

Well Name: POKER LAKE UNIT 13-24 PC

Well Location: T24S / R29E / SEC 13 / SWNE / 32.218155 / -103.934466

County or Parish/State: EDDY / NM

Well Number: 806H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM05912

Unit or CA Name: POKER LAKE UNIT

Unit or CA Number: NMNM71016X

US Well Number: 3001556752

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2874514

Type of Submission: Notice of Intent

Date Sundry Submitted: 09/19/2025

Date proposed operation will begin: 09/26/2025

Type of Action: APD Change

Time Sundry Submitted: 01:50

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include KOP, FTP, BHL, and proposed total depth. A small pool code typo correction is being made as well. Trajectory of the upper portion of the well is changing. See updated Drilling Program, Directional Plan, and Well Plan View. FROM: TO: KOP: 1797' FSL & 991' FEL OF SECTION 13-T24S-R29E 1764' FSL & 988' FEL OF SECTION 13-T24S-R29E FTP: 1993' FSL & 951' FEL OF SECTION 13-T24S-R29E 1993' FSL & 988' FEL OF SECTION 13-T24S-R29E BHL: 50' FNL & 755' FEL OF SECTION 1-T24S-R29E 51' FNL & 755' FEL OF SECTION 1-T24S-R29E The proposed total depth is changing FROM 23654' MD; 9730' TVD TO 23703' MD; 9738' TVD. Pool code correction FROM WILDCAT S24300B; LWR BONE SPRING (97753) TO WILDCAT S243006B; LWR BONE SPRING (97753). There is no new surface disturbance.

NOI Attachments

Procedure Description

POKER_LAKE_UNIT_13_24_PC_806H_Sundry_Docs_Updated_9.19.25_20250919134901.pdf

Received by OCD: 9/24/2025 4:31:17 PM

Page 2 of 70

Well Name: POKER LAKE UNIT 13-24 PC	Well Location: T24S / R29E / SEC 13 / SWNE / 32.218155 / -103.934466	County or Parish/State: EDDY / NM
Well Number: 806H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM05912	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number: 3001556752	Operator: XTO PERMIAN OPERATING LLC	

Conditions of Approval

Additional

242913_Poker_Lake_Unit_13_24_PC_806H_06_09_2025_COAs_20250924120811.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: SAMANTHA WEIS
Signed on: SEP 19, 2025 01:50 PM
Name: XTO PERMIAN OPERATING LLC
Title: Permitting Advisor
Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY
City: SPRING State: TX
Phone: (832) 625-7361
Email address: SAMANTHA.R.BARTNIK@EXXONMOBIL.COM

Field

Representative Name:
Street Address:
City: State: Zip:
Phone:
Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS
BLM POC Phone: 5752342234
Disposition: Approved
Signature: Chris Walls
BLM POC Title: Petroleum Engineer
BLM POC Email Address: CWALLS@BLM.GOV
Disposition Date: 09/24/2025

Form 3160-5
(October 2024)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0220
Expires: October 31, 2027

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

1. Type of Well		5. Lease Serial No.
<input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		9. API Well No.
		10. Field and Pool or Exploratory Area
		11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

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

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

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

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

Additional Information

Additional Remarks

Pool code correction FROM WILDCAT S24300B; LWR BONE SPRING (97753) TO WILDCAT S243006B; LWR BONE SPRING (97753).

There is no new surface disturbance.

Location of Well

0. SHL: SWNE / 2420 FNL / 1536 FEL / TWSP: 24S / RANGE: 29E / SECTION: 13 / LAT: 32.218155 / LONG: -103.934466 (TVD: 0 feet, MD: 0 feet)

PPP: SWNE / 1959 FNL / 1329 FEL / TWSP: 24S / RANGE: 29E / SECTION: 13 / LAT: 32.219419 / LONG: -103.933796 (TVD: 9739 feet, MD: 10200 feet)

BHL: LOT 1 / 50 FNL / 755 FEL / TWSP: 24S / RANGE: 29E / SECTION: 1 / LAT: 32.253811 / LONG: -103.932768 (TVD: 9739 feet, MD: 22690 feet)

CONFIDENTIAL

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Poker Lake Unit 13-24 PC 806H
LOCATION:	Section 13, T.24S., R.29E.
COUNTY:	Eddy County

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Wellhead Variance	<input type="radio"/> Diverter		
Other	<input type="checkbox"/> 4 String	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Open Annulus
Cementing	<input checked="" type="checkbox"/> Contingency Cement Squeeze	<input type="checkbox"/> EchoMeter	<input type="checkbox"/> Primary Cement Squeeze
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Special Requirements	<input type="checkbox"/> Batch Sundry		
Special Requirements Variance	<input checked="" type="checkbox"/> Break Testing	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Casing Clearance

Possibility of water flows in the Rustler

Possibility of lost circulation in the Salado, Castile, and Delaware

Abnormal pressures may be encountered upon penetrating the 3rd Bone Spring Sandstone and all subsequent formations.

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet 43 CFR part 3170 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately **400** 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. The surface hole shall be **12-1/4** inch in diameter.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
 - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus Or operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must run one CBL per Well Pad.

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

Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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. **Cement excess calculates to 21% - more cement may be needed.**

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. This assembly will only be tested when installed on the **9-5/8** inch surface casing. 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** i 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.

E. SPECIAL REQUIREMENT (S)**BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for 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)

☒ Eddy County

EMAIL or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,

BLM_NM_CFO_DrillingNotifications@BLM.GOV

(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,

(575) 689-5981

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

A. CASING

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

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

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.

2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However,

if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

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

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

JS 6/9/2025

C-102 Sumbit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024	
		Submittal Type:	<input type="checkbox"/> Initial Submittal
			<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number 30-015-	Pool Code 96473	Pool Name PIERCE CROSSING; BONE SPRING	
Property Code	Property Name POKER LAKE UNIT 13-24 PC	Well Number 806H	
OGRID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC.	Ground Level Elevation 3,113'	
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

Surface Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	13	24S	29E		2,420 FNL	1,536 FEL	32.218155	-103.934466	EDDY

Bottom Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	24S	29E	1	51 FNL	755 FEL	32.253809	-103.932007	EDDY


Dedicated Acres 120.00	Infill or Defining Well DEFINING	Defining Well API	Overlapping Spacing Unit (Y/N) Y	Consolidation Code U
Order Numbers.			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	13	24S	29E		1,764 FSL	988 FEL	32.215042	-103.932701	EDDY

First Take Point (FTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	13	24S	29E		1,993 FSL	988 FEL	32.215672	-103.932698	EDDY

Last Take Point (LTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	24S	29E	1	101 FNL	755 FEL	32.253670	-103.932007	EDDY

Unitized Area or Area of Interest NMNM105422429	Spacing Unit Type : <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Elevation 3,113'
---	--	-----------------------------------

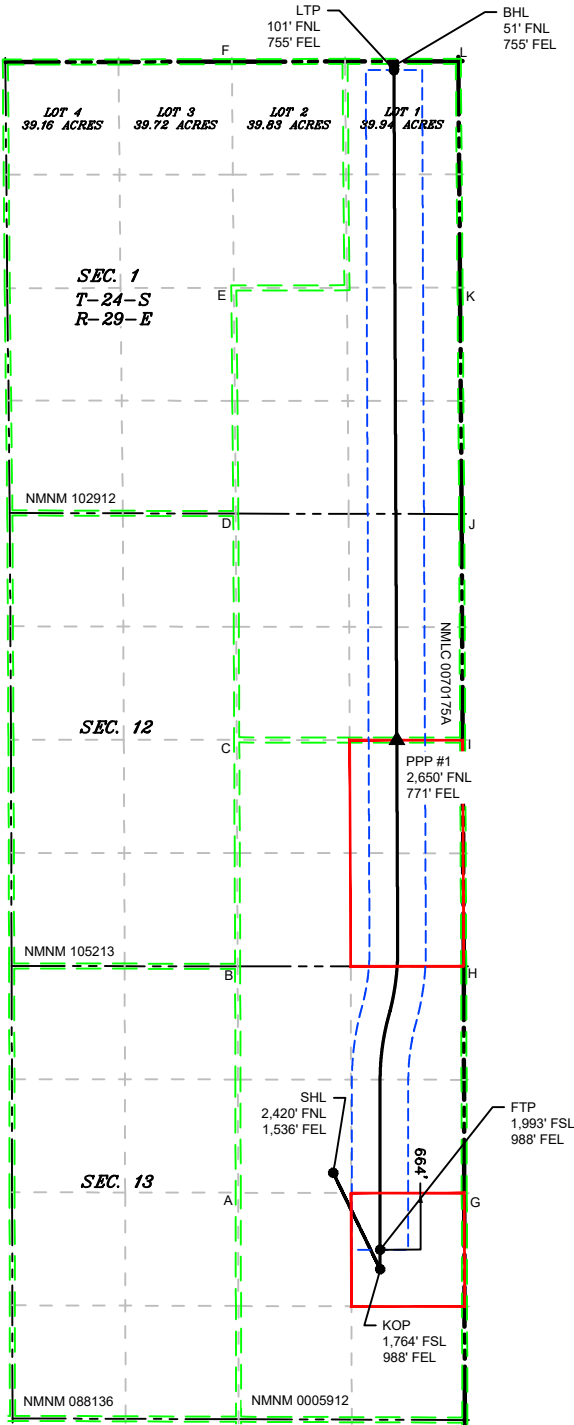
<div>OPERATOR CERTIFICATIONS</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of heretofore entered by the division.</div> <div>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</div> <div><div>Samantha Weis9/19/2025</div><div>SignatureDate</div><div>Samantha Weis</div><div>Printed Name</div><div>samantha.r.bartnik@exxonmobil.com</div><div>Email Address</div></div>	<div>SURVEYOR CERTIFICATIONS</div> <div>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</div> <div><div></div><div>Signature and Seal of Professional Surveyor</div><div><div>MARK DILLON HARP 23786</div><div>Certificate Number</div><div>9/18/2025</div><div>Date of Survey</div></div><div><div>DB</div><div>618.013003.04-29</div></div></div>
---	--

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

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated areage 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 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 accepted.



LEGEND

- SECTION LINE

TOWNSHIP LINE

DEDICATED ACREAGE
- 330' BUFFER

MINERAL LEASE

WELL BORE
- ▲ PPP

● WELL

WELL COORDINATE TABLE								
WELL	NAD 83 NME X	NAD 83 NME Y	NAD 83 LAT	NAD 83 LON	NAD 27 NME X	NAD 27 NME Y	NAD 27 LAT	NAD 27 LON
SHL	664,688.4	443,327.7	32.218155	-103.934466	623,504.9	443,268.3	32.218031	-103.933977
KOP	665,238.5	442,197.1	32.215042	-103.932701	624,054.9	442,137.8	32.214918	-103.932212
FTP	665,238.5	442,426.3	32.215672	-103.932698	624,054.9	442,366.9	32.215547	-103.932210
LTP	665,400.7	456,250.3	32.253670	-103.932007	624,217.6	456,190.6	32.253546	-103.931516
BHL	665,400.5	456,300.7	32.253809	-103.932007	624,217.4	456,241.0	32.253684	-103.931516
PPP1	665,434.0	448,397.8	32.232084	-103.931994	624,250.7	448,338.3	32.231960	-103.931504

CORNER COORDINATE TABLE				
CORNER	NAD 83 NME X	NAD 83 NME Y	NAD 27 NME X	NAD 27 NME Y
A	663,576.0	443,093.9	622,392.5	443,034.6
B	663,570.2	445,748.2	622,386.8	445,688.8
C	663,559.1	448,399.9	622,375.8	448,340.4
D	663,547.9	451,051.0	622,364.7	450,991.4
E	663,524.5	453,696.5	622,341.4	453,636.9
F	663,501.0	456,347.1	622,318.0	456,287.4
G	666,224.6	443,088.1	625,041.0	443,028.8
H	666,218.3	445,746.5	625,034.9	445,687.1
I	666,205.3	448,396.9	625,022.0	448,337.4
J	666,193.9	451,046.7	625,010.6	450,987.1
K	666,174.6	453,699.9	624,991.5	453,640.3
L	666,154.8	456,352.9	624,971.7	456,293.2

C-102 Sumbit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024	
		Submittal Type:	<input type="checkbox"/> Initial Submittal
			<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number 30-015-	Pool Code 97753	Pool Name WILDCAT S243006B; LWR BONE SPRING	
Property Code	Property Name POKER LAKE UNIT 13-24 PC	Well Number 806H	
OGRID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC.	Ground Level Elevation 3,113'	
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

Surface Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	13	24S	29E		2,420 FNL	1,536 FEL	32.218155	-103.934466	EDDY

Bottom Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	24S	29E	1	51 FNL	755 FEL	32.253809	-103.932007	EDDY


Dedicated Acres 160.00	Infill or Defining Well DEFINING	Defining Well API	Overlapping Spacing Unit (Y/N) Y	Consolidation Code U
Order Numbers.			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	13	24S	29E		1,764 FSL	988 FEL	32.215042	-103.932701	EDDY

First Take Point (FTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	13	24S	29E		1,993 FSL	988 FEL	32.215672	-103.932698	EDDY

Last Take Point (LTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	24S	29E	1	101 FNL	755 FEL	32.253670	-103.932007	EDDY

Unitized Area or Area of Interest NMNM105422429	Spacing Unit Type : <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Elevation 3,113'
---	--	-----------------------------------

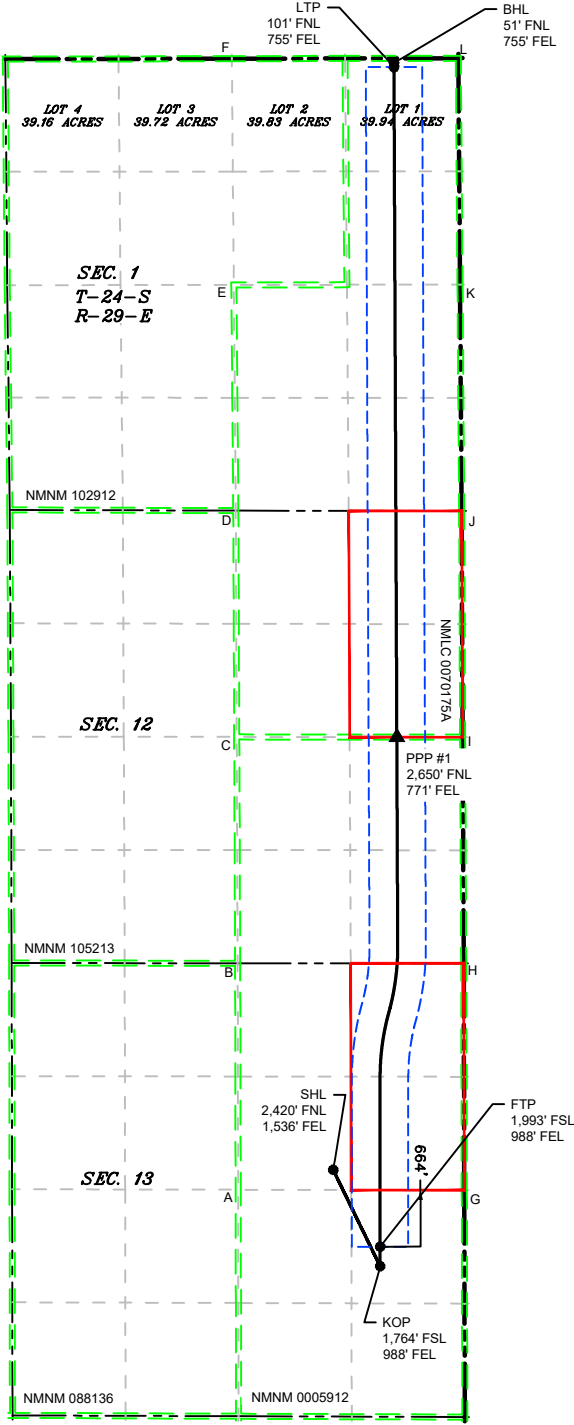
<div>OPERATOR CERTIFICATIONS</div> <div><p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of heretofore entered by the division.</i></p><p><i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i></p></div> <div><div>Samantha Weis9/19/2025</div><div>SignatureDate</div><div>Samantha Weis</div><div>Printed Name</div><div>samantha.r.bartnik@exxonmobil.com</div><div>Email Address</div></div>	<div>SURVEYOR CERTIFICATIONS</div> <div><p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</i></p></div> <div><div></div><div>Signature and Seal of Professional Surveyor</div><div><div>MARK DILLON HARP 23786</div><div>Certificate Number</div><div>9/18/2025</div><div>Date of Survey</div></div><div><div>DB</div><div>618.013003.04-29</div></div></div>
---	--

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

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated areage 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 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 accepted.



LEGEND

- SECTION LINE
-
- TOWNSHIP LINE

WELL COORDINATE TABLE								
WELL	NAD 83 NME X	NAD 83 NME Y	NAD 83 LAT	NAD 83 LON	NAD 27 NME X	NAD 27 NME Y	NAD 27 LAT	NAD 27 LON
SHL	664,688.4	443,327.7	32.218155	-103.934466	623,504.9	443,268.3	32.218031	-103.933977
KOP	665,238.5	442,197.1	32.215042	-103.932701	624,054.9	442,137.8	32.214918	-103.932212
FTP	665,238.5	442,426.3	32.215672	-103.932698	624,054.9	442,366.9	32.215547	-103.932210
LTP	665,400.7	456,250.3	32.253670	-103.932007	624,217.6	456,190.6	32.253546	-103.931516
BHL	665,400.5	456,300.7	32.253809	-103.932007	624,217.4	456,241.0	32.253684	-103.931516
PPP1	665,434.0	448,397.8	32.232084	-103.931994	624,250.7	448,338.3	32.231960	-103.931504

CORNER COORDINATE TABLE				
CORNER	NAD 83 NME X	NAD 83 NME Y	NAD 27 NME X	NAD 27 NME Y
A	663,576.0	443,093.9	622,392.5	443,034.6
B	663,570.2	445,748.2	622,386.8	445,688.8
C	663,559.1	448,399.9	622,375.8	448,340.4
D	663,547.9	451,051.0	622,364.7	450,991.4
E	663,524.5	453,696.5	622,341.4	453,636.9
F	663,501.0	456,347.1	622,318.0	456,287.4
G	666,224.6	443,088.1	625,041.0	443,028.8
H	666,218.3	445,746.5	625,034.9	445,687.1
I	666,205.3	448,396.9	625,022.0	448,337.4
J	666,193.9	451,046.7	625,010.6	450,987.1
K	666,174.6	453,699.9	624,991.5	453,640.3
L	666,154.8	456,352.9	624,971.7	456,293.2

C-102 Sumbit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024	
		Submittal Type:	<input type="checkbox"/> Initial Submittal
			<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number 30-015-	Pool Code 11520	Pool Name CEDAR CANYON; BONE SPRING	
Property Code	Property Name POKER LAKE UNIT 13-24 PC	Well Number 806H	
OGRID No. 373075	Operator Name XTO PERMIAN OPERATING, LLC.	Ground Level Elevation 3,113'	
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal	

Surface Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	13	24S	29E		2,420 FNL	1,536 FEL	32.218155	-103.934466	EDDY

Bottom Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	24S	29E	1	51 FNL	755 FEL	32.253809	-103.932007	EDDY



Dedicated Acres 159.94	Infill or Defining Well DEFINING	Defining Well API	Overlapping Spacing Unit (Y/N) Y	Consolidation Code U
Order Numbers.			Well Setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	13	24S	29E		1,764 FSL	988 FEL	32.215042	-103.932701	EDDY

First Take Point (FTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	13	24S	29E		1,993 FSL	988 FEL	32.215672	-103.932698	EDDY

Last Take Point (LTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	1	24S	29E	1	101 FNL	755 FEL	32.253670	-103.932007	EDDY

Unitized Area or Area of Interest NMNM105422429	Spacing Unit Type : <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Elevation 3,113'
---	--	-----------------------------------

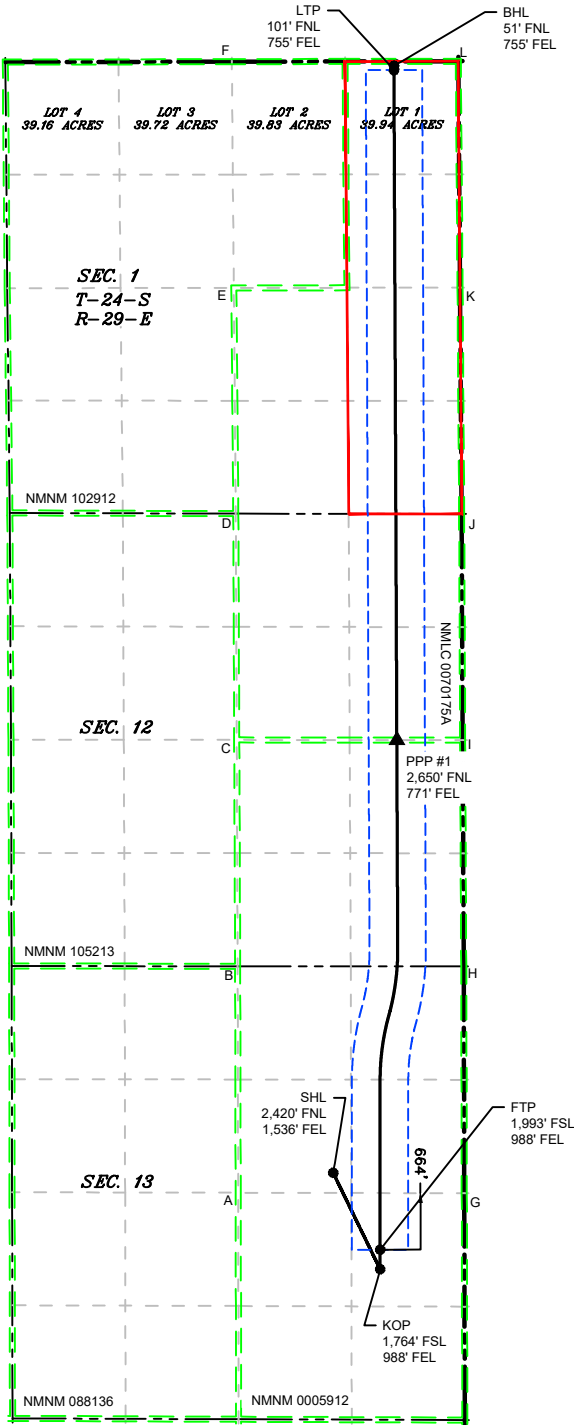
<div>OPERATOR CERTIFICATIONS</div> <div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of heretofore entered by the division.</div> <div>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</div> <div>Samantha Weis9/19/2025</div> <div>SignatureDate</div> <div>Samantha Weis</div> <div>Printed Name</div> <div>samantha.r.bartnik@exxonmobil.com</div> <div>Email Address</div>	<div>SURVEYOR CERTIFICATIONS</div> <div>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</div> <div></div> <div>Signature and Seal of Professional Surveyor</div> <div></div> <div>MARK DILLON HARP 237869/18/2025</div> <div>Certificate NumberDate of Survey</div> <div>DB618.013003.04-29</div>
---	---

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

ACREAGE DEDICATION PLATS

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated areage 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 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 accepted.



LEGEND

- SECTION LINE
- 330' BUFFER
- PPP
- TOWNSHIP LINE
- MINERAL LEASE
- WELL
- DEDICATED ACREAGE
- WELL BORE

WELL COORDINATE TABLE								
WELL	NAD 83 NME X	NAD 83 NME Y	NAD 83 LAT	NAD 83 LON	NAD 27 NME X	NAD 27 NME Y	NAD 27 LAT	NAD 27 LON
SHL	664,688.4	443,327.7	32.218155	-103.934466	623,504.9	443,268.3	32.218031	-103.933977
KOP	665,238.5	442,197.1	32.215042	-103.932701	624,054.9	442,137.8	32.214918	-103.932212
FTP	665,238.5	442,426.3	32.215672	-103.932698	624,054.9	442,366.9	32.215547	-103.932210
LTP	665,400.7	456,250.3	32.253670	-103.932007	624,217.6	456,190.6	32.253546	-103.931516
BHL	665,400.5	456,300.7	32.253809	-103.932007	624,217.4	456,241.0	32.253684	-103.931516
PPP1	665,434.0	448,397.8	32.232084	-103.931994	624,250.7	448,338.3	32.231960	-103.931504

CORNER COORDINATE TABLE				
CORNER	NAD 83 NME X	NAD 83 NME Y	NAD 27 NME X	NAD 27 NME Y
A	663,576.0	443,093.9	622,392.5	443,034.6
B	663,570.2	445,748.2	622,386.8	445,688.8
C	663,559.1	448,399.9	622,375.8	448,340.4
D	663,547.9	451,051.0	622,364.7	450,991.4
E	663,524.5	453,696.5	622,341.4	453,636.9
F	663,501.0	456,347.1	622,318.0	456,287.4
G	666,224.6	443,088.1	625,041.0	443,028.8
H	666,218.3	445,746.5	625,034.9	445,687.1
I	666,205.3	448,396.9	625,022.0	448,337.4
J	666,193.9	451,046.7	625,010.6	450,987.1
K	666,174.6	453,699.9	624,991.5	453,640.3
L	666,154.8	456,352.9	624,971.7	456,293.2

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

ExxonMobil
Poker Lake Unit 13-24 PC 806H
Projected TD: 23703' MD / 9738' TVD
SHL: 2420' FNL & 1536' FEL , Section 13, T24S, R29E
BHL: 51' FNL & 755' FEL , Section 1, T24S, R29E
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
Salado	641'	Water
Delaware	3350'	Water
Cherry Canyon	4246'	Water/Oil/Gas
Brushy Canyon	5789'	Water/Oil/Gas
Basal Brushy Canyon		
Bone Spring Lm.	7102'	Water/Oil/Gas
Avalon Shale	7228'	Water/Oil/Gas
Avalon Lower	7777'	Water/Oil/Gas
1st Bone Spring Sand	8089'	Water/Oil/Gas
2nd Bone Spring Sand	8949'	Water/Oil/Gas
3rd Bone Spring Sand Base		
3rd Bone Spring Lime	9222'	Water/Oil/Gas
Harkey		
3rd Bone Spring Upper Shale	9599'	Water/Oil/Gas
Bone Spring Upper Shale B		
3rd Bone Spring Lower Shale		
Bone Spring Lower Shale M		
3rd Bone Spring Sand		
Warwink		
Red Hills		
Wolfcamp A		
Wolfcamp B		
Wolfcamp C		
Wolfcamp D		
Landing	9738'	Water/Oil/Gas

Section 2 Summary:

*** Deepest Expected Groundwater Depth: 40' (per NM State Engineers Office).

No other formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 9-5/8" inch casing at 616' and circulating cement back to surface.

3. Primary Casing Design**Primary Design:**

Hole Size (in.)	MD	Casing TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25"	0' – 616'	616'	9-5/8"	40	J55	BTC	New	20.90	19.26	5.85
8.75"	0' – 4000'	3933'	7-5/8"	29.7	P110-ICY	Tenaris Wedge 511	New	6.01	8.64	3.34
8.75"	4000' – 9022'	8872'	7-5/8"	29.7	L80-IC	Tenaris Wedge 511	New	2.66	5.59	2.40
6.75"	0' – 8922'	8772'	5-1/2"	20	P110-ICY	Tenaris Wedge 441	New	1.34	3.24	2.86
6.75"	8922' – 23703'	9738'	5-1/2"	20	P110-IC	Tenaris Wedge 441	New	1.18	2.92	2.63

Section 3 Summary:

XTO will keep casing fluid filled to meet BLM's collapse requirement.
The planned kick off point is located at: 9172' MD / 9022' TVD.

Wellhead:

A multi-bowl wellhead system will be utilized. The well design chosen is: 3-String Slim Non-Potash

Wellhead will be installed by manufacturer's representatives.

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

4. Cement Program

Primary Cementing								
Hole Section	Slurry Type	No. Sacks	Density (ppg)	Yield (ft3/sack)	TOC (ft)	Casing Setting Depth (MD)	Excess (%)	Slurry Description
Surface 1	Lead	94	12.4	2.11	0	616	100%	Surface 1 Class C Lead Cement
Surface 1	Tail	141	14.8	1.33	316	616	100%	Surface 1 Class C Tail Cement
Intermediate 1	Lead							
Intermediate 1	Tail	302	14.8	1.45	5789	9,022	35%	Intermediate 1 Class C Tail Cement
Production 1	Lead							
Production 1	Tail	1072	13.2	1.44	8522	23,703	25%	Production 1 Class C Tail Cement
Remedial Cementing								
Casing	Slurry Type	No. Sacks	Density (ppg)	Yield (ft3/sack)	Cemented Interval	Excess (%)	Slurry Description	
Intermediate 1	Bradenhead Squeeze	542	14.8	1.45	0 - 5789'	35%	Intermediate Class C Bradenhead Squeeze Cement	

Section 4 Summary:

*Bradenhead Squeeze 2nd Stage Offline

5. Pressure Control Equipment**Section 5 Summary:**

Once the permanent WH is installed on the casing, the blow out preventer equipment (BOP) will consist of a minimum 5M Hydril and a minimum 10M triple Ram BOP.

All BOP testing will be done by an independent service company. Operator will Test as per 43CFR-3172

Requested Variances**4A) Offline Cementing Variance**

XOM requests the option to offline cement and remediate (if needed) SURFACE, INTERMEDIATE and PRODUCTION casing strings where batch drilling is approved and if unplanned remediation is needed. XOM 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. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence. The TA cap will also be installed when applicable per wellhead manufacturer's procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

5A) Break Test Variance

A break testing variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead for the intermediate hole sections which is in compliance with API Standard 53. The maximum anticipated surface pressure is less than 4800psi and the deepest intermediate casing point does not penetrate the Wolfcamp Formation.

5B) Flex Hose Variance

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.

8A) Open Hole Logging Variance

Open hole logging will not be done on this well.

10A) Spudder Rig Variance

XOM requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing.

10B) Batch Drilling Variance

XOM requests a variance to be able to batch drill this well. In doing so, XOM will set casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. XOM will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and intermediate strings are all completed, XOM will begin drilling the production hole on each of the wells.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss	Comments
			(ppg)	(sec/qt)	(cc)	
0' – 616'	12.25"	FW/Native	8.3 – 8.7	35-40	NC	Fresh Water or Native Water
616' – 9022'	8.75"	BDE/OBM or FW/Brine	9.5 – 10	30-32	NC	Fluid type will be based upon on well conditions. A fully saturated system will be used across the salt interval.
9022' – 23703'	6.75"	OBM	9 – 10.7	50-60	NC - 20	OBM or Cut Brine depending on Well Conditions

Section 6 Summary:

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

Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. An EDR (Electronic Drilling Recorder) 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**Section 7 Summary:**

A Kelly cock will be in the drill string at all times.

A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.

H2S monitors will be on location when drilling below the 9-5/8" casing.

8. Logging, Coring and Testing Program**Section 8 Summary:**

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards**Section 9 Summary:**

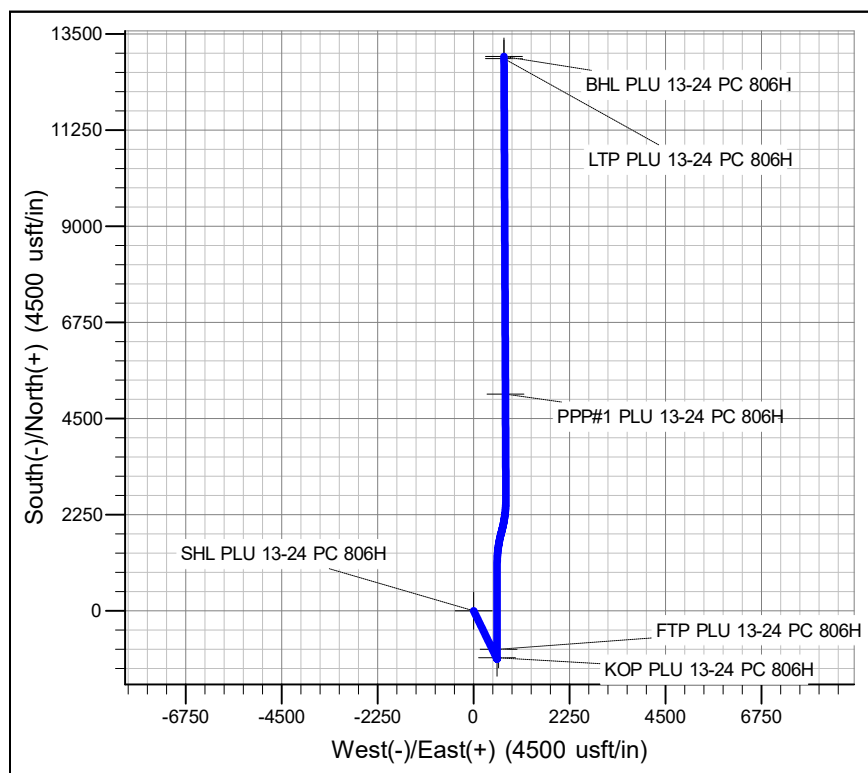
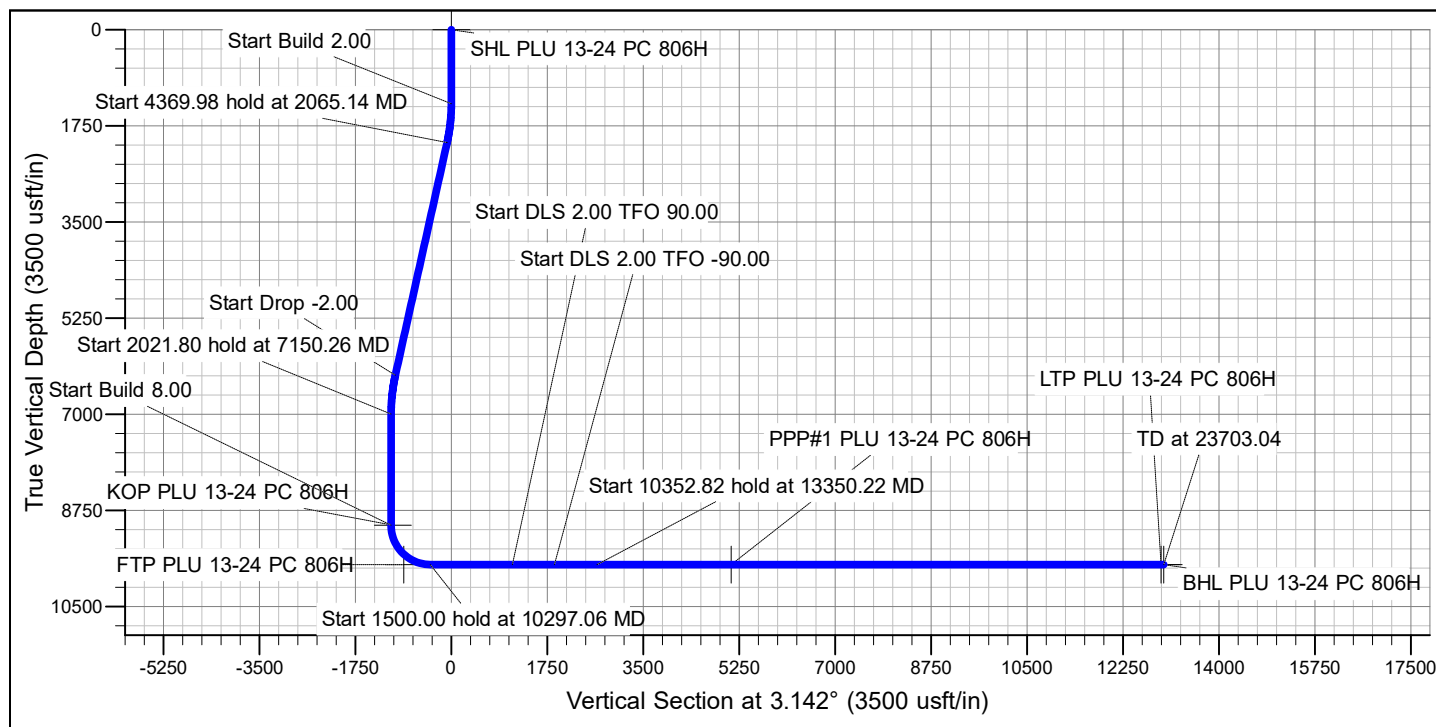
The estimated bottom hole temperature of 163F to 183F. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation is possible throughout the well.

10. Anticipated Starting Date and Duration of Operations**Section 10 Summary:**

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.



Site: (HP508) - PLU 13-1/13-24 PC, Pad B
 Well: Poker Lake Unit 13-24 PC 806H
 Wellbore: OH
 Design: Plan 1



FORMATION TOP DETAILS		
TVDPPath	MDPath	Formation
417.00	417.00	Rustler
640.00	640.00	Salado
3148.00	3190.28	Base of Salt
3349.00	3397.71	Delaware
4245.00	4322.37	Cherry Canyon
5788.00	5914.73	Brushy Canyon
7101.00	7251.26	Bone Spring Lm.
7227.00	7377.26	Avalon Shale
7776.00	7926.26	Lower Avalon Shale
7939.00	8089.26	1st Bone Spring Lime
8088.00	8238.26	1st Bone Spring Sand
8343.00	8493.26	2nd Bone Spring Shale
8419.00	8569.26	2nd Bone Spring Lime
8948.00	9098.26	2nd Bone Spring Sand
9221.00	9373.93	3rd Bone Spring Lime
9598.00	9841.62	3rd Bone Spring Shale
9738.00	10297.06	Landing

COMPANY ROC

FIELD PLU 13-1/13-24 PC - Eddy Co (NAD27 NME)

SITE (HP508) - PLU 13-1/13-24 PC, Pad B

WELL Poker Lake Unit 13-24 PC 806H

WELLPATH OH

DESIGN Plan 1

DEPTHUNT (ft)

WELL INFO

MAP DATUM NAD 1927 (NADCON CONUS)

MAP SYSTEM US State Plane 1927 (Exact solution)

MAP ZONE New Mexico East 3001

WELL LAT 32.21803

WELL LON -103.934

WELL EW M 623504.9

WELL NS M 443268.3

CONVERGE 0.21

MAGMODE IGRF2020

DECLINATION 6.4

NORTH REF Grid

GROUND E 3113

KB ELEV 3143

VS AZI 3.14

SURVEY TYPE INFORMATION

H07000.00 : 8600.00 : PLAN 1 : GYD_OMEGAX

H07008600.00 : 23702.71 : PLAN 1 : XOMR2_OWSG MWD+IFR1+MS

SURVEY LIST

Measured [MD	Inclination INC	Azimuth AZI	Course CL	Len TVD	True SSTVD	Vertic: NS	SubSea EW	TVI X	Local N/-S	Local E/-W	Easting
0	0	0	0	0	0	3143	0	0	0	623504.9	
100	0	0	0	100	100	3043	0	0	0	623504.9	
200	0	0	0	100	200	2943	0	0	0	623504.9	
299.999	0	0	0	100	299.999	2843.001	0	0	0	623504.9	
399.999	0	0	0	100	399.999	2743.001	0	0	0	623504.9	
499.999	0	0	0	100	499.999	2643.001	0	0	0	623504.9	
599.999	0	0	0	100	599.999	2543.001	0	0	0	623504.9	
699.999	0	0	0	100	699.999	2443.001	0	0	0	623504.9	
799.998	0	0	0	100	799.998	2343.002	0	0	0	623504.9	
899.998	0	0	0	100	899.998	2243.002	0	0	0	623504.9	
999.998	0	0	0	100	999.998	2143.002	0	0	0	623504.9	
1099.998	0	0	0	100	1099.998	2043.002	0	0	0	623504.9	
1199.998	0	0	0	100	1199.998	1943.002	0	0	0	623504.9	

1299.997	0	0	100	1299.997	1843.003	0	0	623504.9
1350	0	0	50.003	1350	1793	0	0	623504.9
1399.997	1	154.054	49.997	1399.995	1743.005	-0.392	0.191	623505.1
1499.997	3	154.054	100	1499.928	1643.072	-3.53	1.718	623506.6
1599.997	5	154.054	100	1599.68	1543.32	-9.802	4.77	623509.7
1699.997	7	154.054	100	1699.127	1443.873	-19.201	9.343	623514.2
1799.996	9	154.054	100	1798.148	1344.852	-31.715	15.432	623520.3
1899.996	11	154.054	100	1896.624	1246.376	-47.328	23.029	623527.9
1999.996	13	154.054	100	1994.433	1148.567	-66.023	32.125	623537
2065.144	14.303	154.054	65.148	2057.74	1085.26	-79.848	38.852	623543.8
2099.996	14.303	154.054	34.852	2091.511	1051.489	-87.591	42.619	623547.5
2199.996	14.303	154.054	100	2188.411	954.589	-109.805	53.429	623558.3
2299.995	14.303	154.054	100	2285.311	857.689	-132.02	64.238	623569.1
2399.995	14.303	154.054	100	2382.212	760.788	-154.234	75.047	623579.9
2499.995	14.303	154.054	100	2479.112	663.888	-176.449	85.856	623590.8
2599.995	14.303	154.054	100	2576.012	566.988	-198.663	96.665	623601.6
2699.995	14.303	154.054	100	2672.912	470.088	-220.878	107.474	623612.4
2799.994	14.303	154.054	100	2769.812	373.188	-243.093	118.283	623623.2
2899.994	14.303	154.054	100	2866.712	276.288	-265.307	129.092	623634
2999.994	14.303	154.054	100	2963.612	179.388	-287.522	139.901	623644.8
3099.994	14.303	154.054	100	3060.512	82.488	-309.736	150.71	623655.6
3199.994	14.303	154.054	100	3157.413	-14.413	-331.951	161.519	623666.4
3299.993	14.303	154.054	100	3254.313	-111.313	-354.165	172.329	623677.2
3399.993	14.303	154.054	100	3351.213	-208.213	-376.38	183.138	623688
3499.993	14.303	154.054	100	3448.113	-305.113	-398.595	193.947	623698.8
3599.993	14.303	154.054	100	3545.013	-402.013	-420.809	204.756	623709.7
3699.993	14.303	154.054	100	3641.913	-498.913	-443.024	215.565	623720.5
3799.992	14.303	154.054	100	3738.813	-595.813	-465.238	226.374	623731.3
3899.992	14.303	154.054	100	3835.714	-692.714	-487.453	237.183	623742.1
3999.992	14.303	154.054	100	3932.614	-789.614	-509.667	247.992	623752.9
4099.992	14.303	154.054	100	4029.514	-886.514	-531.882	258.801	623763.7
4199.992	14.303	154.054	100	4126.414	-983.414	-554.097	269.61	623774.5
4299.991	14.303	154.054	100	4223.314	-1080.31	-576.311	280.419	623785.3
4399.991	14.303	154.054	100	4320.214	-1177.21	-598.526	291.228	623796.1
4499.991	14.303	154.054	100	4417.114	-1274.11	-620.74	302.038	623806.9
4599.991	14.303	154.054	100	4514.015	-1371.02	-642.955	312.847	623817.7
4699.991	14.303	154.054	100	4610.915	-1467.92	-665.169	323.656	623828.6
4799.99	14.303	154.054	100	4707.815	-1564.82	-687.384	334.465	623839.4
4899.99	14.303	154.054	100	4804.715	-1661.72	-709.599	345.274	623850.2
4999.99	14.303	154.054	100	4901.615	-1758.62	-731.813	356.083	623861
5099.99	14.303	154.054	100	4998.515	-1855.52	-754.028	366.892	623871.8
5199.99	14.303	154.054	100	5095.415	-1952.42	-776.242	377.701	623882.6
5299.989	14.303	154.054	100	5192.315	-2049.32	-798.457	388.51	623893.4
5399.989	14.303	154.054	100	5289.216	-2146.22	-820.671	399.319	623904.2

5499.989	14.303	154.054	100	5386.116	-2243.12	-842.886	410.128	623915
5599.989	14.303	154.054	100	5483.016	-2340.02	-865.101	420.937	623925.8
5699.989	14.303	154.054	100	5579.916	-2436.92	-887.315	431.747	623936.6
5799.988	14.303	154.054	100	5676.816	-2533.82	-909.53	442.556	623947.5
5899.988	14.303	154.054	100	5773.716	-2630.72	-931.744	453.365	623958.3
5999.988	14.303	154.054	100	5870.616	-2727.62	-953.959	464.174	623969.1
6099.988	14.303	154.054	100	5967.517	-2824.52	-976.173	474.983	623979.9
6199.988	14.303	154.054	100	6064.417	-2921.42	-998.388	485.792	623990.7
6299.987	14.303	154.054	100	6161.317	-3018.32	-1020.6	496.601	624001.5
6399.987	14.303	154.054	100	6258.217	-3115.22	-1042.82	507.41	624012.3
6435.12	14.303	154.054	35.132	6292.26	-3149.26	-1050.62	511.208	624016.1
6499.987	13.006	154.054	64.867	6355.293	-3212.29	-1064.39	517.907	624022.8
6599.987	11.006	154.054	100	6453.101	-3310.1	-1083.09	527.008	624031.9
6699.987	9.006	154.054	100	6551.575	-3408.58	-1098.72	534.609	624039.5
6799.986	7.006	154.054	100	6650.595	-3507.6	-1111.24	540.702	624045.6
6899.986	5.006	154.054	100	6750.041	-3607.04	-1120.65	545.28	624050.2
6999.986	3.006	154.054	100	6849.791	-3706.79	-1126.93	548.336	624053.2
7099.986	1.006	154.054	100	6949.725	-3806.73	-1130.07	549.867	624054.8
7150.264	0	0	50.278	7000	-3857	-1130.47	550.06	624055
7199.986	0	0	49.722	7049.722	-3906.72	-1130.47	550.06	624055
7299.985	0	0	100	7149.722	-4006.72	-1130.47	550.06	624055
7399.985	0	0	100	7249.721	-4106.72	-1130.47	550.06	624055
7499.985	0	0	100	7349.721	-4206.72	-1130.47	550.06	624055
7599.985	0	0	100	7449.721	-4306.72	-1130.47	550.06	624055
7699.985	0	0	100	7549.721	-4406.72	-1130.47	550.06	624055
7799.984	0	0	100	7649.721	-4506.72	-1130.47	550.06	624055
7899.984	0	0	100	7749.72	-4606.72	-1130.47	550.06	624055
7999.984	0	0	100	7849.72	-4706.72	-1130.47	550.06	624055
8099.984	0	0	100	7949.72	-4806.72	-1130.47	550.06	624055
8199.984	0	0	100	8049.72	-4906.72	-1130.47	550.06	624055
8299.983	0	0	100	8149.72	-5006.72	-1130.47	550.06	624055
8399.983	0	0	100	8249.719	-5106.72	-1130.47	550.06	624055
8499.983	0	0	100	8349.719	-5206.72	-1130.47	550.06	624055
8599.983	0	0	100	8449.719	-5306.72	-1130.47	550.06	624055
8699.983	0	0	100	8549.719	-5406.72	-1130.47	550.06	624055
8799.982	0	0	100	8649.719	-5506.72	-1130.47	550.06	624055
8899.982	0	0	100	8749.718	-5606.72	-1130.47	550.06	624055
8999.982	0	0	100	8849.718	-5706.72	-1130.47	550.06	624055
9099.982	0	0	100	8949.718	-5806.72	-1130.47	550.06	624055
9172.064	0	0	72.082	9021.8	-5878.8	-1130.47	550.06	624055
9199.982	2.233	0	27.918	9049.711	-5906.71	-1129.93	550.06	624055
9299.981	10.233	0	100	9149.039	-6006.04	-1119.08	550.06	624055
9399.981	18.233	0	100	9245.89	-6102.89	-1094.51	550.06	624055
9499.981	26.233	0	100	9338.38	-6195.38	-1056.7	550.06	624055

9599.981	34.233	0	100	9424.707	-6281.71	-1006.39	550.06	624055
9699.981	42.233	0	100	9503.193	-6360.19	-944.555	550.06	624055
9799.98	50.233	0	100	9572.309	-6429.31	-872.397	550.06	624055
9899.98	58.233	0	100	9630.71	-6487.71	-791.323	550.06	624055
9999.98	66.233	0	100	9677.259	-6534.26	-702.91	550.06	624055
10099.98	74.233	0	100	9711.051	-6568.05	-608.879	550.06	624055
10199.98	82.233	0	100	9731.427	-6588.43	-511.06	550.06	624055
10297.06	90	0	97.084	9737.997	-6595	-414.273	550.06	624055
10299.98	90	0	2.916	9737.997	-6595	-411.357	550.06	624055
10399.98	90	0	100	9737.997	-6595	-311.357	550.06	624055
10499.98	90	0	100	9737.997	-6595	-211.357	550.06	624055
10599.98	90	0	100	9737.997	-6595	-111.358	550.06	624055
10699.98	90	0	100	9737.997	-6595	-11.358	550.06	624055
10799.98	90	0	100	9737.997	-6595	88.642	550.06	624055
10899.98	90	0	100	9737.997	-6595	188.642	550.06	624055
10999.98	90	0	100	9737.997	-6595	288.642	550.06	624055
11099.98	90	0	100	9737.997	-6595	388.641	550.06	624055
11199.98	90	0	100	9737.997	-6595	488.641	550.06	624055
11299.98	90	0	100	9737.997	-6595	588.641	550.06	624055
11399.98	90	0	100	9737.997	-6595	688.641	550.06	624055
11499.98	90	0	100	9737.997	-6595	788.641	550.06	624055
11599.98	90	0	100	9737.997	-6595	888.64	550.06	624055
11699.98	90	0	100	9737.997	-6595	988.64	550.06	624055
11797.06	90	0	97.087	9737.997	-6595	1085.727	550.06	624055
11799.98	90	0.058	2.913	9737.997	-6595	1088.64	550.061	624055
11899.98	90	2.058	100	9737.997	-6595	1188.618	551.908	624056.8
11999.98	90	4.058	100	9737.997	-6595	1288.47	557.243	624062.1
12099.98	90	6.058	100	9737.997	-6595	1388.075	566.059	624071
12199.98	90	8.058	100	9737.997	-6595	1487.312	578.347	624083.2
12299.98	90	10.058	100	9737.997	-6595	1586.06	594.09	624099
12399.98	90	12.058	100	9737.997	-6595	1684.198	613.269	624118.2
12499.98	90	14.058	100	9737.997	-6595	1781.607	635.862	624140.8
12567.56	90	15.41	67.589	9737.997	-6595	1846.972	653.052	624158
12599.98	90	14.762	32.411	9737.997	-6595	1878.265	661.487	624166.4
12699.98	90	12.762	100	9737.997	-6595	1975.39	685.275	624190.2
12799.97	90	10.762	100	9737.997	-6595	2073.285	705.658	624210.6
12899.97	90	8.762	100	9737.997	-6595	2171.832	722.612	624227.5
12999.97	90	6.762	100	9737.997	-6595	2270.91	736.117	624241
13099.97	90	4.762	100	9737.997	-6595	2370.4	746.156	624251.1
13199.97	90	2.762	100	9737.997	-6595	2470.179	752.716	624257.6
13299.97	90	0.762	100	9737.997	-6595	2570.127	755.791	624260.7
13350.22	90	359.757	50.243	9737.997	-6595	2620.369	756.018	624260.9
13399.97	90	359.757	49.757	9737.997	-6595	2670.125	755.807	624260.7
13499.97	90	359.757	100	9737.997	-6595	2770.124	755.383	624260.3

13599.97	90	359.757	100	9737.997	-6595	2870.123	754.959	624259.9
13699.97	90	359.757	100	9737.997	-6595	2970.121	754.534	624259.4
13799.97	90	359.757	100	9737.997	-6595	3070.12	754.11	624259
13899.97	90	359.757	100	9737.998	-6595	3170.119	753.686	624258.6
13999.97	90	359.757	100	9737.998	-6595	3270.118	753.262	624258.2
14099.97	90	359.757	100	9737.998	-6595	3370.117	752.837	624257.7
14199.97	90	359.757	100	9737.998	-6595	3470.116	752.413	624257.3
14299.97	90	359.757	100	9737.998	-6595	3570.115	751.989	624256.9
14399.97	90	359.757	100	9737.998	-6595	3670.114	751.565	624256.5
14499.97	90	359.757	100	9737.998	-6595	3770.113	751.141	624256
14599.97	90	359.757	100	9737.998	-6595	3870.112	750.716	624255.6
14699.97	90	359.757	100	9737.998	-6595	3970.11	750.292	624255.2
14799.97	90	359.757	100	9737.998	-6595	4070.109	749.868	624254.8
14899.97	90	359.757	100	9737.998	-6595	4170.108	749.444	624254.3
14999.97	90	359.757	100	9737.998	-6595	4270.107	749.02	624253.9
15099.97	90	359.757	100	9737.998	-6595	4370.106	748.595	624253.5
15199.97	90	359.757	100	9737.998	-6595	4470.105	748.171	624253.1
15299.97	90	359.757	100	9737.998	-6595	4570.104	747.747	624252.6
15399.97	90	359.757	100	9737.998	-6595	4670.103	747.323	624252.2
15499.97	90	359.757	100	9737.998	-6595	4770.102	746.899	624251.8
15599.97	90	359.757	100	9737.998	-6595	4870.101	746.474	624251.4
15699.97	90	359.757	100	9737.998	-6595	4970.099	746.05	624251
15799.97	90	359.757	100	9737.998	-6595	5070.098	745.626	624250.5
15899.97	90	359.757	100	9737.998	-6595	5170.097	745.202	624250.1
15999.97	90	359.757	100	9737.998	-6595	5270.096	744.777	624249.7
16099.97	90	359.757	100	9737.998	-6595	5370.095	744.353	624249.3
16199.97	90	359.757	100	9737.998	-6595	5470.094	743.929	624248.8
16299.97	90	359.757	100	9737.998	-6595	5570.093	743.505	624248.4
16399.97	90	359.757	100	9737.998	-6595	5670.092	743.081	624248
16499.97	90	359.757	100	9737.998	-6595	5770.091	742.656	624247.6
16599.97	90	359.757	100	9737.998	-6595	5870.09	742.232	624247.1
16699.97	90	359.757	100	9737.998	-6595	5970.088	741.808	624246.7
16799.97	90	359.757	100	9737.998	-6595	6070.087	741.384	624246.3
16899.97	90	359.757	100	9737.998	-6595	6170.086	740.96	624245.9
16999.97	90	359.757	100	9737.998	-6595	6270.085	740.535	624245.4
17099.97	90	359.757	100	9737.998	-6595	6370.084	740.111	624245
17199.97	90	359.757	100	9737.998	-6595	6470.083	739.687	624244.6
17299.97	90	359.757	100	9737.998	-6595	6570.082	739.263	624244.2
17399.97	90	359.757	100	9737.998	-6595	6670.081	738.838	624243.7
17499.97	90	359.757	100	9737.998	-6595	6770.08	738.414	624243.3
17599.97	90	359.757	100	9737.998	-6595	6870.079	737.99	624242.9
17699.97	90	359.757	100	9737.998	-6595	6970.077	737.566	624242.5
17799.96	90	359.757	100	9737.998	-6595	7070.076	737.142	624242
17899.96	90	359.757	100	9737.999	-6595	7170.075	736.717	624241.6

17999.96	90	359.757	100	9737.999	-6595	7270.074	736.293	624241.2
18099.96	90	359.757	100	9737.999	-6595	7370.073	735.869	624240.8
18199.96	90	359.757	100	9737.999	-6595	7470.072	735.445	624240.3
18299.96	90	359.757	100	9737.999	-6595	7570.071	735.021	624239.9
18399.96	90	359.757	100	9737.999	-6595	7670.07	734.596	624239.5
18499.96	90	359.757	100	9737.999	-6595	7770.069	734.172	624239.1
18599.96	90	359.757	100	9737.999	-6595	7870.068	733.748	624238.6
18699.96	90	359.757	100	9737.999	-6595	7970.066	733.324	624238.2
18799.96	90	359.757	100	9737.999	-6595	8070.065	732.9	624237.8
18899.96	90	359.757	100	9737.999	-6595	8170.064	732.475	624237.4
18999.96	90	359.757	100	9737.999	-6595	8270.063	732.051	624237
19099.96	90	359.757	100	9737.999	-6595	8370.062	731.627	624236.5
19199.96	90	359.757	100	9737.999	-6595	8470.061	731.203	624236.1
19299.96	90	359.757	100	9737.999	-6595	8570.06	730.778	624235.7
19399.96	90	359.757	100	9737.999	-6595	8670.059	730.354	624235.3
19499.96	90	359.757	100	9737.999	-6595	8770.058	729.93	624234.8
19599.96	90	359.757	100	9737.999	-6595	8870.057	729.506	624234.4
19699.96	90	359.757	100	9737.999	-6595	8970.055	729.082	624234
19799.96	90	359.757	100	9737.999	-6595	9070.054	728.657	624233.6
19899.96	90	359.757	100	9737.999	-6595	9170.053	728.233	624233.1
19999.96	90	359.757	100	9737.999	-6595	9270.052	727.809	624232.7
20099.96	90	359.757	100	9737.999	-6595	9370.051	727.385	624232.3
20199.96	90	359.757	100	9737.999	-6595	9470.05	726.961	624231.9
20299.96	90	359.757	100	9737.999	-6595	9570.049	726.536	624231.4
20399.96	90	359.757	100	9737.999	-6595	9670.048	726.112	624231
20499.96	90	359.757	100	9737.999	-6595	9770.047	725.688	624230.6
20599.96	90	359.757	100	9737.999	-6595	9870.046	725.264	624230.2
20699.96	90	359.757	100	9737.999	-6595	9970.044	724.839	624229.7
20799.96	90	359.757	100	9737.999	-6595	10070.04	724.415	624229.3
20899.96	90	359.757	100	9737.999	-6595	10170.04	723.991	624228.9
20999.96	90	359.757	100	9737.999	-6595	10270.04	723.567	624228.5
21099.96	90	359.757	100	9737.999	-6595	10370.04	723.143	624228
21199.96	90	359.757	100	9737.999	-6595	10470.04	722.718	624227.6
21299.96	90	359.757	100	9737.999	-6595	10570.04	722.294	624227.2
21399.96	90	359.757	100	9737.999	-6595	10670.04	721.87	624226.8
21499.96	90	359.757	100	9737.999	-6595	10770.04	721.446	624226.3
21599.96	90	359.757	100	9737.999	-6595	10870.04	721.022	624225.9
21699.96	90	359.757	100	9737.999	-6595	10970.03	720.597	624225.5
21799.96	90	359.757	100	9738	-6595	11070.03	720.173	624225.1
21899.96	90	359.757	100	9738	-6595	11170.03	719.749	624224.6
21999.96	90	359.757	100	9738	-6595	11270.03	719.325	624224.2
22099.96	90	359.757	100	9738	-6595	11370.03	718.9	624223.8
22199.96	90	359.757	100	9738	-6595	11470.03	718.476	624223.4
22299.96	90	359.757	100	9738	-6595	11570.03	718.052	624223

22399.96	90	359.757	100	9738	-6595	11670.03	717.628	624222.5
22499.96	90	359.757	100	9738	-6595	11770.03	717.204	624222.1
22599.96	90	359.757	100	9738	-6595	11870.02	716.779	624221.7
22699.96	90	359.757	100	9738	-6595	11970.02	716.355	624221.3
22799.95	90	359.757	100	9738	-6595	12070.02	715.931	624220.8
22899.95	90	359.757	100	9738	-6595	12170.02	715.507	624220.4
22999.95	90	359.757	100	9738	-6595	12270.02	715.083	624220
23099.95	90	359.757	100	9738	-6595	12370.02	714.658	624219.6
23199.95	90	359.757	100	9738	-6595	12470.02	714.234	624219.1
23299.95	90	359.757	100	9738	-6595	12570.02	713.81	624218.7
23399.95	90	359.757	100	9738	-6595	12670.02	713.386	624218.3
23499.95	90	359.757	100	9738	-6595	12770.01	712.962	624217.9
23599.95	90	359.757	100	9738	-6595	12870.01	712.537	624217.4
23699.95	90	359.757	100	9738	-6595	12970.01	712.113	624217
23703.04	90	359.757	3.089	9738	-6595	12973.1	712.1	624217

Northing Y	Latitude LAT	Longitude LON	Dogleg Sev DLS	Build Rate BLD	Turn Rate TRN	Vertical Section VS
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0

443268.3	32.21803	-103.934	0	0	0	0
443268.3	32.21803	-103.934	0	0	0	0
443267.9	32.21803	-103.934	2	2	0	-0.381
443264.8	32.21802	-103.934	2	2	0	-3.431
443258.5	32.218	-103.934	2	2	0	-9.526
443249.1	32.21798	-103.934	2	2	0	-18.66
443236.6	32.21794	-103.934	2	2	0	-30.821
443221	32.2179	-103.934	2	2	0	-45.995
443202.3	32.21785	-103.934	2	2	0	-64.163
443188.5	32.21781	-103.934	2	2	0	-77.599
443180.7	32.21779	-103.934	0	0	0	-85.123
443158.5	32.21773	-103.934	0	0	0	-106.712
443136.3	32.21767	-103.934	0	0	0	-128.3
443114.1	32.21761	-103.934	0	0	0	-149.889
443091.9	32.21755	-103.934	0	0	0	-171.478
443069.6	32.21748	-103.934	0	0	0	-193.067
443047.4	32.21742	-103.934	0	0	0	-214.656
443025.2	32.21736	-103.934	0	0	0	-236.244
443003	32.2173	-103.934	0	0	0	-257.833
442980.8	32.21724	-103.934	0	0	0	-279.422
442958.6	32.21718	-103.933	0	0	0	-301.011
442936.3	32.21712	-103.933	0	0	0	-322.599
442914.1	32.21706	-103.933	0	0	0	-344.188
442891.9	32.21699	-103.933	0	0	0	-365.777
442869.7	32.21693	-103.933	0	0	0	-387.366
442847.5	32.21687	-103.933	0	0	0	-408.954
442825.3	32.21681	-103.933	0	0	0	-430.543
442803.1	32.21675	-103.933	0	0	0	-452.132
442780.8	32.21669	-103.933	0	0	0	-473.721
442758.6	32.21663	-103.933	0	0	0	-495.309
442736.4	32.21657	-103.933	0	0	0	-516.898
442714.2	32.21651	-103.933	0	0	0	-538.487
442692	32.21644	-103.933	0	0	0	-560.076
442669.8	32.21638	-103.933	0	0	0	-581.664
442647.6	32.21632	-103.933	0	0	0	-603.253
442625.3	32.21626	-103.933	0	0	0	-624.842
442603.1	32.2162	-103.933	0	0	0	-646.431
442580.9	32.21614	-103.933	0	0	0	-668.019
442558.7	32.21608	-103.933	0	0	0	-689.608
442536.5	32.21602	-103.933	0	0	0	-711.197
442514.3	32.21595	-103.933	0	0	0	-732.786
442492.1	32.21589	-103.933	0	0	0	-754.374
442469.8	32.21583	-103.933	0	0	0	-775.963
442447.6	32.21577	-103.933	0	0	0	-797.552

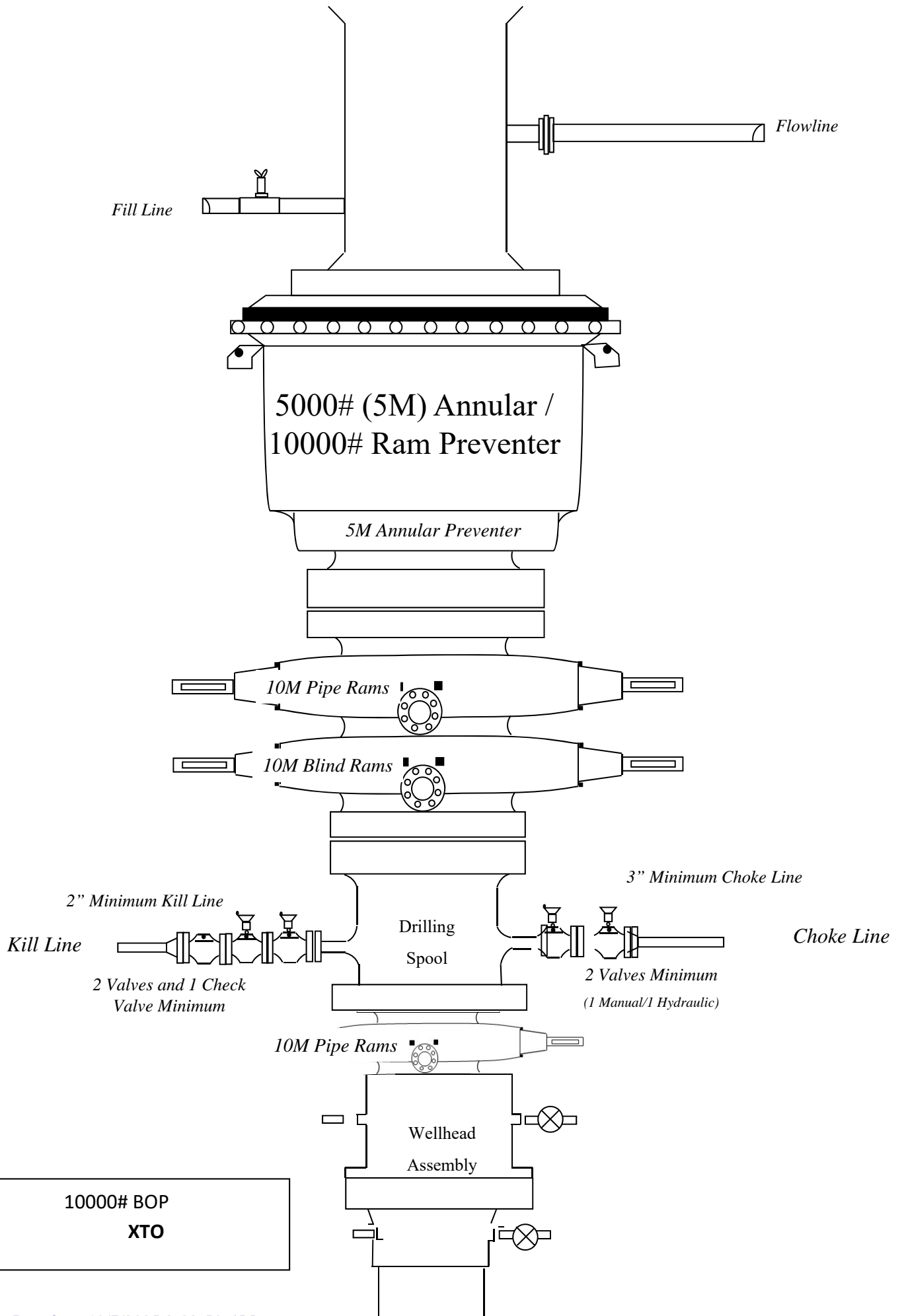
[illegible]

442261.9	32.21526	-103.932	8	8	0	-974.731
442323.7	32.21543	-103.932	8	8	0	-912.987
442395.9	32.21563	-103.932	8	8	0	-840.938
442477	32.21585	-103.932	8	8	0	-759.986
442565.4	32.21609	-103.932	8	8	0	-671.706
442659.4	32.21635	-103.932	8	8	0	-577.816
442757.2	32.21662	-103.932	8	8	0	-480.144
442854	32.21689	-103.932	8	8	0	-383.502
442856.9	32.21689	-103.932	0	0	0	-380.591
442956.9	32.21717	-103.932	0	0	0	-280.742
443056.9	32.21744	-103.932	0	0	0	-180.892
443156.9	32.21772	-103.932	0	0	0	-81.043
443256.9	32.21799	-103.932	0	0	0	18.807
443356.9	32.21827	-103.932	0	0	0	118.656
443456.9	32.21854	-103.932	0	0	0	218.506
443556.9	32.21882	-103.932	0	0	0	318.355
443656.9	32.21909	-103.932	0	0	0	418.205
443756.9	32.21937	-103.932	0	0	0	518.054
443856.9	32.21964	-103.932	0	0	0	617.904
443956.9	32.21992	-103.932	0	0	0	717.753
444056.9	32.22019	-103.932	0	0	0	817.603
444156.9	32.22047	-103.932	0	0	0	917.452
444256.9	32.22074	-103.932	0	0	0	1017.302
444354	32.22101	-103.932	0	0	0	1114.243
444356.9	32.22102	-103.932	2	0	2	1117.151
444456.9	32.22129	-103.932	2	0	2	1217.08
444556.8	32.22157	-103.932	2	0	2	1317.075
444656.4	32.22184	-103.932	2	0	2	1417.013
444755.6	32.22211	-103.932	2	0	2	1516.775
444854.4	32.22239	-103.932	2	0	2	1616.237
444952.5	32.22265	-103.932	2	0	2	1715.278
445049.9	32.22292	-103.932	2	0	2	1813.779
445115.3	32.2231	-103.932	2	0	2	1879.988
445146.6	32.22319	-103.932	2	0	-2	1911.697
445243.7	32.22345	-103.932	2	0	-2	2009.979
445341.6	32.22372	-103.932	2	0	-2	2108.844
445440.1	32.22399	-103.932	2	0	-2	2208.172
445539.2	32.22427	-103.932	2	0	-2	2307.842
445638.7	32.22454	-103.932	2	0	-2	2407.732
445738.5	32.22481	-103.932	2	0	-2	2507.721
445838.4	32.22509	-103.932	2	0	-2	2607.687
445888.7	32.22523	-103.932	2	0	-2	2657.866
445938.4	32.22536	-103.932	0	0	0	2707.536
446038.4	32.22564	-103.932	0	0	0	2807.361

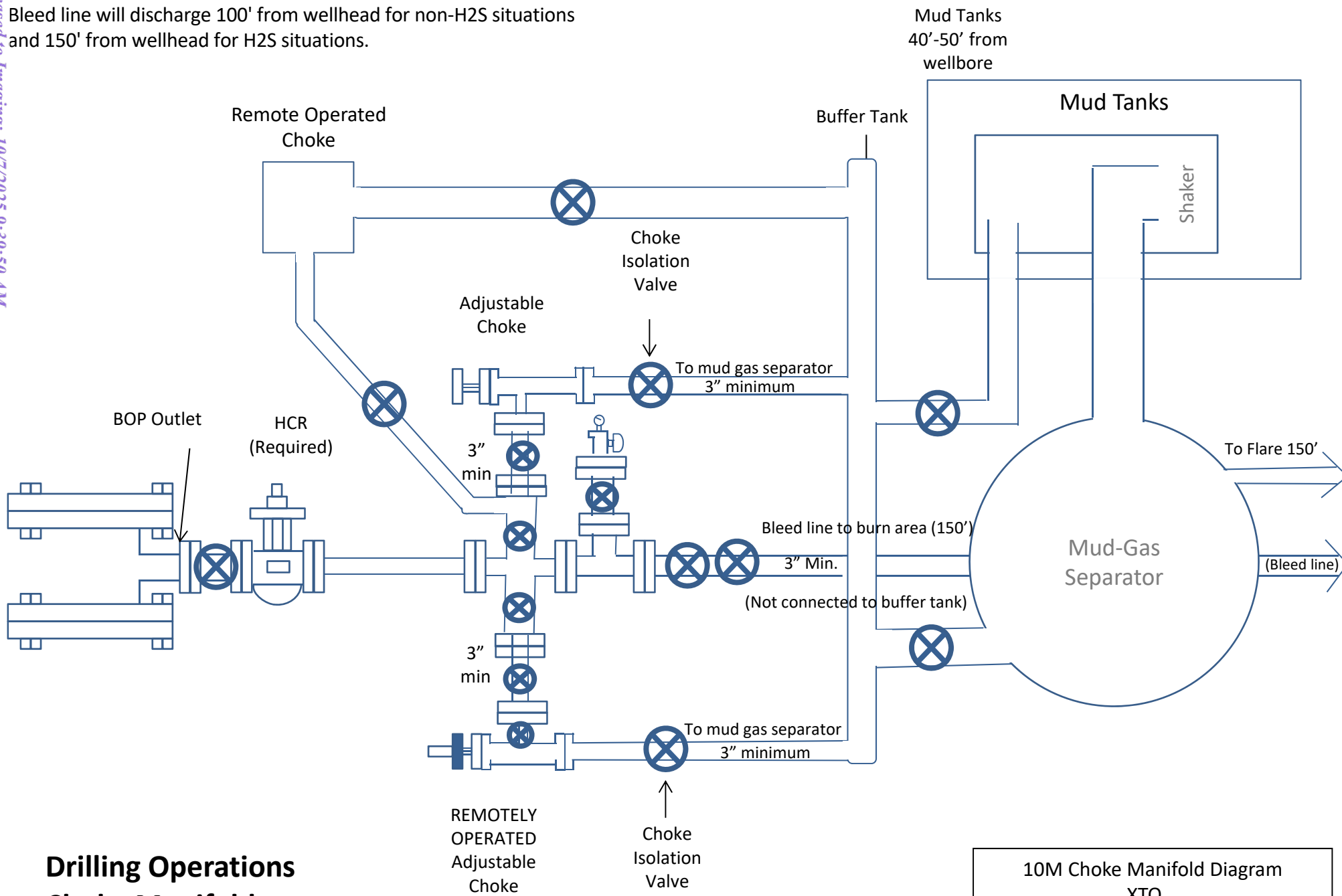
446138.4	32.22591	-103.932	0	0	0	2907.186
446238.4	32.22619	-103.932	0	0	0	3007.012
446338.4	32.22646	-103.932	0	0	0	3106.837
446438.4	32.22674	-103.932	0	0	0	3206.662
446538.4	32.22701	-103.932	0	0	0	3306.488
446638.4	32.22729	-103.932	0	0	0	3406.313
446738.4	32.22756	-103.932	0	0	0	3506.138
446838.4	32.22784	-103.932	0	0	0	3605.964
446938.4	32.22811	-103.932	0	0	0	3705.789
447038.4	32.22839	-103.932	0	0	0	3805.614
447138.4	32.22866	-103.932	0	0	0	3905.44
447238.4	32.22894	-103.932	0	0	0	4005.265
447338.4	32.22921	-103.932	0	0	0	4105.09
447438.4	32.22949	-103.932	0	0	0	4204.916
447538.4	32.22976	-103.932	0	0	0	4304.741
447638.4	32.23004	-103.932	0	0	0	4404.566
447738.4	32.23031	-103.932	0	0	0	4504.392
447838.4	32.23059	-103.932	0	0	0	4604.217
447938.4	32.23086	-103.932	0	0	0	4704.042
448038.4	32.23114	-103.932	0	0	0	4803.868
448138.4	32.23141	-103.932	0	0	0	4903.693
448238.4	32.23169	-103.932	0	0	0	5003.518
448338.4	32.23196	-103.932	0	0	0	5103.344
448438.4	32.23224	-103.932	0	0	0	5203.169
448538.4	32.23251	-103.932	0	0	0	5302.995
448638.4	32.23279	-103.932	0	0	0	5402.82
448738.4	32.23306	-103.932	0	0	0	5502.645
448838.4	32.23334	-103.932	0	0	0	5602.471
448938.4	32.23361	-103.932	0	0	0	5702.296
449038.4	32.23389	-103.932	0	0	0	5802.121
449138.4	32.23416	-103.932	0	0	0	5901.947
449238.4	32.23444	-103.932	0	0	0	6001.772
449338.4	32.23471	-103.932	0	0	0	6101.597
449438.4	32.23498	-103.932	0	0	0	6201.423
449538.4	32.23526	-103.932	0	0	0	6301.248
449638.4	32.23553	-103.932	0	0	0	6401.073
449738.4	32.23581	-103.932	0	0	0	6500.899
449838.4	32.23608	-103.932	0	0	0	6600.724
449938.4	32.23636	-103.932	0	0	0	6700.549
450038.4	32.23663	-103.932	0	0	0	6800.375
450138.4	32.23691	-103.932	0	0	0	6900.2
450238.4	32.23718	-103.932	0	0	0	7000.025
450338.4	32.23746	-103.932	0	0	0	7099.851
450438.4	32.23773	-103.932	0	0	0	7199.676

450538.4	32.23801	-103.932	0	0	0	7299.501
450638.4	32.23828	-103.932	0	0	0	7399.327
450738.4	32.23856	-103.932	0	0	0	7499.152
450838.4	32.23883	-103.932	0	0	0	7598.977
450938.4	32.23911	-103.932	0	0	0	7698.803
451038.4	32.23938	-103.932	0	0	0	7798.628
451138.4	32.23966	-103.932	0	0	0	7898.453
451238.4	32.23993	-103.932	0	0	0	7998.279
451338.4	32.24021	-103.932	0	0	0	8098.104
451438.4	32.24048	-103.932	0	0	0	8197.929
451538.4	32.24076	-103.932	0	0	0	8297.755
451638.4	32.24103	-103.932	0	0	0	8397.58
451738.4	32.24131	-103.932	0	0	0	8497.405
451838.4	32.24158	-103.932	0	0	0	8597.231
451938.4	32.24186	-103.932	0	0	0	8697.056
452038.4	32.24213	-103.932	0	0	0	8796.882
452138.4	32.24241	-103.932	0	0	0	8896.707
452238.4	32.24268	-103.932	0	0	0	8996.532
452338.4	32.24296	-103.932	0	0	0	9096.358
452438.4	32.24323	-103.932	0	0	0	9196.183
452538.4	32.24351	-103.932	0	0	0	9296.008
452638.4	32.24378	-103.932	0	0	0	9395.834
452738.4	32.24406	-103.932	0	0	0	9495.659
452838.3	32.24433	-103.932	0	0	0	9595.484
452938.3	32.24461	-103.932	0	0	0	9695.31
453038.3	32.24488	-103.932	0	0	0	9795.135
453138.3	32.24516	-103.932	0	0	0	9894.96
453238.3	32.24543	-103.932	0	0	0	9994.786
453338.3	32.24571	-103.932	0	0	0	10094.61
453438.3	32.24598	-103.932	0	0	0	10194.44
453538.3	32.24626	-103.932	0	0	0	10294.26
453638.3	32.24653	-103.932	0	0	0	10394.09
453738.3	32.24681	-103.932	0	0	0	10493.91
453838.3	32.24708	-103.932	0	0	0	10593.74
453938.3	32.24736	-103.932	0	0	0	10693.56
454038.3	32.24763	-103.932	0	0	0	10793.39
454138.3	32.2479	-103.932	0	0	0	10893.21
454238.3	32.24818	-103.932	0	0	0	10993.04
454338.3	32.24845	-103.932	0	0	0	11092.86
454438.3	32.24873	-103.932	0	0	0	11192.69
454538.3	32.249	-103.932	0	0	0	11292.52
454638.3	32.24928	-103.932	0	0	0	11392.34
454738.3	32.24955	-103.932	0	0	0	11492.17
454838.3	32.24983	-103.932	0	0	0	11591.99

454938.3	32.2501	-103.932	0	0	0	11691.82
455038.3	32.25038	-103.932	0	0	0	11791.64
455138.3	32.25065	-103.932	0	0	0	11891.47
455238.3	32.25093	-103.932	0	0	0	11991.29
455338.3	32.2512	-103.932	0	0	0	12091.12
455438.3	32.25148	-103.932	0	0	0	12190.94
455538.3	32.25175	-103.932	0	0	0	12290.77
455638.3	32.25203	-103.932	0	0	0	12390.59
455738.3	32.2523	-103.932	0	0	0	12490.42
455838.3	32.25258	-103.932	0	0	0	12590.25
455938.3	32.25285	-103.932	0	0	0	12690.07
456038.3	32.25313	-103.932	0	0	0	12789.9
456138.3	32.2534	-103.932	0	0	0	12889.72
456238.3	32.25368	-103.932	0	0	0	12989.55
456241.4	32.25369	-103.932	0	0	0	12992.63



Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



Drilling Operations Choke Manifold 10M Service

10M Choke Manifold Diagram
XTO



TenarisHydril Wedge 511



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	7.625 in.	Wall Thickness	0.375 in.	Grade	P110-ICY
Min. Wall Thickness	90.00 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	Wall Thickness	0.375 in.	Body Yield Strength	1068 x1000 lb
Nominal Weight	29.70 lb/ft	Plain End Weight	29.06 lb/ft	Min. Internal Yield Pressure	11,070 psi
Drift	6.750 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	6.875 in.			Collapse Pressure	7360 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	Tension Efficiency	61.10 %	Minimum	5900 ft-lb
Connection ID	6.787 in.	Joint Yield Strength	653 x1000 lb	Optimum	7100 ft-lb
Make-up Loss	3.704 in.	Internal Pressure Capacity	11,070 psi	Maximum	10,300 ft-lb
Threads per inch	3.28	Compression Efficiency	73.80 %	Operation Limit Torques	
Connection OD Option	Regular	Compression Strength	788 x1000 lb	Operating Torque	55,000 ft-lb
		Max. Allowable Bending	45.83 °/100 ft	Yield Torque	82,000 ft-lb
		External Pressure Capacity	7360 psi		

Notes

For the latest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2025. All rights reserved.



TenarisHydril Wedge 511



Coupling	Pipe Body
Grade: L80-IC	Grade: L80-IC
Body: Red	1st Band: Red
1st Band: Brown	2nd Band: Brown
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	7.625 in.	Wall Thickness	0.375 in.	Grade	L80-IC
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	7.625 in.	Wall Thickness	0.375 in.	Body Yield Strength	683 x1000 lb
Nominal Weight	29.70 lb/ft	Plain End Weight	29.06 lb/ft	Min. Internal Yield Pressure	6890 psi
Drift	6.750 in.	OD Tolerance	API	SMYS	80,000 psi
Nominal ID	6.875 in.			Collapse Pressure	5900 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	7.625 in.	Tension Efficiency	61.10 %	Minimum	5900 ft-lb
Connection ID	6.787 in.	Joint Yield Strength	417 x1000 lb	Optimum	7100 ft-lb
Make-up Loss	3.704 in.	Internal Pressure Capacity	6890 psi	Maximum	10,300 ft-lb
Threads per inch	3.28	Compression Efficiency	73.80 %	Operation Limit Torques	
Connection OD Option	Regular	Compression Strength	504 x1000 lb	Operating Torque	35,000 ft-lb
		Max. Allowable Bending	29.33 °/100 ft	Yield Torque	52,000 ft-lb
		External Pressure Capacity	5900 psi		

Notes

For the latest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2024. All rights reserved.



TenarisHydril Wedge 441®



Coupling	Pipe Body
Grade: P110-ICY	Grade: P110-ICY
Body: White	1st Band: White
1st Band: Pale Green	2nd Band: Pale Green
2nd Band: -	3rd Band: Pale Green
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-ICY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Body Yield Strength	729 x1000 lb
Nominal Weight	20.00 lb/ft	Plain End Weight	19.83 lb/ft	Min. Internal Yield Pressure	14,360 psi
Drift	4.653 in.	OD Tolerance	API	SMYS	125,000 psi
Nominal ID	4.778 in.			Collapse Pressure	12,300 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.852 in.	Tension Efficiency	81.50 %	Minimum	15,000 ft-lb
Coupling Length	8.714 in.	Joint Yield Strength	594 x1000 lb	Optimum	16,000 ft-lb
Connection ID	4.778 in.	Internal Pressure Capacity	14,360 psi	Maximum	19,200 ft-lb
Make-up Loss	3.780 in.	Compression Efficiency	81.50 %	Operation Limit Torques	
Threads per inch	3.40	Compression Strength	594 x1000 lb	Operating Torque	36,000 ft-lb
Connection OD Option	Regular	Max. Allowable Bending	84.76 °/100 ft	Yield Torque	42,000 ft-lb
		External Pressure Capacity	12,300 psi	Buck-On	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.304 (17.00) in. (lb/ft)
Wedge 461® - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) / 0.415 (23.00) in. (lb/ft)
Connections with Dopeless® Technology are fully compatible with the same connection in its doped version

For the latest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information –if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2025. All rights reserved.



TenarisHydril Wedge 441®



Coupling	Pipe Body
Grade: P110-IC	Grade: P110-IC
Body: White	1st Band: White
1st Band: -	2nd Band: Pale Green
2nd Band: -	3rd Band: -
3rd Band: -	4th Band: -
	5th Band: -
	6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-IC
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Type	Casing
Connection OD Option	REGULAR				

Pipe Body Data

Geometry				Performance	
Nominal OD	5.500 in.	Wall Thickness	0.361 in.	Body Yield Strength	641 x1000 lb
Nominal Weight	20.00 lb/ft	Plain End Weight	19.83 lb/ft	Min. Internal Yield Pressure	12,640 psi
Drift	4.653 in.	OD Tolerance	API	SMYS	110,000 psi
Nominal ID	4.778 in.			Collapse Pressure	12,300 psi

Connection Data

Geometry		Performance		Make-Up Torques	
Connection OD	5.852 in.	Tension Efficiency	81.50 %	Minimum	15,000 ft-lb
Coupling Length	8.714 in.	Joint Yield Strength	522 x1000 lb	Optimum	16,000 ft-lb
Connection ID	4.778 in.	Internal Pressure Capacity	12,640 psi	Maximum	19,200 ft-lb
Make-up Loss	3.780 in.	Compression Efficiency	81.50 %	Operation Limit Torques	
Threads per inch	3.40	Compression Strength	522 x1000 lb	Operating Torque	32,000 ft-lb
Connection OD Option	Regular	Max. Allowable Bending	74.98 °/100 ft	Yield Torque	38,000 ft-lb
		External Pressure Capacity	12,300 psi	Buck-On	
				Minimum	19,200 ft-lb
				Maximum	20,700 ft-lb

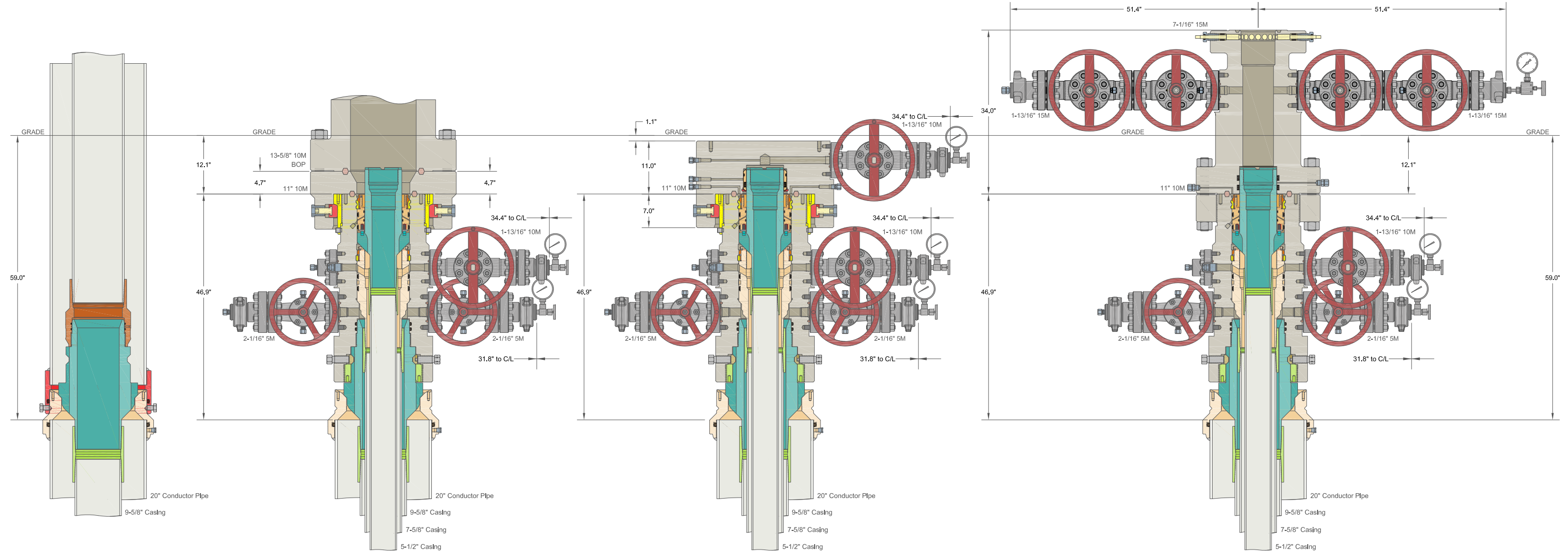
Notes

This connection is fully interchangeable with:
Wedge 441® - 5.5 in. - 0.304 (17.00) in. (lb/ft)
Wedge 461® - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) / 0.415 (23.00) in. (lb/ft)
Connections with Dopeless® Technology are fully compatible with the same connection in its doped version
Connection performance values are related to structural capabilities. For sealability-related performance information, request the Connection Service Envelope from your local Tenaris Representative.

For the latest performance data, always visit our website: www.tenaris.com
For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any- provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's standard terms and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2025. All rights reserved.

ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.



ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC		XTO ENERGY INC DELAWARE BASIN	
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	DRAWN	VJK	31MAR22
	APPRV		
	DRAWING NO. HBE0000479		

XTO Permian Operating, LLC. states that we will not introduce any additives that contain PFAS chemicals in the completion or recompletion of the well and will meet the certification requirement.

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

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
 - a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nipped 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.

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.

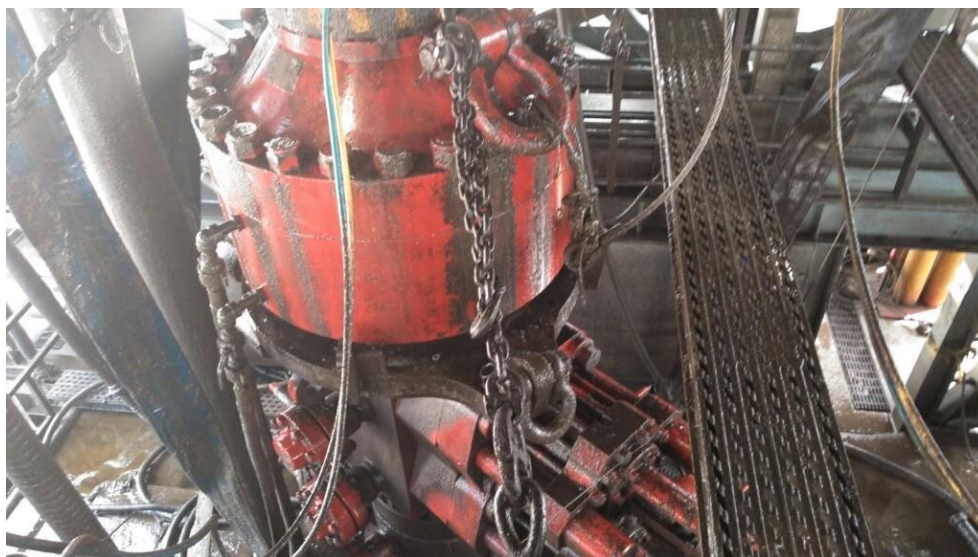


Figure 1: Winch System attached to BOP Stack

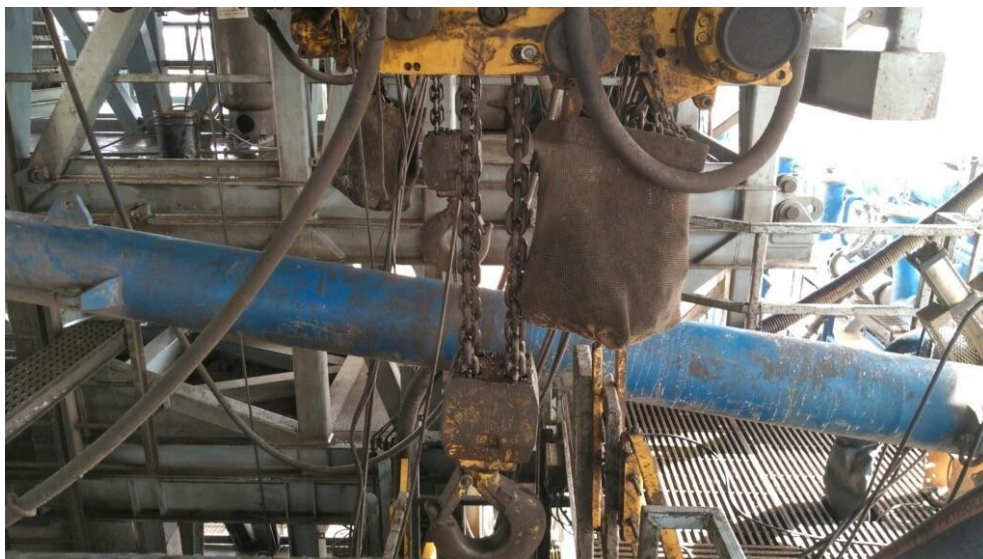


Figure 2: BOP Winch System

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 3170 recognizes 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.

62

API STANDARD 53

Table C.4—Initial Pressure Testing, Surface BOP Stacks

Component to be Pressure Tested	Pressure Test—Low Pressure ^{ac} psig (MPa)	Pressure Test—High Pressure ^{ac}	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer ^b	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers ^{bd}	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

^a Pressure test evaluation periods shall be a minimum of five minutes.

No visible leaks.

The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

^b Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

^c For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

^d For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

^e Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

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

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

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

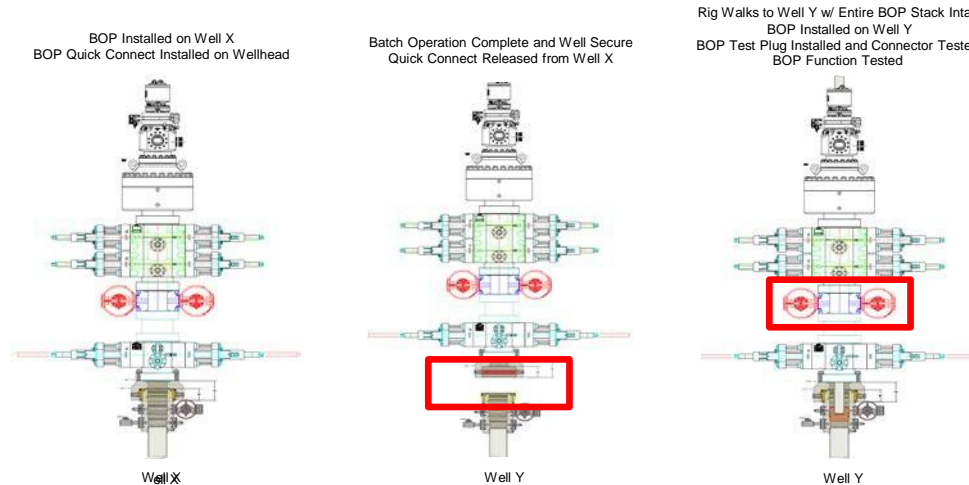
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

Procedures

1. XTO Energy will use this document for our break testing plan for New Mexico Delaware basin. The summary below will be referenced in the APD or Sundry Notice and receive approval prior to implementing this variance.
2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
 - a. A full BOP test will be conducted on the first well on the pad.
 - b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
 - 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.

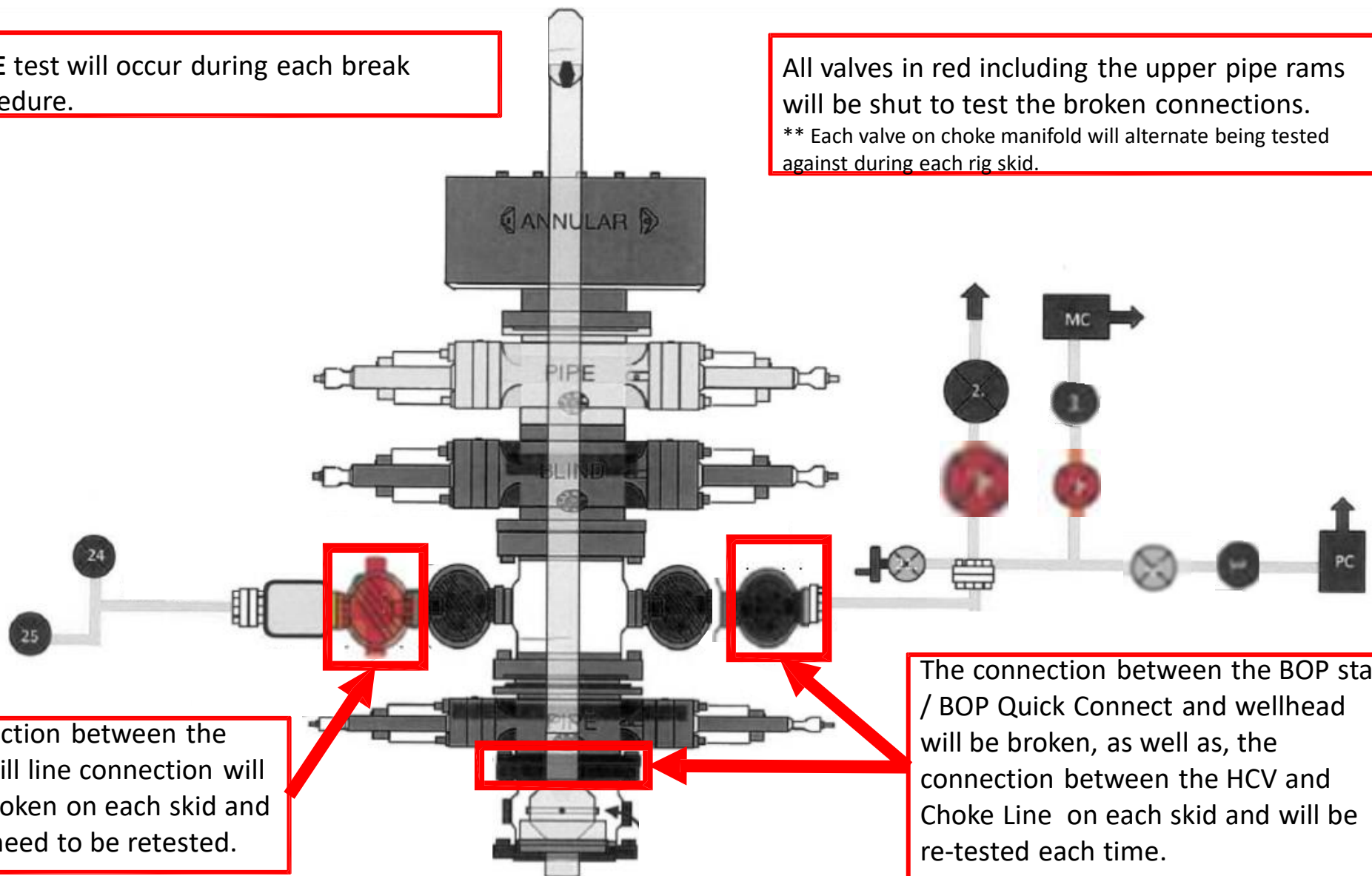
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.

Only **ONE** test will occur during each break test procedure.

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.



The connection between the HCV and kill line connection will **NOT** be broken on each skid and does not need to be retested.

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.

**BLACK GOLD®**

GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX. 77086

PHONE: +1 (281) 602-4100**FAX: +1 (281) 602-4147****EMAIL: gesna.quality@gates.com****WEB: www.gates.com/oilandgas**

NEW CHOKE HOSE
INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

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

CUSTOMER: NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#: 15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N: IMR RETEST SN 74621 ASSET #66-1531

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

SALES ORDER #: 529480
QUANTITY: 1
SERIAL #: 74621 H3-012524-1

SIGNATURE:*F. Cismos***TITLE:****QUALITY ASSURANCE****DATE:****1/25/2024**



H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

TEST OBJECT

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

TEST INFORMATION

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

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

Part number:

Description:

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

Part number:

Description:

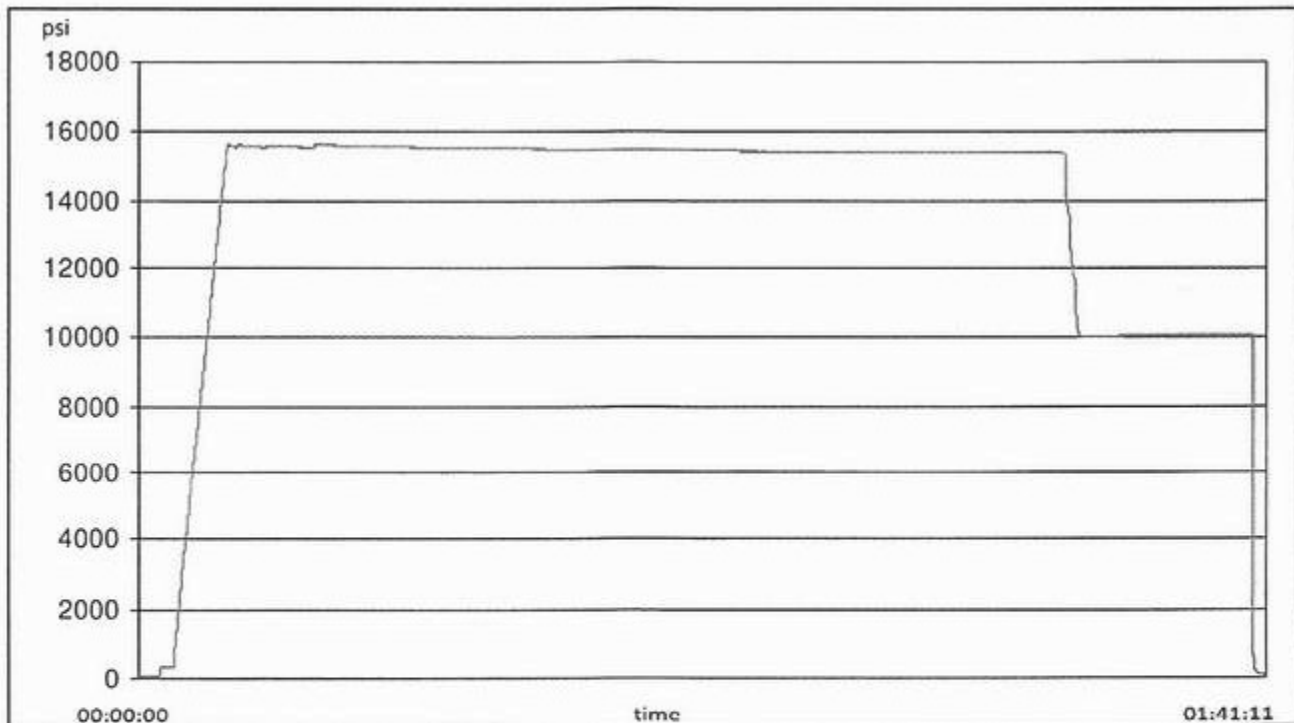
Visual check:

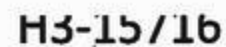
Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





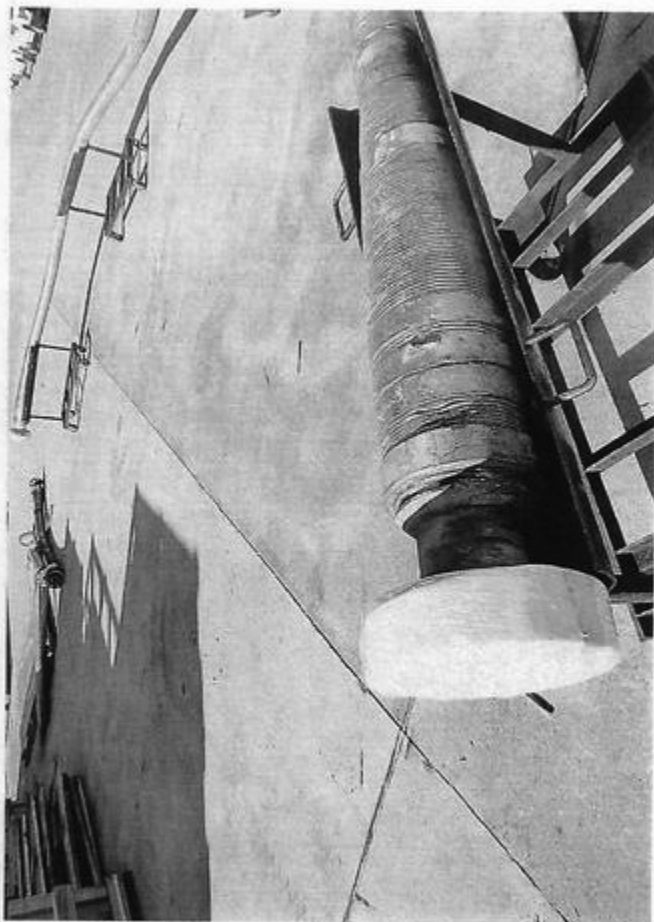
1/25/2024 11:48:06 AM

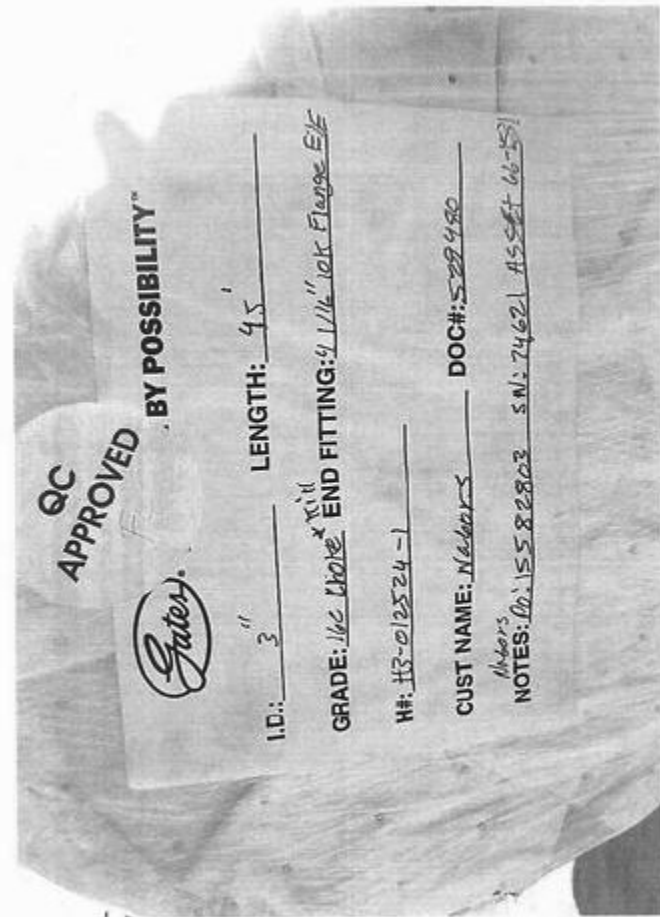
GAUGE TRACEABILITY

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

Comment

--





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 nippedled 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



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 nipping 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 3rd 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.



Offline Production Cementing

Delaware Basin | 18 March 2025

Energy lives here™

Variance Request for Offline Production Cementing

Proposal: allow wells that meet set criteria to perform production casing cement jobs offline, consistent with ExxonMobil's extensive experience safely and effectively cementing production casing strings offline in Texas

Supporting Materials:

- Criteria for offline production cementing
- Proposed procedure
- Process and equipment
- Barrier comparison

Criteria for Offline Cementing

The following conditions must be met to proceed with offline production cementing on Wolfcamp target formations or shallower:

- a) *Casing hanger successfully landed in the wellhead*
- b) *Ability to circulate overbalanced mud weight*
- c) *Initiate offline cementing operations within 24hr of landing casing*
- d) *All well control barriers test successfully and BLM notified of intent to perform offline production cementing prior to N/D BOP*
- e) *No offset frac operations within 1 mile and within the same target horizon*
- f) *Well Control certified ExxonMobil Operations Supervisor to be present during offline cementing operation to monitor returns*
- g) *Drill ahead operations will not begin on next well until offline production cement operations have concluded*

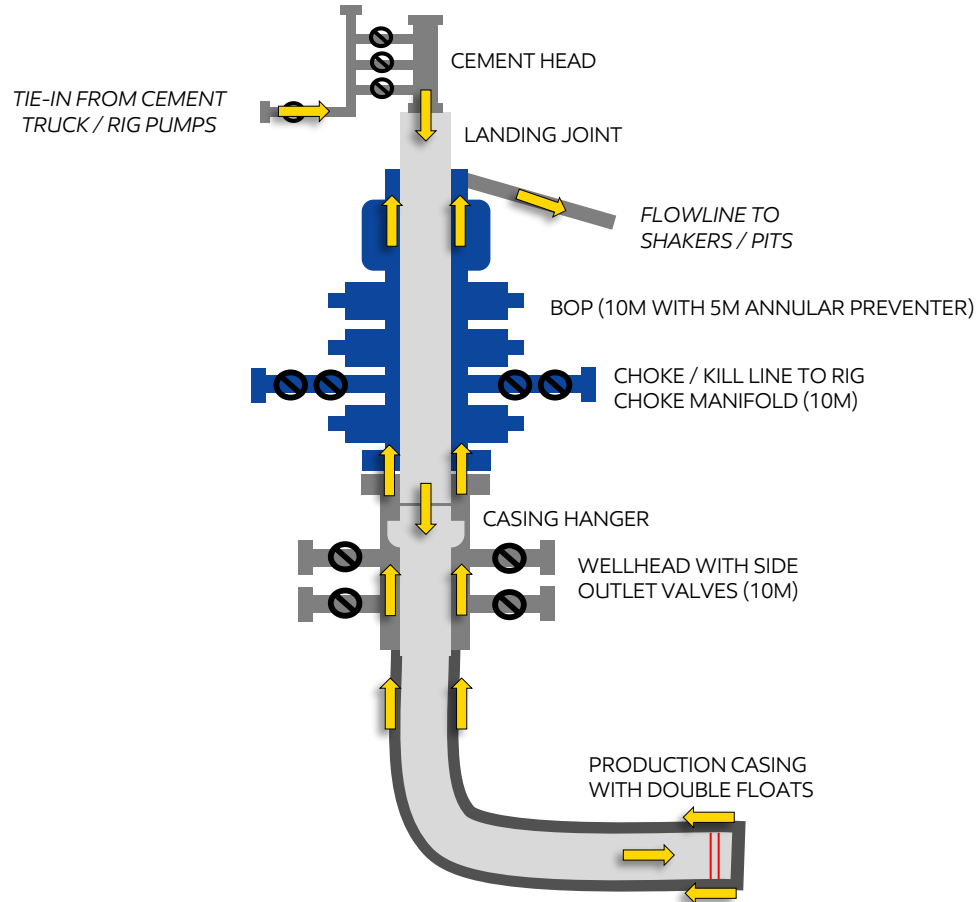


Offline Cementing Procedure

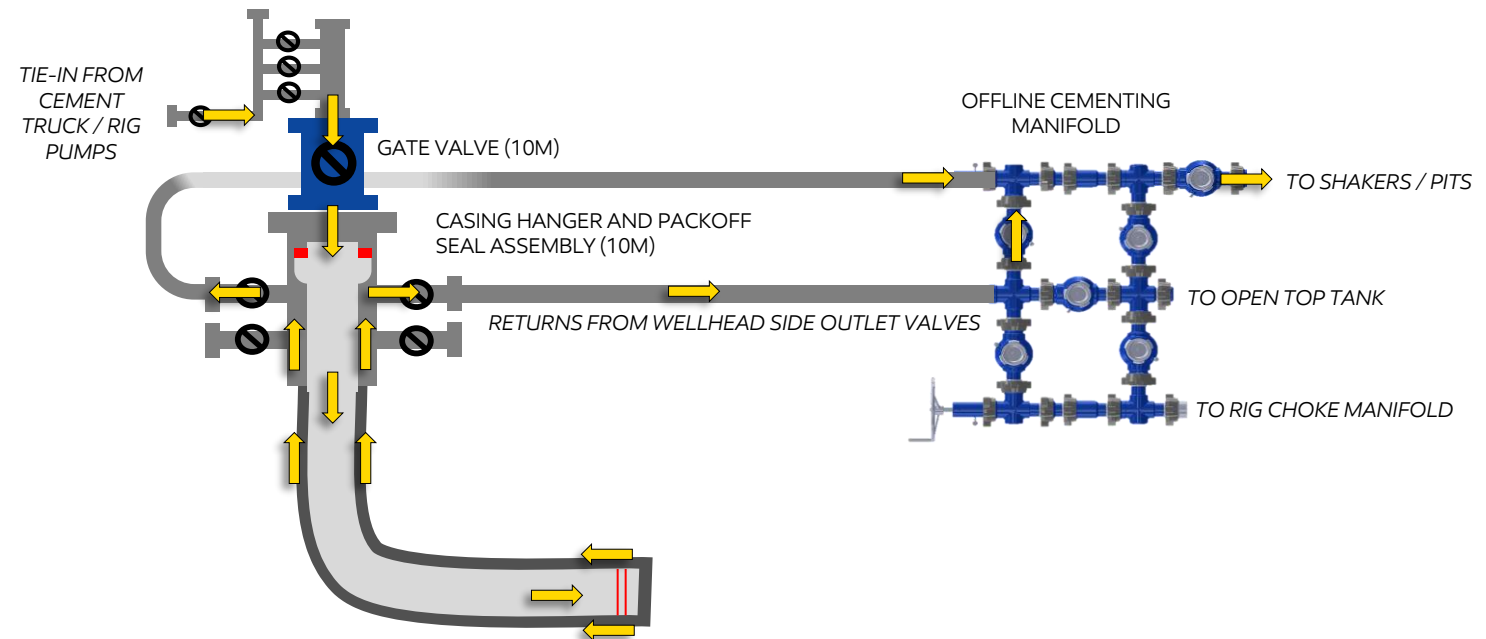
1. **Land production casing hanger** *If casing hanger cannot be landed, cementing will be performed online*
2. Flow check and **confirm the well is static on the casing and annulus.** *If flow is observed, cementing will be performed online*
3. **Lay down landing joint**
4. **Install and test pack-off assembly**
 - a) Pressure test the seal assembly per wellhead provider's procedure to confirm integrity to 250 / 10,000psi
5. **Install back-pressure valve** (BPV, rated to 10,000psi) in hanger per wellhead provider's procedure
6. **Confirm the well is static**
 - a) Flow indicates failure of hydrostatic barrier or mechanical barriers and underbalanced well conditions. *If flow is observed, cementing will be performed online*
 - b) Notify BLM of intent to proceed with nipple down and offline cementing
7. With the well secured and BLM notified; **nipple down BOP and skid rig** to next well on pad
 - a) *Note, verify offline cementing criteria is met before N/D BOP. If unable to meet criteria, cement job will be performed online*
8. **Install and test gate valve**
 - a) Test connection between wellhead adapter seals against hanger neck and ring gasket to 250 / 10,000 psi for 5 minutes
9. **Remove BPV from casing**
10. **Rig up cement head and cementing lines**
11. **Perform production cement job** as per procedure
 - a) Confirm flowpath and valve alignment; default routing to take returns from casing upper side outlet valves → offline cementing manifold → shakers / pits
 - b) *If elevated gas or flow trend observed, reroute returns through choke manifold for ability to hold backpressure to maintain well control and route mud returns to MGS*
12. **Confirm well is static** and double floats are holding after cement job
 - a) *If double floats do not hold, the well can be secured by closing gate valve or cement head or by holding and monitoring pressure at the cement truck while WOC*
13. **Rigdown surface equipment**
 - a) Bleed any remaining line pressure and remove cement head
 - b) Install BPV per wellhead providers recommended procedure
 - c) Close upper casing side outlet valves, break and R/D offline cement lines
 - d) Remove 10M gate valve and wellhead adapter
14. **Secure well**
 - a) Install temporary abandonment cap

Process and Equipment

ONLINE CEMENTING











OFFLINE CEMENTING



KEY DIFFERENCES

1. Rig BOP replaced by gate valve and WH adaptor assembly (10M rated)
2. Addition of offline cementing manifold and high pressure iron to direct fluid returns to rig active system and/or choke manifold
3. Packoff annulus barrier in place and tested prior to cementing operations (10M rated)
4. Cement truck performs cement job displacement (vs rig pumps)

Barrier Comparison

	ONLINE		OFFLINE (PROPOSED)	
	Casing	Annulus	Casing	Annulus
N/D BOP & Skid Rig			1. Hydrostatic 2. Double float valves 3. BPV 	1. Hydrostatic 2. Packoff 
Install Cement Head	1. Hydrostatic 2. Double float valves	1. Hydrostatic 2. BOP (annular, VBR)	1. Hydrostatic 2. Double float valves 3. Gate valve 	1. Hydrostatic 2. Packoff 3. Wellhead Adaptor 
Perform Cement Job	1. Double float valves 2. Cement Head	1. Hydrostatic 2. BOP (annular, VBR)	1. Double float valves 2. Cement Head 3. Gate valve 	1. Hydrostatic 2. Packoff 3. Wellhead Adaptor 
Remove Cement Head	1. Double float valves	1. Hydrostatic 2. BOP (annular, VBR)	1. Double float valves 2. Gate valve 	1. Hydrostatic 2. Packoff 3. Wellhead Adaptor 
N/D & Install TA Cap	1. Double float valves 2. BPV	1. Hydrostatic 2. Packoff	1. Double float valves 2. BPV	1. Hydrostatic 2. Packoff

Well Control Response Plan

The following well control response plan for offline cementing is the same as for online cementing.

1. **Pre-job design:** Cement job designed to define max pump rates to reduce ECD and avoid losses during cement job.
2. **Identify the influx / re-route return flow:** If an influx is observed, the cementing manifold would be re-routed to direct flow to the rig choke manifold (instead of the shakers). If gas was encountered or a kick was detected, continue pumping the job through the rig choke / gas buster while controlling annulus back pressure through the rig choke. Shut the well in once the job is finished (to ensure cement does not set up inside casing). Roles & responsibilities are as follows:
 - Onsite well site representative responsible for monitoring and helping to identify if an influx occurred with support from the rig crews.
 - Rig crew responsible for shutting in the well.
 - Onsite well site representative responsible for operating the rig choke manifold.
3. **Monitor pressure:** If well is shut-in, pressure monitored while cement is building compressive strength.
4. **Flow check:** Once sufficient time is allocated to build compressive strength, perform flow check.
5. **Shut-in:** If annulus pressure / flow is observed, shut-in the well at the casing valves.
6. **Kill the well:** Pump kill weight mud or cement (depending on well conditions) via bradenhead squeeze down the annulus using the rig pumps tied into the cementing manifold or the cement truck.
7. **Flow check:** Flow check the well to confirm static.

ExxonMobil

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

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 509174

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 509174
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	No additives containing PFAS chemicals will be added to the drilling fluids or completion fluids used during drilling, completions, or recompletions operations.	10/7/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	10/7/2025