.102841       °N         LONG. =       103.779630       °W         ETP (NAD 27 NME)         BHL (NAD 27 NME)       BHL (NAD 27 NME)         Y =       387,780.6       N         X =       671,505.2       E         LAT. =       32.064915       °N         LAT. =       32.064777       °N         LONG. =       103.779695       °W         LONG. =       103.779695       °W         PP #1 (NAD 83 NME)       PPP #1 (NAD 27 NME)         Y =       398,367.6       N       Y =       398,309.8       N         X =       712,652.3       E       X =       671,466.5       E         LAT. =       32.093984       °N       LAT. =       32.093589       °N         LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E				LONG. =	103.779633	°W				
X =       671,454.4       E         LAT. =       32.102841       °N         LONG. =       103.779630       °W         BHL (NAD 27 NME)         Y =       387,780.6       N         X =       671,505.2       E         LAT. =       32.064915       °N         LAT. =       32.064777       °N         LONG. =       103.779695       °W         LONG. =       103.779695       °W         PPP #1 (NAD 83 NME)       PPP #1 (NAD 27 NME)         Y =       398,367.6       N       Y =       398,309.8       N         X =       712,652.3       E       X =       671,466.5       E         LAT. =       32.093984       °N       LAT. =       32.093589       °N         LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N			IE)							
LAT. = 32.102841 °N  LONG. = 103.779630 °W   TTP (NAD 27 NME) BHL (NAD 27 NME)  Y = 387,780.6 N Y = 387,730.6 N  X = 671,505.2 E X = 671,505.4 E  LAT. = 32.064915 °N LAT. = 32.064777 °N  LONG. = 103.779695 °W LONG. = 103.779695 °W  PPP #1 (NAD 83 NME) PPP #1 (NAD 27 NME)  Y = 398,367.6 N Y = 398,309.8 N  X = 712,652.3 E X = 671,466.5 E  LAT. = 32.093984 °N LAT. = 32.093589 °N  LONG. = 103.780122 °W LONG. = 103.779645 °W  PPP #2 (NAD 83 NME) PPP #2 (NAD 27 NME)  Y = 393,067.2 N Y = 393,009.5 N  X = 712,672.0 E X = 671,486.0 E  LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =	401,577.1								
LONG. = 103.779630 °W  LTP (NAD 27 NME)  Y = 387,780.6 N Y = 387,730.6 N  X = 671,505.2 E X = 671,505.4 E  LAT. = 32.064915 °N LAT. = 32.064777 °N  LONG. = 103.779695 °W LONG. = 103.779695 °W  PPP #1 (NAD 83 NME)  Y = 398,367.6 N Y = 398,309.8 N  X = 712,652.3 E X = 671,466.5 E  LAT. = 32.093984 °N LAT. = 32.093589 °N  LONG. = 103.780122 °W LONG. = 103.779645 °W  PPP #2 (NAD 83 NME)  PPP #2 (NAD 83 NME)  Y = 393,067.2 N Y = 393,009.5 N  X = 712,672.0 E X = 671,486.0 E  LAT. = 32.079414 °N LAT. = 32.079289 °N	X =	671,454.4	Е							
LTP (NAD 27 NME)         BHL (NAD 27 NME)           Y =         387,780.6         N           X =         671,505.2         E           LAT. =         32.064915         °N           LAT. =         32.064777         °N           LONG. =         103.779695         °W           LONG. =         103.779695         °W           PPP #1 (NAD 83 NME)         PPP #1 (NAD 27 NME)           Y =         398,367.6         N         Y =         398,309.8         N           X =         712,652.3         E         X =         671,466.5         E           LAT. =         32.093984         °N         LAT. =         32.093589         °N           LONG. =         103.780122         °W         LONG. =         103.779645         °W           PPP #2 (NAD 83 NME)         PPP #2 (NAD 27 NME)         Y =         393,009.5         N           X =         712,672.0         E         X =         671,486.0         E           LAT. =         32.079414         °N         LAT. =         32.079289         °N	LAT. =	32.102841								
Y =       387,780.6       N       Y =       387,730.6       N         X =       671,505.2       E       X =       671,505.4       E         LAT. =       32.064915       °N       LAT. =       32.064777       °N         LONG. =       103.779695       °W       LONG. =       103.779695       °W         PPP #1 (NAD 83 NME)       PPP #1 (NAD 27 NME)         Y =       398,367.6       N       Y =       398,309.8       N         X =       712,652.3       E       X =       671,466.5       E         LAT. =       32.093984       °N       LAT. =       32.093589       °N         LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N										
X =       671,505.2       E       X =       671,505.4       E         LAT. =       32.064915       °N       LAT. =       32.064777       °N         LONG. =       103.779695       °W       LONG. =       103.779695       °W         PPP #1 (NAD 27 NME)         Y =       398,367.6       N       Y =       398,309.8       N         X =       712,652.3       E       X =       671,466.5       E         LAT. =       32.093984       °N       LAT. =       32.093589       °N         LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N	LT		IE)			Ε)				
LAT. = 32.064915 °N LAT. = 32.064777 °N LONG. = 103.779695 °W LONG. = 103.779695 °W  PPP #1 (NAD 83 NME) PPP #1 (NAD 27 NME)  Y = 398,367.6 N Y = 398,309.8 N  X = 712,652.3 E X = 671,466.5 E  LAT. = 32.093984 °N LAT. = 32.093589 °N LONG. = 103.780122 °W LONG. = 103.779645 °W  PPP #2 (NAD 83 NME) PPP #2 (NAD 27 NME)  Y = 393,067.2 N Y = 393,009.5 N  X = 712,672.0 E X = 671,486.0 E  LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =	387,780.6	Ν	Y =	387,730.6					
LONG. =         103.779695         °W         LONG. =         103.779695         °W           PPP #1 (NAD 83 NME)         PPP #1 (NAD 27 NME)           Y =         398,367.6         N         Y =         398,309.8         N           X =         712,652.3         E         X =         671,466.5         E           LAT. =         32.093984         °N         LAT. =         32.093589         °N           LONG. =         103.780122         °W         LONG. =         103.779645         °W           PPP #2 (NAD 83 NME)         PPP #2 (NAD 27 NME)           Y =         393,067.2         N         Y =         393,009.5         N           X =         712,672.0         E         X =         671,486.0         E           LAT. =         32.079414         °N         LAT. =         32.079289         °N	X =	671,505.2	Е	X =	671,505.4					
PPP #1 (NAD 83 NME)         PPP #1 (NAD 27 NME)           Y =         398,367.6         N         Y =         398,309.8         N           X =         712,652.3         E         X =         671,466.5         E           LAT. =         32.093984         °N         LAT. =         32.093589         °N           LONG. =         103.780122         °W         LONG. =         103.779645         °W           PPP #2 (NAD 83 NME)         PPP #2 (NAD 27 NME)           Y =         393,067.2         N         Y =         393,009.5         N           X =         712,672.0         E         X =         671,486.0         E           LAT. =         32.079414         °N         LAT. =         32.079289         °N										
Y =       398,367.6       N       Y =       398,309.8       N         X =       712,652.3       E       X =       671,466.5       E         LAT. =       32.093984       °N       LAT. =       32.093589       °N         LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N	LONG. =	103.779695	°W	LONG. =	103.779695	°W				
X =       712,652.3       E       X =       671,466.5       E         LAT. =       32.093984       °N       LAT. =       32.093589       °N         LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N		#1 (NAD 83 N	ME)			ΛE)				
LAT. = 32.093984 °N LAT. = 32.093589 °N LONG. = 103.780122 °W LONG. = 103.779645 °W  PPP #2 (NAD 83 NME) PPP #2 (NAD 27 NME)  Y = 393,067.2 N Y = 393,009.5 N  X = 712,672.0 E X = 671,486.0 E  LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =		Ν	Y =						
LONG. =       103.780122       °W       LONG. =       103.779645       °W         PPP #2 (NAD 83 NME)       PPP #2 (NAD 27 NME)         Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N	X =	712,652.3	Е	X =	671,466.5	Е				
PPP #2 (NAD 83 NME)         PPP #2 (NAD 27 NME)           Y =         393,067.2         N         Y =         393,009.5         N           X =         712,672.0         E         X =         671,486.0         E           LAT. =         32.079414         °N         LAT. =         32.079289         °N	LAT. =	32.093984		LAT. =	32.093589					
Y =       393,067.2       N       Y =       393,009.5       N         X =       712,672.0       E       X =       671,486.0       E         LAT. =       32.079414       °N       LAT. =       32.079289       °N				LONG. =	103.779645	°W				
X = 712,672.0 E X = 671,486.0 E LAT. = 32.079414 °N LAT. = 32.079289 °N	PPP		ME)			ΛE)				
LAT. = 32.079414 °N LAT. = 32.079289 °N	Y =	393,067.2		-	393,009.5					
=		712,672.0		X =	671,486.0					
LONG. = 103.780147 °W LONG. = 103.779670 °W	LONG. =	103.780147	°W	LONG. =	103.779670	°W				

CORNER COORDINATES (NAD83 NME)										
A - Y =	401.014.4	N	A-X=	711,707.2	E					
B - Y =	398,362.0	N	B - X =	711,700.3	Е					
C - Y =	395,711.7	N	C - X =	711,714.8	Е					
D - Y =	393,060.0	N	D - X =	711,729.2	Е					
E-Y=	390,394.6	N	E - X =	711,738.3	Е					
F - Y =	387,731.0	N	F - X =	711,747.4	Е					
G-Y=	401,020.7	N	G-X=	713,036.5	Е					
H - Y =	398,369.9	N	H - X =	713,031.4	Е					
I-Y=	395,722.1	N	E - X =	713,045.2	Е					
J - Y =	393,070.2	N	F - X =	713,059.0	Е					
K - Y =	390,405.5	N	G - X =	713,067.5	Е					
L - Y =	387,741.0	Ν	H-X=	713,075.6	Е					
CC	RNER COO	RDII	NATES (I	NAD27 NME)						
A - Y =	400,956.5	Ν	A - X =	670,521.5	Е					
B - Y =	398,304.2	Ν	B - X =	670,514.5	Е					
C - Y =	395,654.0	Ν	C - X =	670,528.9	Е					
D - Y =	393,002.3	Ν	D - X =	670,543.2	Е					
E-Y=	390,337.0	N	E - X =	670,552.2	Е					
F-Y=	387,673.5	Ν	F - X =	670,561.2	Е					
G-Y=	400,962.8	Ν	G - X =	671,850.7	Е					
H - Y =	398,312.1	N	H-X=	671,845.5	Е					
I - Y =	395,664.4	N	E - X =	671,859.3	Ε					
J-Y=	393,012.5	Ν	F - X =	671,873.0	Ε					
K - Y =	390,347.9	N	G-X=	671,881.4	Е					
L - Y =	387,683.5	N	H-X=	671,889.4	Е					



DATE: 9-28-2024 DRAWN BY: LM CHECKED BY: СН FIELD CREW: IR PROJECT NO: 2023040166 SCALE: SHEET. REVISION:

1" = 2,500' 2 OF 2 NO

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

XTO Energy Inc.
POKER LAKE UNIT 28 BS 310H
Projected TD: 24375.43' MD / 10818' TVD
SHL: 2435' FNL & 1921' FEL , Section 28, T25S, R31E
BHL: 50' FSL & 1712' FEL , Section 4, T26S, R31E
EDDY County, NM

## 1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	895'	Water
Top of Salt	1229'	Water
Base of Salt	4031'	Water
Delaware	4236'	Water
Brushy Canyon	6900'	Water/Oil/Gas
Bone Spring	8187'	Water
Avalon	8312'	Water/Oil/Gas
1st Bone Spring	8941'	Water/Oil/Gas
2nd Bone Spring	9461'	Water/Oil/Gas
3rd Bone Spring	10295'	Water/Oil/Gas
Target/Land Curve	10818'	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 @ 995' (234' 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 9920.04' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 24375.43 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9620.04 feet).

#### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 995'	9.625	40	J-55	втс	New	1.61	6.33	15.83
8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.82	2.86	1.89
8.75	4000' – 9920.04'	7.625	29.7	HC L-80	Flush Joint	New	2.05	2.31	2.31
6.75	0' - 9820.04'	5.5	20	RY P-110	Freedom/Semi- Permium	New	1.05	2.13	2.02
6.75	9820.04' - 24375.43'	5.5	20	RY P-110	Talon/Semi- Flush	New	1.05	1.93	2.02

 $<sup>\</sup>cdot$  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).

#### Wellhead:

Operator will utilize Multibowl System - SEE ATTACHED

#### 4. Cement Program

#### Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 995'

Lead: 230 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

#### Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9920.04'

1st Stage

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

TOC: Surface

Tail: 280 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6900

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

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
Tail: 780 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Top of Cement: 0

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

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6900') 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 Talon/Semi-Flush, RY P-110 casing to be set at +/- 24375.43'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9620.04 feet
Tail: 1020 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10120.04 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

#### 5. Pressure Control Equipment

Once the permanent WH is installed on the surface casing, the blow out preventer equipment (BOP) will consist of a **5M Hydril Annular** and **a 10M Triple Ram** BOP

All BOP testing will be done by an independent service company. Operator will test as per BLM CFR43-3172

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

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

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

#### 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss	Additional Comments
			(ppg)	(Sec/qt)	(cc)	
0' - 995'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
995' - 9920.04'	8.75	Saturated brine for salt interval / Direct Emulsion	9-9.5	30-32	NC	Fully saturated salt across salado / salt
9920.04' - 24375.43'	6.75	ОВМ	10.2-10.7	50-60	NC - 20	N/A

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

Spud with fresh water/native mud. Drill out from under surface casing with Saturated Salt. A saturated salt 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 170 to 190 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.

#### 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 28 BS 310H

 Measured Depth:
 24375.43 ft

 TVD RKB:
 10818.00 ft

Location

New Mexico East -Cartographic Reference System: NAD 27 Northing: 401175.70 ft Easting: 671260.00 ft **RKB**: 3371.00 ft **Ground Level:** 3339.00 ft North Reference: Grid Convergence Angle: 0.29 Deg

Plan Sections Poker Lake Unit 28 BS 310H

Measured			TVD			Build	Turn	Dogleg
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft) Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00
1337.72	4.75	25.84	1337.45	8.87	4.30	2.00	0.00	2.00
6480.52	4.75	25.84	6462.55	392.52	190.06	0.00	0.00	0.00
6718.24	0.00	0.00	6700.00	401.39	194.36	-2.00	0.00	2.00
10120.04	0.00	0.00	10101.80	401.39	194.36	0.00	0.00	0.00
11245.04	90.00	179.79	10818.00	-314.80	197.00	8.00	0.00	8.00 FTP8
24325.43	90.00	179.79	10818.00	-13395.10	245.20	0.00	0.00	0.00 LTP 8
24375.43	90.00	179.79	10818.00	-13445.10	245.38	0.00	0.00	0.00 BHL 2

**Position Uncertainty** Poker Lake Unit 28 BS 310H

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

Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	XOMR2_OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.000	0.358	0.179	90.000	XOMR2_OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.310	0.000	0.000	0.717	0.538	90.000	XOMR2_OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.325	0.000	0.000	1.075	0.896	90.000	XOMR2_OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.347	0.000	0.000	1.434	1.255	90.000	XOMR2_OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.374	0.000	0.000	1.792	1.613	90.000	XOMR2_OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.406	0.000	0.000	2.151	1.972	90.000	XOMR2_OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.443	0.000	0.000	2.509	2.330	90.000	XOMR2_OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.485	0.000	0.000	2.868	2.689	90.000	XOMR2_OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.531	0.000	0.000	3.226	3.047	90.000	XOMR2_OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.581	0.000	0.000	3.585	3.405	90.000	XOMR2_OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.634	0.000	0.000	3.943	3.764	90.000	XOMR2_OWSG MWD+IFR1+MS
1200.000	2.000	25.837	1199.980	4.265	0.000	4.156	0.000	2.690	0.000	0.000	4.301	4.121	90.070	XOMR2_OWSG MWD+IFR1+MS
1300.000	4.000	25.837	1299.838	4.616	0.000	4.511	0.000	2.747	0.000	0.000	4.659	4.477	90.340	XOMR2_OWSG MWD+IFR1+MS
1337.719	4.754	25.837	1337.447	4.747	0.000	4.645	0.000	2.768	0.000	0.000	4.795	4.611	90.575	XOMR2_OWSG MWD+IFR1+MS
1400.000	4.754	25.837	1399.513	4.969	0.000	4.866	0.000	2.806	0.000	0.000	5.017	4.832	90.604	XOMR2_OWSG MWD+IFR1+MS
1500.000	4.754	25.837	1499.169	5.327	0.000	5.222	0.000	2.872	0.000	0.000	5.374	5.187	90.550	XOMR2_OWSG MWD+IFR1+MS
1600.000	4.754	25.837	1598.825	5.685	0.000	5.578	0.000	2.940	0.000	0.000	5.732	5.543	90.523	XOMR2_OWSG MWD+IFR1+MS
1700.000	4.754	25.837	1698.481	6.044	0.000	5.935	0.000	3.011	0.000	0.000	6.090	5.900	90.518	XOMR2_OWSG MWD+IFR1+MS

1800.000	4.754	25.837	1798.137	6.404 (	0.000	6.292	0.000	3.084	0.000	0.000	6.448	6.256	90.530	XOMR2_OWSG MWD+IFR1+MS
1900.000	4.754	25.837	1897.793	6.764 (	0.000	6.649	0.000	3.159	0.000	0.000	6.807	6.614	90.557	XOMR2_OWSG MWD+IFR1+MS
2000.000	4.754	25.837	1997.448	7.124(	0.000	7.007	0.000	3.236	0.000	0.000	7.166	6.971	90.596	XOMR2_OWSG MWD+IFR1+MS
2100.000	4.754	25.837	2097.104	7.485(	0.000	7.365	0.000	3.315	0.000	0.000	7.526	7.329	90.644	XOMR2_OWSG MWD+IFR1+MS
2200.000	4.754	25.837	2196.760	7.845(	0.000	7.723	0.000	3.396	0.000	0.000	7.885	7.687	90.700	XOMR2_OWSG MWD+IFR1+MS
2300.000	4.754	25.837	2296.416	8.206 (	0.000	8.082	0.000	3.479	0.000	0.000	8.245	8.045	90.763	XOMR2_OWSG MWD+IFR1+MS
2400.000	4.754	25.837	2396.072	8.568 (	0.000	8.440	0.000	3.563	0.000	0.000	8.606	8.404	90.832	XOMR2_OWSG MWD+IFR1+MS
2500.000	4.754	25.837	2495.728	8.929 (	0.000	8.799	0.000	3.648	0.000	0.000	8.966	8.762	90.905	XOMR2_OWSG MWD+IFR1+MS
2600.000	4.754	25.837	2595.384	9.291 (	0.000	9.157	0.000	3.736	0.000	0.000	9.326	9.121	90.982	XOMR2_OWSG MWD+IFR1+MS
2700.000	4.754	25.837	2695.040	9.652 (	0.000	9.516	0.000	3.824	0.000	0.000	9.687	9.480	91.062	XOMR2_OWSG MWD+IFR1+MS
2800.000	4.754	25.837	2794.696	10.014 (	0.000	9.875	0.000	3.914	0.000	0.000	10.047	9.838	91.145	XOMR2_OWSG MWD+IFR1+MS
2900.000	4.754	25.837	2894.352	10.376(	0.000	10.234	0.000	4.006	0.000	0.000	10.408	10.197	91.230	XOMR2_OWSG MWD+IFR1+MS
3000.000	4.754	25.837	2994.008	10.738(	0.000	10.593	0.000	4.099	0.000	0.000	10.769	10.556	91.316	XOMR2_OWSG MWD+IFR1+MS
3100.000	4.754	25.837	3093.664	11.100 (	0.000	10.953	0.000	4.193	0.000	0.000	11.130	10.916	91.404	XOMR2_OWSG MWD+IFR1+MS
3200.000	4.754	25.837	3193.319	11.462(	0.000	11.312	0.000	4.289	0.000	0.000	11.491	11.275	91.493	XOMR2_OWSG MWD+IFR1+MS
3300.000	4.754	25.837	3292.975	11.824(	0.000	11.671	0.000	4.386	0.000	0.000	11.852	11.634	91.583	XOMR2_OWSG MWD+IFR1+MS
3400.000	4.754	25.837	3392.631	12.187(	0.000	12.030	0.000	4.484	0.000	0.000	12.213	11.993	91.673	XOMR2_OWSG MWD+IFR1+MS
3500.000	4.754	25.837	3492.287	12.549(	0.000	12.390	0.000	4.584	0.000	0.000	12.575	12.353	91.764	XOMR2_OWSG MWD+IFR1+MS
3600.000	4.754	25.837	3591.943	12.911 (	0.000	12.749	0.000	4.685	0.000	0.000	12.936	12.712	91.855	XOMR2_OWSG MWD+IFR1+MS
3700.000	4.754	25.837	3691.599	13.274(	0.000	13.109	0.000	4.788	0.000	0.000	13.297	13.071	91.946	XOMR2_OWSG MWD+IFR1+MS

3800.000	4.754	25.837	3791.255	13.636 0.000	13.468	0.000	4.892 0.000	0.000	13.659	13.431	92.037 XOMR2_OWSG MWD+IFR1+MS
3900.000	4.754	25.837	3890.911	13.999 0.000	13.828	0.000	4.997 0.000	0.000	14.020	13.790	92.128 XOMR2_OWSG MWD+IFR1+MS
4000.000	4.754	25.837	3990.567	14.361 0.000	14.187	0.000	5.104 0.000	0.000	14.381	14.150	92.218 XOMR2_OWSG MWD+IFR1+MS
4100.000	4.754	25.837	4090.223	14.724 0.000	14.547	0.000	5.213 0.000	0.000	14.743	14.509	92.309 XOMR2_OWSG MWD+IFR1+MS
4200.000	4.754	25.837	4189.879	15.086 0.000	14.906	0.000	5.323 0.000	0.000	15.104	14.869	92.399 XOMR2_OWSG MWD+IFR1+MS
4300.000	4.754	25.837	4289.535	15.449 0.000	15.266	0.000	5.435 0.000	0.000	15.466	15.228	92.489 XOMR2_OWSG MWD+IFR1+MS
4400.000	4.754	25.837	4389.190	15.812 0.000	15.626	0.000	5.548 0.000	0.000	15.828	15.588	92.578 XOMR2_OWSG MWD+IFR1+MS
4500.000	4.754	25.837	4488.846	16.174 0.000	15.985	0.000	5.663 0.000	0.000	16.189	15.948	92.666 XOMR2_OWSG MWD+IFR1+MS
4600.000	4.754	25.837	4588.502	16.537 0.000	16.345	0.000	5.780 0.000	0.000	16.551	16.307	92.755 XOMR2_OWSG MWD+IFR1+MS
4700.000	4.754	25.837	4688.158	16.900 0.000	16.705	0.000	5.898 0.000	0.000	16.913	16.667	92.842 XOMR2_OWSG MWD+IFR1+MS
4800.000	4.754	25.837	4787.814	17.263 0.000	17.064	0.000	6.018 0.000	0.000	17.274	17.027	92.929 XOMR2_OWSG MWD+IFR1+MS
4900.000	4.754	25.837	4887.470	17.625 0.000	17.424	0.000	6.140 0.000	0.000	17.636	17.386	93.016 XOMR2_OWSG MWD+IFR1+MS
5000.000	4.754	25.837	4987.126	17.988 0.000	17.784	0.000	6.264 0.000	0.000	17.998	17.746	93.102 XOMR2_OWSG MWD+IFR1+MS
5100.000	4.754	25.837	5086.782	18.351 0.000	18.144	0.000	6.389 0.000	0.000	18.360	18.106	93.187 XOMR2_OWSG MWD+IFR1+MS
5200.000	4.754	25.837	5186.438	18.714 0.000	18.504	0.000	6.517 0.000	0.000	18.721	18.466	93.272 XOMR2_OWSG MWD+IFR1+MS
5300.000	4.754	25.837	5286.094	19.077 0.000	18.863	0.000	6.646 0.000	0.000	19.083	18.825	93.356 XOMR2_OWSG MWD+IFR1+MS
5400.000	4.754	25.837	5385.750	19.440 0.000	19.223	0.000	6.777 0.000	0.000	19.445	19.185	93.439 XOMR2_OWSG MWD+IFR1+MS
5500.000	4.754	25.837	5485.406	19.803 0.000	19.583	0.000	6.911 0.000	0.000	19.807	19.545	93.522 XOMR2_OWSG MWD+IFR1+MS
5600.000	4.754	25.837	5585.061	20.166 0.000	19.943	0.000	7.046 0.000	0.000	20.169	19.905	93.604 XOMR2_OWSG MWD+IFR1+MS
5700.000	4.754	25.837	5684.717	20.528 0.000	20.303	0.000	7.183 0.000	0.000	20.531	20.265	93.686 XOMR2_OWSG MWD+IFR1+MS

5800.000	4.754	25.837	5784.373	20.891 0.000	20.662	0.000	7.323 0.000	0.000	20.893	20.624	93.767 XOMR2_ MWD+IF	OWSG R1+MS
5900.000	4.754	25.837	5884.029	21.254 0.000	21.022	0.000	7.464 0.000	0.000	21.254	20.984	93.847 XOMR2_ MWD+IF	OWSG R1+MS
6000.000	4.754	25.837	5983.685	21.617 0.000	21.382	0.000	7.608 0.000	0.000	21.616	21.344	93.927 XOMR2_ MWD+IF	
6100.000	4.754	25.837	6083.341	21.980 0.000	21.742	0.000	7.754 0.000	0.000	21.978	21.704	94.006 XOMR2_ MWD+IF	OWSG R1+MS
6200.000	4.754	25.837	6182.997	22.343 0.000	22.102	0.000	7.902 0.000	0.000	22.340	22.064	94.084 XOMR2_ MWD+IF	
6300.000	4.754	25.837	6282.653	22.706 0.000	22.462	0.000	8.053 0.000	0.000	22.702	22.424	94.162 XOMR2_ MWD+IF	OWSG R1+MS
6400.000	4.754	25.837	6382.309	23.069 0.000	22.822	0.000	8.205 0.000	0.000	23.064	22.784	94.239 XOMR2_ MWD+IF	
6480.522	4.754	25.837	6462.553	23.362 0.000	23.112	0.000	8.330 0.000	0.000	23.356	23.073	94.301 XOMR2_ MWD+IF	OWSG R1+MS
6500.000	4.365	25.837	6481.970	23.434 0.000	23.182	0.000	8.360 0.000	0.000	23.426	23.143	94.312 XOMR2_ MWD+IF	
6600.000	2.365	25.837	6581.793	23.788 0.000	23.540	0.000	8.517 0.000	0.000	23.786	23.502	94.357 XOMR2_ MWD+IF	OWSG R1+MS
6700.000	0.365	25.837	6681.759	24.114 0.000	23.897	0.000	8.674 0.000	0.000	24.143	23.858	94.368 XOMR2_ MWD+IF	OWSG R1+MS
6718.241	0.000	0.000	6700.000	24.206 0.000	23.925	0.000	8.703 0.000	0.000	24.208	23.923	94.356 XOMR2_ MWD+IF	OWSG R1+MS
6800.000	0.000	0.000	6781.759	24.495 0.000	24.214	0.000	8.832 0.000	0.000	24.497	24.212	94.263 XOMR2_ MWD+IF	
6900.000	0.000	0.000	6881.759	24.849 0.000	24.568	0.000	8.991 0.000	0.000	24.851	24.566	94.152 XOMR2_ MWD+IF	OWSG R1+MS
7000.000	0.000	0.000	6981.759	25.203 0.000	24.922	0.000	9.153 0.000	0.000	25.204	24.920	94.044 XOMR2_ MWD+IF	OWSG R1+MS
7100.000	0.000	0.000	7081.759	25.557 0.000	25.276	0.000	9.318 0.000	0.000	25.558	25.274	93.938 XOMR2_ MWD+IF	OWSG R1+MS
7200.000	0.000	0.000	7181.759	25.911 0.000	25.630	0.000	9.486 0.000	0.000	25.913	25.629	93.836 XOMR2_ MWD+IF	
7300.000	0.000	0.000	7281.759	26.266 0.000	25.984	0.000	9.656 0.000	0.000	26.267	25.983	93.736 XOMR2_ MWD+IF	OWSG R1+MS
7400.000	0.000	0.000	7381.759	26.620 0.000	26.339	0.000	9.828 0.000	0.000	26.621	26.338	93.639 XOMR2_ MWD+IF	OWSG R1+MS
7500.000	0.000	0.000	7481.759	26.975 0.000	26.693	0.000	10.004 0.000	0.000	26.976	26.692	93.545 XOMR2_ MWD+IF	OWSG R1+MS

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7600.000	0.000	0.000	7581.759	27.329 0.000	27.048	0.000	10.182	0.000	0.000	27.330	27.047	93.452	XOMR2_OWSG MWD+IFR1+MS
7700.000	0.000	0.000	7681.759	27.684 0.000	27.403	0.000	10.363	0.000	0.000	27.685	27.402	93.362	XOMR2_OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7781.759	28.039 0.000	27.758	0.000	10.546	0.000	0.000	28.040	27.757	93.275	XOMR2_OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7881.759	28.394 0.000	28.113	0.000	10.732	0.000	0.000	28.395	28.112	93.189	XOMR2_OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7981.759	28.749 0.000	28.468	0.000	10.921	0.000	0.000	28.750	28.467	93.106	XOMR2_OWSG MWD+IFR1+MS
8100.000	0.000	0.000	8081.759	29.104 0.000	28.823	0.000	11.113	0.000	0.000	29.105	28.822	93.024	XOMR2_OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8181.759	29.459 0.000	29.178	0.000	11.308	0.000	0.000	29.460	29.177	92.945	XOMR2_OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8281.759	29.815 0.000	29.533	0.000	11.505	0.000	0.000	29.815	29.533	92.867	XOMR2_OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8381.759	30.170 0.000	29.889	0.000	11.705	0.000	0.000	30.171	29.888	92.791	XOMR2_OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8481.759	30.525 0.000	30.244	0.000	11.908	0.000	0.000	30.526	30.243	92.717	XOMR2_OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8581.759	30.881 0.000	30.600	0.000	12.114	0.000	0.000	30.881	30.599	92.644	XOMR2_OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8681.759	31.236 0.000	30.955	0.000	12.323	0.000	0.000	31.237	30.955	92.573	XOMR2_OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8781.759	31.592 0.000	31.311	0.000	12.534	0.000	0.000	31.593	31.310	92.504	XOMR2_OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8881.759	31.948 0.000	31.667	0.000	12.749	0.000	0.000	31.948	31.666	92.436	XOMR2_OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8981.759	32.304 0.000	32.022	0.000	12.966	0.000	0.000	32.304	32.022	92.370	XOMR2_OWSG MWD+IFR1+MS
9100.000	0.000	0.000	9081.759	32.659 0.000	32.378	0.000	13.187	0.000	0.000	32.660	32.378	92.305	XOMR2_OWSG MWD+IFR1+MS
9200.000	0.000	0.000	9181.759	33.015 0.000	32.734	0.000	13.410	0.000	0.000	33.016	32.734	92.241	XOMR2_OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9281.759	33.371 0.000	33.090	0.000	13.636	0.000	0.000	33.372	33.090	92.179	XOMR2_OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9381.759	33.727 0.000	33.446	0.000	13.865	0.000	0.000	33.728	33.446	92.118	XOMR2_OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9481.759	34.083 0.000	33.802	0.000	14.097	0.000	0.000	34.084	33.802	92.059	XOMR2_OWSG MWD+IFR1+MS

9600.000	0.000	0.000	9581.759	34.439 0.00	34.158	0.000	14.332 (	0.000	0.000	34.440	34.158	92.000	XOMR2_OWSG MWD+IFR1+MS
9700.000	0.000	0.000	9681.759	34.795 0.00	34.514	0.000	14.570	0.000	0.000	34.796	34.514	91.943	XOMR2_OWSG MWD+IFR1+MS
9800.000	0.000	0.000	9781.759	35.152 0.00	34.870	0.000	14.811 (	0.000	0.000	35.152	34.870	91.887	XOMR2_OWSG MWD+IFR1+MS
9900.000	0.000	0.000	9881.759	35.508 0.00	35.227	0.000	15.055	0.000	0.000	35.508	35.226	91.832	XOMR2_OWSG MWD+IFR1+MS
10000.000	0.000	0.000	9981.759	35.864 0.00	35.583	0.000	15.301	0.000	0.000	35.864	35.583	91.778	XOMR2_OWSG MWD+IFR1+MS
10100.000	0.000	0.000	10081.759	36.220 0.00	35.939	0.000	15.551	0.000	0.000	36.221	35.939	91.725	XOMR2_OWSG MWD+IFR1+MS
10120.044	0.000	0.000	10101.803	36.292 0.00	36.011	0.000	15.602	0.000	0.000	36.292	36.010	91.715	XOMR2_OWSG MWD+IFR1+MS
10200.000	6.396	179.789	10181.593	36.235 0.00	36.279	-0.000	15.801	0.000	0.000	36.559	36.279	91.651	XOMR2_OWSG MWD+IFR1+MS
10300.000	14.396	179.789	10279.871	35.622 0.00	36.585	-0.000	16.041	0.000	0.000	36.859	36.585	91.535	XOMR2_OWSG MWD+IFR1+MS
10400.000	22.396	179.789	10374.684	34.445 0.00	36.874	-0.000	16.264	0.000	0.000	37.135	36.874	91.452	XOMR2_OWSG MWD+IFR1+MS
10500.000	30.396	179.789	10464.185	32.749 0.00	37.142	2 -0.000	16.469	0.000	0.000	37.379	37.142	91.500	XOMR2_OWSG MWD+IFR1+MS
10600.000	38.396	179.789	10546.633	30.603 0.00	37.387	-0.000	16.655	0.000	0.000	37.586	37.387	91.863	XOMR2_OWSG MWD+IFR1+MS
10700.000	46.396	179.789	10620.422	28.106 0.00	37.606	0.000	16.824	0.000	0.000	37.754	37.605	93.033	XOMR2_OWSG MWD+IFR1+MS
10800.000	54.396	179.789	10684.118	25.401 0.00	37.798	-0.000	16.983	0.000	0.000	37.883	37.797	97.171	XOMR2_OWSG MWD+IFR1+MS
10900.000	62.396	179.789	10736.479	22.687 0.00	37.963	-0.000	17.139(	0.000	0.000	37.984	37.952	126.383	XOMR2_OWSG MWD+IFR1+MS
11000.000	70.396	179.789	10776.487	20.247 0.00	38.100	-0.000	17.301 (	0.000	0.000	38.106	38.025	-16.117	XOMR2_OWSG MWD+IFR1+MS
11100.000	78.396	179.789	10803.363	18.451 0.00	38.208	-0.000	17.474 (	0.000	0.000	38.214	38.057	-11.372	XOMR2_OWSG MWD+IFR1+MS
11200.000	86.396	179.789	10816.584	17.689 0.00	38.286	-0.000	17.665	0.000	0.000	38.294	38.069	-10.720	XOMR2_OWSG MWD+IFR1+MS
11245.044	90.000	179.789	10818.000	17.756 0.00	38.311	-0.000	17.756	0.000	0.000	38.319	38.072	-11.008	XOMR2_OWSG MWD+IFR1+MS
11300.000	90.000	179.789	10818.000	17.875 0.00	38.339	-0.000	17.875	0.000	0.000	38.349	38.073	-11.320	XOMR2_OWSG MWD+IFR1+MS

11400.000	90.000	179.789	10818.000	18.116	0.000	38.405	-0.000	18.116	0.000	0.000	38.417	38.075	-11.305	XOMR2_OWSG MWD+IFR1+MS
11500.000	90.000	179.789	10818.000	18.387	0.000	38.485	-0.000	18.387	0.000	0.000	38.499	38.079	<b>-</b> 10.919	XOMR2_OWSG MWD+IFR1+MS
11600.000	90.000	179.789	10818.000	18.688	0.000	38.580	-0.000	18.688	0.000	0.000	38.596	38.084	-10.365	XOMR2_OWSG MWD+IFR1+MS
11700.000	90.000	179.789	10818.000	19.016	0.000	38.691	-0.000	19.016	0.000	0.000	38.708	38.090	-9.753	XOMR2_OWSG MWD+IFR1+MS
11800.000	90.000	179.789	10818.000	19.370	0.000	38.816	-0.000	19.370	0.000	0.000	38.833	38.097	-9.145	XOMR2_OWSG MWD+IFR1+MS
11900.000	90.000	179.789	10818.000	19.749	0.000	38.955	-0.000	19.749	0.000	0.000	38.974	38.105	-8.567	XOMR2_OWSG MWD+IFR1+MS
12000.000	90.000	179.789	10818.000	20.152	0.000	39.110	-0.000	20.152	0.000	0.000	39.128	38.113	<b>-</b> 8.032	XOMR2_OWSG MWD+IFR1+MS
12100.000	90.000	179.789	10818.000	20.576	0.000	39.278	-0.000	20.576	0.000	0.000	39.297	38.123	<b>-</b> 7.542	XOMR2_OWSG MWD+IFR1+MS
12200.000	90.000	179.789	10818.000	21.022	0.000	39.460	-0.000	21.022	0.000	0.000	39.479	38.133	<b>-</b> 7.098	XOMR2_OWSG MWD+IFR1+MS
12300.000	90.000	179.789	10818.000	21.487	0.000	39.657	-0.000	21.487	0.000	0.000	39.676	38.143	-6.695	XOMR2_OWSG MWD+IFR1+MS
12400.000	90.000	179.789	10818.000	21.970	0.000	39.867	-0.000	21.970	0.000	0.000	39.886	38.155	-6.330	XOMR2_OWSG MWD+IFR1+MS
12500.000	90.000	179.789	10818.000	22.470	0.000	40.091	-0.000	22.470	0.000	0.000	40.110	38.167	-5.999	XOMR2_OWSG MWD+IFR1+MS
12600.000	90.000	179.789	10818.000	22.985	0.000	40.327	-0.000	22.985	0.000	0.000	40.347	38.180	-5.699	XOMR2_OWSG MWD+IFR1+MS
12700.000	90.000	179.789	10818.000	23.516	0.000	40.577	-0.000	23.516	0.000	0.000	40.597	38.194	<b>-</b> 5.425	XOMR2_OWSG MWD+IFR1+MS
12800.000	90.000	179.789	10818.000	24.061	0.000	40.840	-0.000	24.061	0.000	0.000	40.859	38.208	-5.176	XOMR2_OWSG MWD+IFR1+MS
12900.000	90.000	179.789	10818.000	24.619	0.000	41.115	-0.000	24.619	0.000	0.000	41.135	38.223	<b>-</b> 4.947	XOMR2_OWSG MWD+IFR1+MS
13000.000	90.000	179.789	10818.000	25.189	0.000	41.403	-0.000	25.189	0.000	0.000	41.422	38.238	<b>-</b> 4.737	XOMR2_OWSG MWD+IFR1+MS
13100.000	90.000	179.789	10818.000	25.770	0.000	41.702	-0.000	25.770	0.000	0.000	41.721	38.255	<b>-</b> 4.544	XOMR2_OWSG MWD+IFR1+MS
13200.000	90.000	179.789	10818.000	26.361	0.000	42.014	-0.000	26.361	0.000	0.000	42.033	38.272	-4.366	XOMR2_OWSG MWD+IFR1+MS
13300.000	90.000	179.789	10818.000	26.963	0.000	42.337	-0.000	26.963	0.000	0.000	42.356	38.289	-4.202	XOMR2_OWSG MWD+IFR1+MS

13400.000	90.000	179.789	10818.000	27.574	0.000	42.671	-0.000	27.574	0.000	0.000	42.690	38.307	-4.049	XOMR2_OWSG MWD+IFR1+MS
13500.000	90.000	179.789	10818.000	28.193	0.000	43.016	-0.000	28.193	0.000	0.000	43.035	38.326	-3.907	XOMR2_OWSG MWD+IFR1+MS
13600.000	90.000	179.789	10818.000	28.820	0.000	43.372	-0.000	28.820	0.000	0.000	43.390	38.346	-3.775	XOMR2_OWSG MWD+IFR1+MS
13700.000	90.000	179.789	10818.000	29.455	0.000	43.738	-0.000	29.455	0.000	0.000	43.757	38.366	-3.652	XOMR2_OWSG MWD+IFR1+MS
13800.000	90.000	179.789	10818.000	30.097	0.000	44.115	-0.000	30.097	0.000	0.000	44.133	38.387	-3.536	XOMR2_OWSG MWD+IFR1+MS
13900.000	90.000	179.789	10818.000	30.746	0.000	44.502	-0.000	30.746	0.000	0.000	44.519	38.409	-3.428	XOMR2_OWSG MWD+IFR1+MS
14000.000	90.000	179.789	10818.000	31.401	0.000	44.898	-0.000	31.401	0.000	0.000	44.916	38.431	-3.327	XOMR2_OWSG MWD+IFR1+MS
14100.000	90.000	179.789	10818.000	32.061	0.000	45.303	-0.000	32.061	0.000	0.000	45.321	38.454	-3.231	XOMR2_OWSG MWD+IFR1+MS
14200.000	90.000	179.789	10818.000	32.728	0.000	45.718	-0.000	32.728	0.000	0.000	45.736	38.477	-3.142	XOMR2_OWSG MWD+IFR1+MS
14300.000	90.000	179.789	10818.000	33.399	0.000	46.142	-0.000	33.399	0.000	0.000	46.159	38.501	-3.057	XOMR2_OWSG MWD+IFR1+MS
14400.000	90.000	179.789	10818.000	34.075	0.000	46.575	-0.000	34.075	0.000	0.000	46.592	38.526	<b>-</b> 2.977	XOMR2_OWSG MWD+IFR1+MS
14500.000	90.000	179.789	10818.000	34.756	0.000	47.016	-0.000	34.756	0.000	0.000	47.033	38.551	-2.901	XOMR2_OWSG MWD+IFR1+MS
14600.000	90.000	179.789	10818.000	35.441	0.000	47.465	-0.000	35.441	0.000	0.000	47.482	38.577	-2.829	XOMR2_OWSG MWD+IFR1+MS
14700.000	90.000	179.789	10818.000	36.130	0.000	47.922	-0.000	36.130	0.000	0.000	47.939	38.604	-2.761	XOMR2_OWSG MWD+IFR1+MS
14800.000	90.000	179.789	10818.000	36.823	0.000	48.387	-0.000	36.823	0.000	0.000	48.404	38.632	-2.696	XOMR2_OWSG MWD+IFR1+MS
14900.000	90.000	179.789	10818.000	37.520	0.000	48.860	-0.000	37.520	0.000	0.000	48.876	38.660	-2.634	XOMR2_OWSG MWD+IFR1+MS
15000.000	90.000	179.789	10818.000	38.220	0.000	49.339	-0.000	38.220	0.000	0.000	49.356	38.688	-2.576	XOMR2_OWSG MWD+IFR1+MS
15100.000	90.000	179.789	10818.000	38.923	0.000	49.826	-0.000	38.923	0.000	0.000	49.842	38.717	-2.520	XOMR2_OWSG MWD+IFR1+MS
15200.000	90.000	179.789	10818.000	39.629	0.000	50.320	-0.000	39.629	0.000	0.000	50.336	38.747	-2.466	XOMR2_OWSG MWD+IFR1+MS
15300.000	90.000	179.789	10818.000	40.338	0.000	50.821	-0.000	40.338	0.000	0.000	50.837	38.778	-2.415	XOMR2_OWSG MWD+IFR1+MS

15400.000	90.000	179.789	10818.000	41.050	0.000	51.328	-0.000	41.050	0.000	0.000	51.344	38.809	-2.367	XOMR2_OWSG MWD+IFR1+MS
15500.000	90.000	179.789	10818.000	41.765	0.000	51.841	-0.000	41.765	0.000	0.000	51.857	38.841	-2.320	XOMR2_OWSG MWD+IFR1+MS
15600.000	90.000	179.789	10818.000	42.482	0.000	52.361	-0.000	42.482	0.000	0.000	52.376	38.873	-2.275	XOMR2_OWSG MWD+IFR1+MS
15700.000	90.000	179.789	10818.000	43.201	0.000	52.886	-0.000	43.201	0.000	0.000	52.902	38.906	-2.232	XOMR2_OWSG MWD+IFR1+MS
15800.000	90.000	179.789	10818.000	43.923	0.000	53.418	-0.000	43.923	0.000	0.000	53.433	38.940	-2.191	XOMR2_OWSG MWD+IFR1+MS
15900.000	90.000	179.789	10818.000	44.646	0.000	53.955	-0.000	44.646	0.000	0.000	53.969	38.974	-2.151	XOMR2_OWSG MWD+IFR1+MS
16000.000	90.000	179.789	10818.000	45.372	0.000	54.497	-0.000	45.372	0.000	0.000	54.512	39.009	-2.113	XOMR2_OWSG MWD+IFR1+MS
16100.000	90.000	179.789	10818.000	46.100	0.000	55.045	-0.000	46.100	0.000	0.000	55.059	39.045	-2.077	XOMR2_OWSG MWD+IFR1+MS
16200.000	90.000	179.789	10818.000	46.829	0.000	55.597	-0.000	46.829	0.000	0.000	55.612	39.081	-2.042	XOMR2_OWSG MWD+IFR1+MS
16300.000	90.000	179.789	10818.000	47.561	0.000	56.155	-0.000	47.561	0.000	0.000	56.169	39.118	-2.008	XOMR2_OWSG MWD+IFR1+MS
16400.000	90.000	179.789	10818.000	48.294	0.000	56.718	-0.000	48.294	0.000	0.000	56.732	39.155	-1.975	XOMR2_OWSG MWD+IFR1+MS
16500.000	90.000	179.789	10818.000	49.028	0.000	57.285	-0.000	49.028	0.000	0.000	57.299	39.193	-1.944	XOMR2_OWSG MWD+IFR1+MS
16600.000	90.000	179.789	10818.000	49.765	0.000	57.857	-0.000	49.765	0.000	0.000	57.870	39.232	-1.913	XOMR2_OWSG MWD+IFR1+MS
16700.000	90.000	179.789	10818.000	50.502	0.000	58.433	-0.000	50.502	0.000	0.000	58.446	39.271	-1.884	XOMR2_OWSG MWD+IFR1+MS
16800.000	90.000	179.789	10818.000	51.241	0.000	59.013	-0.000	51.241	0.000	0.000	59.027	39.311	-1.855	XOMR2_OWSG MWD+IFR1+MS
16900.000	90.000	179.789	10818.000	51.981	0.000	59.598	-0.000	51.981	0.000	0.000	59.611	39.351	-1.828	XOMR2_OWSG MWD+IFR1+MS
17000.000	90.000	179.789	10818.000	52.723	0.000	60.187	-0.000	52.723	0.000	0.000	60.200	39.392	-1.801	XOMR2_OWSG MWD+IFR1+MS
17100.000	90.000	179.789	10818.000	53.466	0.000	60.779	-0.000	53.466	0.000	0.000	60.792	39.434	-1.776	XOMR2_OWSG MWD+IFR1+MS
17200.000	90.000	179.789	10818.000	54.210	0.000	61.375	-0.000	54.210	0.000	0.000	61.388	39.476	-1.751	XOMR2_OWSG MWD+IFR1+MS
17300.000	90.000	179.789	10818.000	54.955	0.000	61.976	-0.000	54.955	0.000	0.000	61.988	39.519	-1.727	XOMR2_OWSG MWD+IFR1+MS

17400.000	90.000	179.789	10818.000	55.701	0.000	62.579	-0.000	55.701	0.000	0.000	62.592	39.562	-1.703	XOMR2_OWSG MWD+IFR1+MS
17500.000	90.000	179.789	10818.000	56.449	0.000	63.186	-0.000	56.449	0.000	0.000	63.199	39.606	-1.680	XOMR2_OWSG MWD+IFR1+MS
17600.000	90.000	179.789	10818.000	57.197	0.000	63.797	-0.000	57.197	0.000	0.000	63.810	39.651	-1.658	XOMR2_OWSG MWD+IFR1+MS
17700.000	90.000	179.789	10818.000	57.946	0.000	64.411	-0.000	57.946	0.000	0.000	64.423	39.696	-1.637	XOMR2_OWSG MWD+IFR1+MS
17800.000	90.000	179.789	10818.000	58.696	0.000	65.028	-0.000	58.696	0.000	0.000	65.040	39.742	-1.616	XOMR2_OWSG MWD+IFR1+MS
17900.000	90.000	179.789	10818.000	59.448	0.000	65.648	-0.000	59.448	0.000	0.000	65.660	39.788	-1.596	XOMR2_OWSG MWD+IFR1+MS
18000.000	90.000	179.789	10818.000	60.200	0.000	66.271	-0.000	60.200	0.000	0.000	66.283	39.835	-1.577	XOMR2_OWSG MWD+IFR1+MS
18100.000	90.000	179.789	10818.000	60.952	0.000	66.897	-0.000	60.952	0.000	0.000	66.909	39.883	-1.558	XOMR2_OWSG MWD+IFR1+MS
18200.000	90.000	179.789	10818.000	61.706	0.000	67.526	-0.000	61.706	0.000	0.000	67.538	39.931	-1.539	XOMR2_OWSG MWD+IFR1+MS
18300.000	90.000	179.789	10818.000	62.460	0.000	68.158	-0.000	62.460	0.000	0.000	68.170	39.980	-1.521	XOMR2_OWSG MWD+IFR1+MS
18400.000	90.000	179.789	10818.000	63.215	0.000	68.793	-0.000	63.215	0.000	0.000	68.804	40.029	-1.504	XOMR2_OWSG MWD+IFR1+MS
18500.000	90.000	179.789	10818.000	63.971	0.000	69.430	-0.000	63.971	0.000	0.000	69.441	40.079	-1.486	XOMR2_OWSG MWD+IFR1+MS
18600.000	90.000	179.789	10818.000	64.728	0.000	70.069	-0.000	64.728	0.000	0.000	70.081	40.129	-1.470	XOMR2_OWSG MWD+IFR1+MS
18700.000	90.000	179.789	10818.000	65.485	0.000	70.711	-0.000	65.485	0.000	0.000	70.723	40.180	-1.454	XOMR2_OWSG MWD+IFR1+MS
18800.000	90.000	179.789	10818.000	66.243	0.000	71.356	-0.000	66.243	0.000	0.000	71.367	40.232	-1.438	XOMR2_OWSG MWD+IFR1+MS
18900.000	90.000	179.789	10818.000	67.001	0.000	72.003	-0.000	67.001	0.000	0.000	72.014	40.284	-1.422	XOMR2_OWSG MWD+IFR1+MS
19000.000	90.000	179.789	10818.000	67.760	0.000	72.652	-0.000	67.760	0.000	0.000	72.663	40.337	-1.407	XOMR2_OWSG MWD+IFR1+MS
19100.000	90.000	179.789	10818.000	68.520	0.000	73.303	-0.000	68.520	0.000	0.000	73.314	40.390	-1.393	XOMR2_OWSG MWD+IFR1+MS
19200.000	90.000	179.789	10818.000	69.280	0.000	73.957	-0.000	69.280	0.000	0.000	73.968	40.444	-1.378	XOMR2_OWSG MWD+IFR1+MS
19300.000	90.000	179.789	10818.000	70.040	0.000	74.613	-0.000	70.040	0.000	0.000	74.623	40.498	-1.365	XOMR2_OWSG MWD+IFR1+MS

19400.000	90.000	179.789	10818.000	70.802 0.000	75.270 -0.000	70.802 0.000	0.000	75.281	40.553	-1.351 XOMR2_OWSG MWD+IFR1+MS
19500.000	90.000	179.789	10818.000	71.563 0.000	75.930 -0.000	71.563 0.000	0.000	75.941	40.608	-1.338 XOMR2_OWSG MWD+IFR1+MS
19600.000	90.000	179.789	10818.000	72.326 0.000	76.592 -0.000	72.326 0.000	0.000	76.602	40.664	-1.325 XOMR2_OWSG MWD+IFR1+MS
19700.000	90.000	179.789	10818.000	73.088 0.000	77.255 -0.000	73.088 0.000	0.000	77.266	40.721	-1.312 XOMR2_OWSG MWD+IFR1+MS
19800.000	90.000	179.789	10818.000	73.852 0.000	77.921 -0.000	73.852 0.000	0.000	77.931	40.778	-1.299 XOMR2_OWSG MWD+IFR1+MS
19900.000	90.000	179.789	10818.000	74.615 0.000	78.588 -0.000	74.615 0.000	0.000	78.598	40.836	-1.287 XOMR2_OWSG MWD+IFR1+MS
20000.000	90.000	179.789	10818.000	75.379 0.000	79.257 -0.000	75.379 0.000	0.000	79.267	40.894	-1.275 XOMR2_OWSG MWD+IFR1+MS
20100.000	90.000	179.789	10818.000	76.144 0.000	79.928 -0.000	76.144 0.000	0.000	79.938	40.953	-1.264 XOMR2_OWSG MWD+IFR1+MS
20200.000	90.000	179.789	10818.000	76.909 0.000	80.600 -0.000	76.909 0.000	0.000	80.610	41.012	-1.252 XOMR2_OWSG MWD+IFR1+MS
20300.000	90.000	179.789	10818.000	77.674 0.000	81.274 -0.000	77.674 0.000	0.000	81.284	41.072	-1.241 XOMR2_OWSG MWD+IFR1+MS
20400.000	90.000	179.789	10818.000	78.440 0.000	81.950 -0.000	78.440 0.000	0.000	81.960	41.132	-1.230 XOMR2_OWSG MWD+IFR1+MS
20500.000	90.000	179.789	10818.000	79.206 0.000	82.627 -0.000	79.206 0.000	0.000	82.637	41.193	-1.220 XOMR2_OWSG MWD+IFR1+MS
20600.000	90.000	179.789	10818.000	79.972 0.000	83.306 -0.000	79.972 0.000	0.000	83.315	41.254	-1.209 XOMR2_OWSG MWD+IFR1+MS
20700.000	90.000	179.789	10818.000	80.739 0.000	83.986 -0.000	80.739 0.000	0.000	83.996	41.316	-1.199 XOMR2_OWSG MWD+IFR1+MS
20800.000	90.000	179.789	10818.000	81.506 0.000	84.668 -0.000	81.506 0.000	0.000	84.677	41.379	-1.189 XOMR2_OWSG MWD+IFR1+MS
20900.000	90.000	179.789	10818.000	82.273 0.000	85.351 -0.000	82.273 0.000	0.000	85.360	41.442	-1.179 XOMR2_OWSG MWD+IFR1+MS
21000.000	90.000	179.789	10818.000	83.041 0.000	86.035 -0.000	83.041 0.000	0.000	86.044	41.505	-1.170 XOMR2_OWSG MWD+IFR1+MS
21100.000	90.000	179.789	10818.000	83.809 0.000	86.721 -0.000	83.809 0.000	0.000	86.730	41.569	-1.160 XOMR2_OWSG MWD+IFR1+MS
21200.000	90.000	179.789	10818.000	84.578 0.000	87.408 -0.000	84.578 0.000	0.000	87.417	41.634	-1.151 XOMR2_OWSG MWD+IFR1+MS
21300.000	90.000	179.789	10818.000	85.346 0.000	88.096 -0.000	85.346 0.000	0.000	88.105	41.699	-1.142 XOMR2_OWSG MWD+IFR1+MS

21400.000	90.000	179.789	10818.000	86.115	0.000	88.786	-0.000	86.115	0.000	0.000	88.795	41.764	-1.133	XOMR2_OWSG MWD+IFR1+MS
21500.000	90.000	179.789	10818.000	86.884	0.000	89.477	-0.000	86.884	0.000	0.000	89.486	41.830	-1.124	XOMR2_OWSG MWD+IFR1+MS
21600.000	90.000	179.789	10818.000	87.654	0.000	90.169	-0.000	87.654	0.000	0.000	90.178	41.897	-1.116	XOMR2_OWSG MWD+IFR1+MS
21700.000	90.000	179.789	10818.000	88.424	0.000	90.862	-0.000	88.424	0.000	0.000	90.871	41.964	-1.107	XOMR2_OWSG MWD+IFR1+MS
21800.000	90.000	179.789	10818.000	89.194	0.000	91.556	-0.000	89.194	0.000	0.000	91.565	42.031	-1.099	XOMR2_OWSG MWD+IFR1+MS
21900.000	90.000	179.789	10818.000	89.964	0.000	92.252	-0.000	89.964	0.000	0.000	92.260	42.099	-1.091	XOMR2_OWSG MWD+IFR1+MS
22000.000	90.000	179.789	10818.000	90.735	0.000	92.948	-0.000	90.735	0.000	0.000	92.957	42.168	-1.083	XOMR2_OWSG MWD+IFR1+MS
22100.000	90.000	179.789	10818.000	91.506	0.000	93.646	-0.000	91.506	0.000	0.000	93.654	42.237	-1.075	XOMR2_OWSG MWD+IFR1+MS
22200.000	90.000	179.789	10818.000	92.277	0.000	94.344	-0.000	92.277	0.000	0.000	94.353	42.306	-1.067	XOMR2_OWSG MWD+IFR1+MS
22300.000	90.000	179.789	10818.000	93.048	0.000	95.044	-0.000	93.048	0.000	0.000	95.052	42.376	-1.060	XOMR2_OWSG MWD+IFR1+MS
22400.000	90.000	179.789	10818.000	93.819	0.000	95.745	-0.000	93.819	0.000	0.000	95.753	42.447	-1.052	XOMR2_OWSG MWD+IFR1+MS
22500.000	90.000	179.789	10818.000	94.591	0.000	96.446	-0.000	94.591	0.000	0.000	96.455	42.518	<b>-</b> 1.045	XOMR2_OWSG MWD+IFR1+MS
22600.000	90.000	179.789	10818.000	95.363	0.000	97.149	-0.000	95.363	0.000	0.000	97.157	42.589	<b>-</b> 1.038	XOMR2_OWSG MWD+IFR1+MS
22700.000	90.000	179.789	10818.000	96.135	0.000	97.852	-0.000	96.135	0.000	0.000	97.861	42.661	-1.031	XOMR2_OWSG MWD+IFR1+MS
22800.000	90.000	179.789	10818.000	96.907	0.000	98.557	-0.000	96.907	0.000	0.000	98.565	42.734	-1.024	XOMR2_OWSG MWD+IFR1+MS
22900.000	90.000	179.789	10818.000	97.680	0.000	99.262	-0.000	97.680	0.000	0.000	99.270	42.806	-1.017	XOMR2_OWSG MWD+IFR1+MS
23000.000	90.000	179.789	10818.000	98.453	0.000	99.968	-0.000	98.453	0.000	0.000	99.976	42.880	-1.010	XOMR2_OWSG MWD+IFR1+MS
23100.000	90.000	179.789	10818.000	99.226	0.000	100.675	-0.000	99.226	0.000	0.000	100.683	42.954	-1.004	XOMR2_OWSG MWD+IFR1+MS
23200.000	90.000	179.789	10818.000	99.999	0.000	101.383	-0.000	99.999	0.000	0.000	101.391	43.028	-0.997	XOMR2_OWSG MWD+IFR1+MS
23300.000	90.000	179.789	10818.000	100.772	0.000	102.092	-0.000	100.772	0.000	0.000	102.100	43.102	-0.991	XOMR2_OWSG MWD+IFR1+MS

2	3400.000	90.000	179.789	10818.000	101.546	0.000	102.801	-0.000	101.546	0.000	0.000	102.809	43.178	-0.985	XOMR2_OWSG MWD+IFR1+MS
2	3500.000	90.000	179.789	10818.000	102.319	0.000	103.512	-0.000	102.319	0.000	0.000	103.519	43.253	-0.979	XOMR2_OWSG MWD+IFR1+MS
2	3600.000	90.000	179.789	10818.000	103.093	0.000	104.223	-0.000	103.093	0.000	0.000	104.230	43.329	-0.973	XOMR2_OWSG MWD+IFR1+MS
2	3700.000	90.000	179.789	10818.000	103.867	0.000	104.934	-0.000	103.867	0.000	0.000	104.942	43.406	-0.967	XOMR2_OWSG MWD+IFR1+MS
2	3800.000	90.000	179.789	10818.000	104.641	0.000	105.647	-0.000	104.641	0.000	0.000	105.655	43.483	-0.961	XOMR2_OWSG MWD+IFR1+MS
2	3900.000	90.000	179.789	10818.000	105.415	0.000	106.360	-0.000	105.415	0.000	0.000	106.368	43.560	-0.955	XOMR2_OWSG MWD+IFR1+MS
2	4000.000	90.000	179.789	10818.000	106.190	0.000	107.074	-0.000	106.190	0.000	0.000	107.082	43.638	-0.949	XOMR2_OWSG MWD+IFR1+MS
2	4100.000	90.000	179.789	10818.000	106.964	0.000	107.789	-0.000	106.964	0.000	0.000	107.796	43.716	-0.944	XOMR2_OWSG MWD+IFR1+MS
2	4200.000	90.000	179.789	10818.000	107.739	0.000	108.504	-0.000	107.739	0.000	0.000	108.512	43.795	-0.938	XOMR2_OWSG MWD+IFR1+MS
2	4300.000	90.000	179.789	10818.000	108.514	0.000	109.220	-0.000	108.514	0.000	0.000	109.228	43.874	-0.933	XOMR2_OWSG MWD+IFR1+MS
2	4325.433	90.000	179.789	10818.000	108.711	0.000	109.402	-0.000	108.711	0.000	0.000	109.410	43.895	-0.931	XOMR2_OWSG MWD+IFR1+MS
2	4375.433	90.000	179.789	10818.000	109.099	0.000	109.760	-0.000	109.099	0.000	0.000	109.768	43.934	-0.929	XOMR2_OWSG MWD+IFR1+MS

Plan Targets	Poker Lake Unit 28 BS 310H			
	Measured Depth	<b>Grid Northing</b>	<b>Grid Easting</b>	TVD MSL Target Shape
Target Name	(ft)	(ft)	(ft)	(ft)
FTP 8	11245.04	400860.90	671457.00	7447.00 CIRCLE
LTP 8	24325.43	387780.60	671505.20	7447.00 CIRCLE
BHL 2	24375.43	387730.60	671505.40	7447.00 CIRCLE

ALL DIMENSIONS APPROXIMA

# CACTUS WELLHEAD LLC

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers

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DRAWN	VJK	31MAR2
APPRV		

DRAWING NO. HBE0000479

FORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, SCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY SUTHORIZED BY CACTUS WELLHEAD, LLC.

Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

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

#### **Background**

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

#### **Supporting Documentation**

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



Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System

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

API STANDARD	53		
ole C.4—Initial Pressure Te	esting, Surface BOP Stacks		
Pressure Test_I ow	Pressure Test-	-High Pressure <sup>ac</sup>	
Pressure <sup>ac</sup> psig (MPa)	Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket	
250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.	
250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP	
250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP	
250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP	
250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or Myhichever is lower	MASP for the well program,	
250 to 350 (1.72 to 2.41)	MASP for the well program		
during the evaluation period. The passure tested on the largest and sm	pressure shall not decrease below the allest OD drill pipe to be used in well	program.	
when the integrity of a pressure se ne ram BOPs shall be pressure tes	al is broken. Ited with the ram locks engaged and	the closing and locking pressure	
	Pressure Test—Low Pressure Test—Low Pressure Test—Low Pressure Test—Low Pressure Test—Service (MPa)  250 to 350 (1.72 to 2.41)  250 to 350 (1.72 to 2.41)	Pressure 1est—Low Pressure's psig (MPa)  Change Out of Component, Elastomer, or Ring Gasket  250 to 350 (1.72 to 2.41)  RWP of annular preventer  RWP of ram preventer or wellhead system, whichever is lower  RWP of side outlet valve or wellhead system, whichever is lower  RWP of ram preventer or wellhead system, whichever is lower  RWP of side outlet valve or wellhead system, whichever is lower  RWP of ram preventers or wellhead system, whichever is lower  250 to 350 (1.72 to 2.41)  RWP of valve(s), line(s), or Notichever is lower  RWP of valve(s), line(s), or Notichever is lower  ASP for the well program  whall be a minimum of five minutes.  during the evaluation period. The pressure shall not decrease below the assure tested on the largest and smallest OD drill pipe to be used in well from one wellhead to another within the 21 days, pressure testing is recombent the integrity of a pressure seal is broken.	

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

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

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

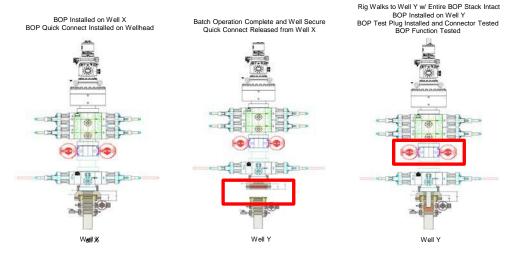
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

#### **Procedures**

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

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

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



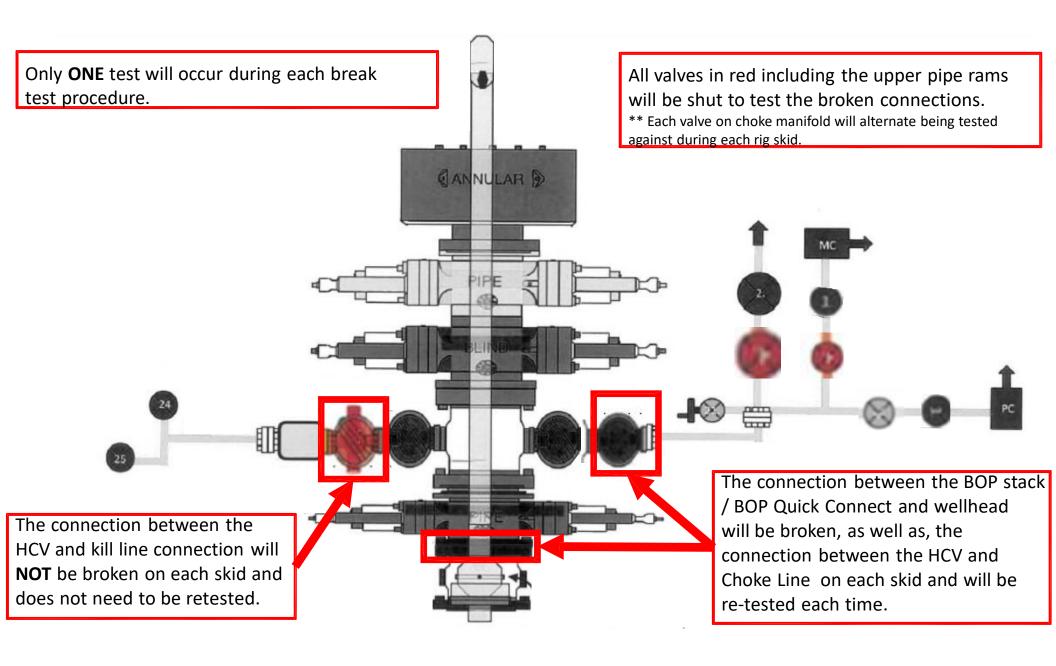
#### Summary

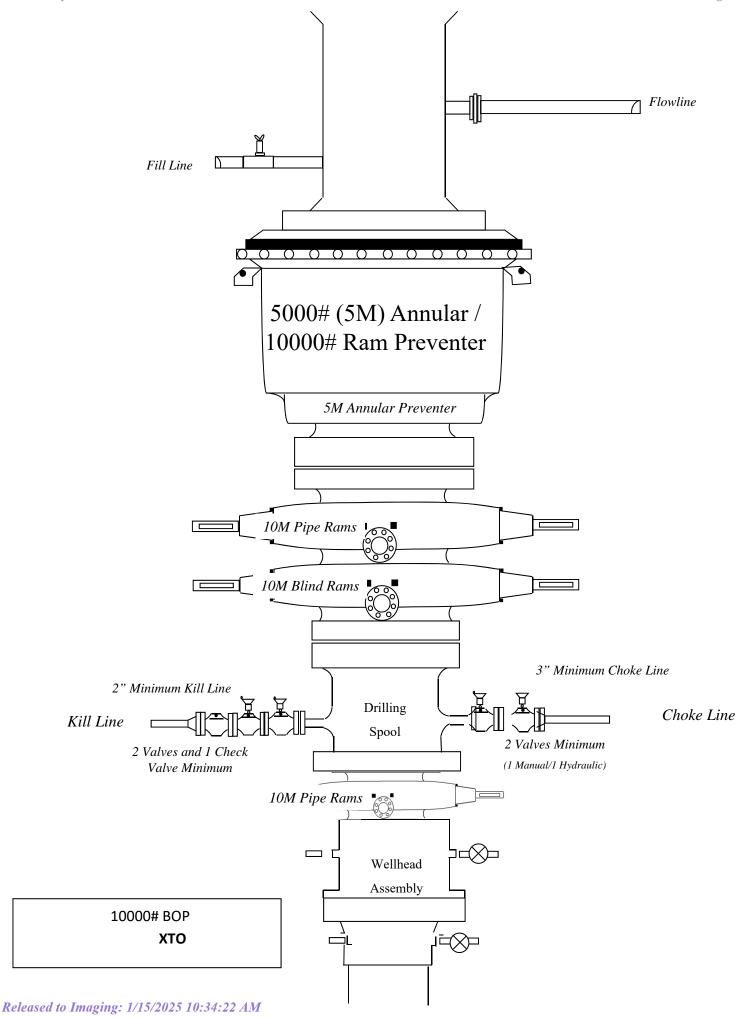
A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

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

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

- 1. After a full BOP test is conducted on the first well on the pad.
- 2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
- 3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
- 4. Full BOP test will be required prior to drilling the production hole.





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## **U. S. Steel Tubular Products** 5.500" 20.00lb/ft (0.361" Wall)

## P110 RY USS-FREEDOM HTQ®

Minimum Yield Strength				
Institute   Inst	MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ <sup>®</sup>	
MENSIONS	Minimum Yield Strength	110,000		psi
Name	Maximum Yield Strength	125,000		psi
Dutside Diameter   5.500   6.300   in.	Minimum Tensile Strength	125,000		psi
Vall Thickness   0.361	DIMENSIONS	Pipe	USS-FREEDOM HTQ <sup>®</sup>	
A.778	Outside Diameter	5.500	6.300	in.
	Wall Thickness	0.361		in.
Internate Drift	Inside Diameter	4.778	4.778	in.
Dominal Linear Weight, T&C   20.00     Ib/ft     Plain End Weight   19.83     Ib/ft     Pipe   USS-FREEDOM HTQ®     Pipe   USS-FREEDOM     Pipe	Standard Drift	4.653	4.653	in.
Pipe   USS-FREEDOM HTQ®   Sq. in.   Ib/ft	Alternate Drift			in.
Pipe   USS-FREEDOM HTQ®   Sq. in.	Nominal Linear Weight, T&C	20.00		lb/ft
### Stritical Area   5.828   5.828   5.828   sq. in.	Plain End Weight	19.83		lb/ft
## Pipe USS-FREEDOM HTQ®  ## U	ECTION AREA	Pipe	USS-FREEDOM HTQ®	
## Pipe USS-FREEDOM HTQ®  ## U	Critical Area	5.828	5.828	sq. in.
Minimum Collapse Pressure       11,100       11,100       psi         Minimum Internal Yield Pressure       12,640       12,640       psi         Minimum Pipe Body Yield Strength       641,000       Ib         Joint Strength        641,000       Ib         Compression Rating        641,000       Ib         Reference Length [4]        21,370       ft         Maximum Uniaxial Bend Rating [2]        91.7       deg/100 ft         KE-UP DATA       Pipe       USS-FREEDOM HTQ®         Make-Up Loss        4.13       in.         Minimum Make-Up Torque [3]        15,000       ft-Ib         Maximum Make-Up Torque [3]        21,000       ft-Ib	Joint Efficiency		100.0	%
Minimum Internal Yield Pressure         12,640         12,640         psi           Minimum Pipe Body Yield Strength         641,000          lb           Joint Strength          641,000         lb           Joint Strength          641,000         lb           Joint Strength          641,000         lb           Joint Strength          641,000         lb           Joint Strength          641,000         lb           Joint Strength          641,000         lb           Joint Strength          91,370         ft           Joint Strength          91,770         deg/100 ft           Joint Strength          91,7         deg/100 ft           Joint Strength          91,7         deg/100 ft           Joint Strength          91,7         deg/100 ft           Joint Strength          4.13         in.           Joint Strength          4.13         in.           Joint Strength          4.13         in.           Joint Strength          4.13         in. <td< td=""><td>ERFORMANCE</td><td>Pipe</td><td>USS-FREEDOM HTQ®</td><td></td></td<>	ERFORMANCE	Pipe	USS-FREEDOM HTQ®	
Minimum Pipe Body Yield Strength   641,000	Minimum Collapse Pressure	11,100	11,100	psi
Compression Rating	Minimum Internal Yield Pressure	12,640	12,640	psi
Compression Rating	Minimum Pipe Body Yield Strength	641,000		lb
Reference Length [4]        21,370       ft         Maximum Uniaxial Bend Rating [2]        91.7       deg/100 ft         KE-UP DATA       Pipe       USS-FREEDOM HTQ®         Make-Up Loss        4.13       in.         Minimum Make-Up Torque [3]        15,000       ft-lb         Maximum Make-Up Torque [3]        21,000       ft-lb	Joint Strength		641,000	lb
Maximum Uniaxial Bend Rating [2]          91.7         deg/100 ft           KE-UP DATA         Pipe         USS-FREEDOM HTQ®           Make-Up Loss          4.13         in.           Minimum Make-Up Torque [3]          15,000         ft-lb           Maximum Make-Up Torque [3]          21,000         ft-lb	Compression Rating		641,000	lb
KE-UP DATA         Pipe         USS-FREEDOM HTQ®           Make-Up Loss          4.13         in.           Minimum Make-Up Torque [3]          15,000         ft-lb           Maximum Make-Up Torque [3]          21,000         ft-lb	Reference Length [4]		21,370	ft
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 Uniaxial Bend Rating [2]		91.7	deg/100 ft
Inimum Make-Up Torque [3]        15,000       ft-lb         Maximum Make-Up Torque [3]        21,000       ft-lb	AKE-UP DATA	Pipe	USS-FREEDOM HTQ®	
Maximum Make-Up Torque [3] 21,000 ft-lb	Make-Up Loss		4.13	in.
	Minimum Make-Up Torque [3]		15,000	ft-lb
Maximum Operating Torque[3] 29,500 ft-lb	Maximum Make-Up Torque [3]		21,000	ft-lb
1 0 1 1 1	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).
- 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.

#### **Legal Notice**

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

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

#### **XTO Permian Operating, LLC Offline Cementing Variance Request**

XTO requests the option to cement the surface and intermediate casing strings offline as a prudent batch drilling efficiency of acreage development.

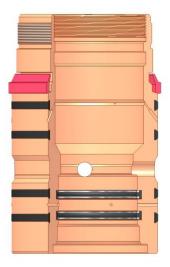
#### 1. Cement Program

No changes to the cement program will take place for offline cementing.

#### 2. Offline Cementing Procedure

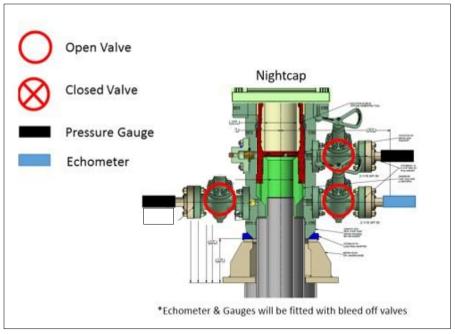
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

- 1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe)
- 2. Land casing with mandrel
- 3. Fill pipe with kill weight fluid, do not circulate through floats and confirm well is static
- 4. Set annular packoff shown below and pressure test to confirm integrity of the seal. Pressure ratings of wellhead components and valves is 5,000 psi.
- 5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange.
  - a. If any barrier fails to test, the BOP stack will not be nippled down until after the cement job is completed with cement 500ft above the highest formation capable of flow with kill weight mud above or after it has achieved 50-psi compressive strength if kill weight fluid cannot be verified.



Annular packoff with both external and internal seals

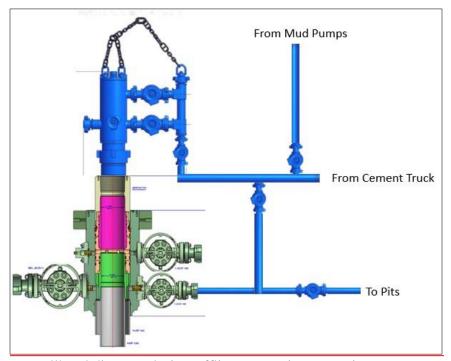
#### **XTO Permian Operating, LLC Offline Cementing Variance Request**



Wellhead diagram during skidding operations

- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
  - a. Well Control Plan
    - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
    - ii. Rig pumps or a 3<sup>rd</sup> party pump will be tied into the upper casing valve to pump down the casing ID
    - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
    - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
    - v. Well will be confirmed static
    - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
- 8. Install offline cement tool
- 9. Rig up cement equipment

#### **XTO Permian Operating, LLC Offline Cementing Variance Request**



Wellhead diagram during offline cementing operations

- 10. Circulate bottoms up with cement truck
  - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
  - b. Max anticipated time before circulating with cement truck is 6 hrs
- 11. Perform cement job taking returns from the annulus wellhead valve
- 12. Confirm well is static and floats are holding after cement job
- 13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

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

#### Description of Operations:

- 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.

11/29/2021 4·16·04 PM

## U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall)

P110 RY USS-TALON HTQ™ RD

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000		psi	
Maximum Yield Strength	125,000		psi	
Minimum Tensile Strength	125,000		psi	
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		
Outside Diameter	5.500	5.900	in.	
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
SECTION AREA	Pipe	USS-TALON HTQ™ RD		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lb	
Joint Strength		641,000	lb	
Compression Rating		641,000	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. 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.
- Coupling must meet minimum mechanical properties of the pipe.

#### **Legal Notice**

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FAX: +1 (281) 602-4147

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WEB: www.gates.com/oilandgas

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.

CI	ICT	ON	AF	D.	
CU	131	OI	AIL	n.	

NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA

CUSTOMER P.O.#:

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

CUSTOMER P/N:

IMR RETEST SN 74621 ASSET #66-1531

PART DESCRIPTION:

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

FLANGES

SALES ORDER #:

529480

QUANTITY:

1

SERIAL #:

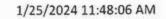
74621 H3-012524-1

SIGNATURE: F. CUSTUSE

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024







## **TEST REPORT**

CUSTOMER

Company:

Nabors Industries Inc.

**TEST OBJECT** 

Serial number: H3-012524-1

Lot number:

Production description:

Sales order #:

74621/66-1531

Customer reference:

529480

Description:

74621/66-1531

FG1213

Hose ID:

Fitting 1:

3" 16C CK

Part number:

Part number: Description:

**TEST INFORMATION** 

Test pressure hold:

Work pressure hold:

Length difference:

Length difference:

Test procedure: Test pressure:

Work pressure:

GTS-04-053 15000.00

psi

sec

10000.00

3600.00

900.00

0.00 0.00 psi

sec % inch Fitting 2:

Part number:

Description:

3.0 x 4-1/16 10K

3.0 x 4-1/16 10K

Visual check:

Pressure test result:

PASS

Length measurement result:

Length:

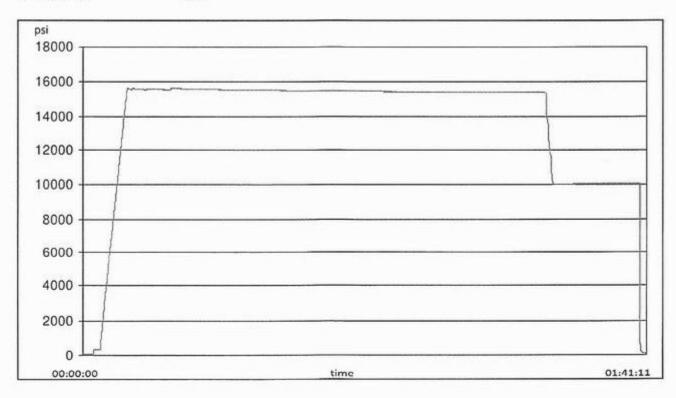
45

feet

n . . . . /n

Test operator:

Travis





H3-15/16

1/25/2024 11:48:06 AM

## **TEST REPORT**

### **GAUGE TRACEABILITY**

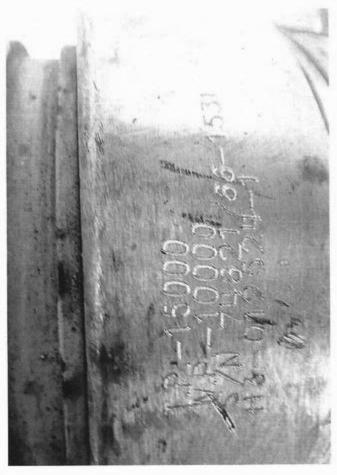
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110IQWDG	2023-05-16	2024-05-16
	110D3PHO	110D3PHO 2023-06-06

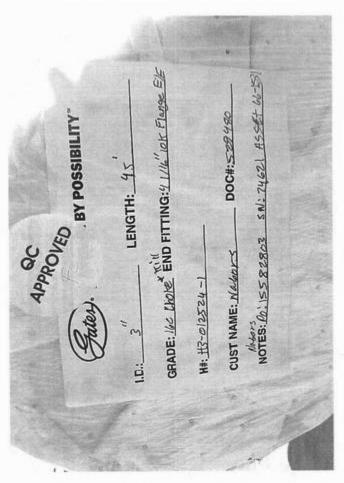


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General Information Phone: (505) 629-6116

Online Phone Directory <a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

CONDITIONS

Action 415510

#### **CONDITIONS**

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	415510
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By		Condition Date
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	1/15/2025