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

Sundry Print Report

04/04/2025

Well Name: JRU APACHE FEDERAL COM

Well Location: T22S / R30E / SEC 13 / NESE / 32.391762 / -103.828231

County or Parish/State: EDDY / NM

Well Number: 112H

Type of Well: CONVENTIONAL GAS WELL

Allottee or Tribe Name:

Lease Number: NMNM89051

Unit or CA Name: JAMES RANCH UNIT

Unit or CA Number: NMNM70965X

US Well Number: 3001555529

Operator: XTO ENERGY INCORPORATED

Notice of Intent

Sundry ID: 2839789

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 03/04/2025

Time Sundry Submitted: 08:13

Date proposed operation will begin: 03/07/2025

Procedure Description: XTO ENERGY INCORPORATED, respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, KOP, FTP, LTP, BHL, casing design, cement program, mud circulation system, proposed total depth, dedicated acreage and pool. FROM: TO: SHL: 2515' FSL & 818' FEL OF SECTION 13-T22S-R30E 2516' FSL & 868' FEL OF SECTION 13-T22S-R30E KOP: 2515' FSL & 818' FEL OF SECTION 13-T22S-R30E 1600' FNL & 330' FEL OF SECTION 13-T22S-R30E FTP: 1650' FNL & 330' FEL OF SECTION 13-T22S-R30E 1600' FNL & 330' FEL OF SECTION 13-T22S-R30E LTP: 1650' FNL & 100' FWL OF SECTION 14-T22S-R30E 1600' FNL & 100' FWL OF SECTION 14-T22S-R30E BHL: 1650' FNL & 50' FWL OF SECTION 14-T22S-R30E 1600' FNL & 50' FWL OF SECTION 14-T22S-R30E The proposed total depth is changing from 21892' MD/11001' TVD to 21235.38' MD/11084' TVD. The dedicated acreage is changing from 320 acres to 640 acres. The pool is changing from Los Medanos; Wolfcamp, South to Los Medanos; Wolfcamp, North (Gas) and Los Medanos; Wolfcamp (Gas). Individual C102s for each pool highlighting the corresponding dedicated acreage are attached. There will be no new surface disturbance. See attached drilling program for the updated casing design, cement program and the mud circulation system.

NOI Attachments

Procedure Description

Sundry_Attachment___James_Ranch_Unit_Apache_112H_20250304081131.pdf

Released to Imaging: 4/25/2025 11:29:58 AM

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US Well Number: 3001555529

Operator: XTO ENERGY INCORPORATED

Conditions of Approval

Additional

JRU_Apache_Fed_Com_112H_COA_20250402153218.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: SRINIVAS LAGHUVARAPU

Signed on: MAR 04, 2025 08:13 AM

Name: XTO ENERGY INCORPORATED

Title: REGULATORY ANALYST

Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY

City: SPRING **State:** TX

Phone: (720) 539-1673

Email address: SRINIVAS.N.LAGHUVARAPU@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS

BLM POC Title: Petroleum Engineer

BLM POC Phone: 5752342234

BLM POC Email Address: cwalls@blm.gov

Disposition: Approved

Disposition Date: 04/03/2025

Signature: Chris Walls

Released to Imaging: 4/25/2025 11:29:58 AM

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

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

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

8. Well Name and No.

2. Name of Operator

9. API Well No.

3a. Address

3b. Phone No. *(include area code)*

10. Field and Pool or Exploratory Area

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

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

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be 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 OFICE 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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

The dedicated acreage is changing from 320 acres to 640 acres.

The pool is changing from Los Medanos; Wolfcamp, South to Los Medanos; Wolfcamp, North (Gas) and Los Medanos; Wolfcamp (Gas).
Individual C102s for each pool highlighting the corresponding dedicated acreage are attached.

There will be no new surface disturbance.

See attached drilling program for the updated casing design, cement program and the mud circulation system.

Location of Well

0. SHL: NESE / 2515 FSL / 818 FEL / TWSP: 22S / RANGE: 30E / SECTION: 13 / LAT: 32.391762 / LONG: -103.828231 (TVD: 0 feet, MD: 0 feet)
PPP: SWNW / 1650 FNL / 990 FWL / TWSP: 22S / RANGE: 30E / SECTION: 13 / LAT: 32.39485 / LONG: -103.839126 (TVD: 11063 feet, MD: 15600 feet)
PPP: SENE / 1650 FNL / 330 FEL / TWSP: 22S / RANGE: 30E / SECTION: 13 / LAT: 32.394837 / LONG: -103.82665 (TVD: 11103 feet, MD: 11600 feet)
BHL: SWNW / 1650 FNL / 50 FWL / TWSP: 22S / RANGE: 30E / SECTION: 14 / LAT: 32.394872 / LONG: -103.860081 (TVD: 11001 feet, MD: 21892 feet)

CONFIDENTIAL

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	**NMNM089051**
LOCATION:	Sec. 13, T.22 S, R 30 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	JRU Apache Fed Com 112H
SURFACE HOLE FOOTAGE:	2576'/S & 867'/E
BOTTOM HOLE FOOTAGE:	1072'/N & 50'/W.

*Changes approved through engineering via **Sundry 2839789__** on **4-2-2025_**. Any previous COAs not addressed within the updated COAs still apply.*

COA

H_2S	○ No		○ Yes	
Potash / WIPP	○ None	○ Secretary	◉ R-111-Q	☑ Open Annulus
	4-String Design: Engineered Weak Point			☑ WIPP
Cave / Karst	○ Low	◉ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☑ Primary Squeeze	☐ Cont. Squeeze	☑ EchoMeter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	☐ COM	☑ Unit
Waste Prev.	○ Self-Certification	◉ Waste Min. Plan	○ APD Submitted prior to 06/10/2024	
Additional Language	☑ Flex Hose	☑ Casing Clearance	☐ Pilot Hole	☑ Break Testing
	☑ Four-String	☑ Offline Cementing	☐ Fluid-Filled	

A. HYDROGEN SULFIDE

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

APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **720** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
    c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
    d. If cement falls back, remedial cementing will be done prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch **1st Intermediate** casing is:
    - Cement to surface. If cement does not circulate see B.1.a, c-d above.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, or potash.

3. The minimum required fill of cement behind the **7-5/8** inch **2nd Intermediate** casing is: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

    a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon at 7786'. Excess calculates to 24%. Additional cement maybe required.**

    b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement should tie-back **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office.

Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, or potash.

Operator has proposed to pump down Intermediate 1 X Intermediate 2 annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the Intermediate 1 casing to tieback requirements listed above after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

- ❖ **A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the Intermediate String.** Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within **180 days.**

Operator has proposed to pump down **intermediate x production** annulus post completion. **Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the production 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 during second stage bradenhead when running Echo-meter if cement is required to surface. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Operator has proposed an open annulus completion in R-111-Q. Operator shall provide a method of verification pre-completion top of cement. **Submit results to the BLM. Pressure monitoring device and Pressure Safety Valves must be installed at surface on both the intermediate annulus and the production annulus for the life of the well.**

In the event of a casing failure during completion, the operator must contact the BLM at (575-706-2779) and (575-361-2822 Eddy County).

4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
   - Cement should tie-back **500 feet** into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office.

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).

    1. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

        a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
        b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
        c. Manufacturer representative shall install the test plug for the initial BOP test.
        d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
        e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

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

WIPP Requirements

The proposed surface well or bottom hole is located within 330 feet of the WIPP Land Withdrawal Area boundary. As a result, the operator is required to submit daily drilling reports, logs and deviation survey information to the Bureau of Land Management Engineering Department and the U.S. Department of Energy per requirements of the Joint Powers Agreement until a total vertical depth of 7,000 feet is reached. These reports will have at a minimum, the depth of any excess mud returns (brine flows), the rate of penetration and a clearly marked section showing the deviation for each 500-foot interval. Operator may be required to do more frequent deviation surveys based on the daily information submitted and may be required to take other corrective measures. Information will also be provided to the New Mexico Oil Conservation Division after drilling activities have been completed. Upon completion of the

well, the operator shall submit a complete directional survey. Any future entry into the well for purposes of completing additional drilling will require supplemental information.

Any oil and gas well operator drilling within one mile of the WIPP Boundary must notify WIPP as soon as possible if any of the following conditions are encountered during oil and gas operations: R-111-Q Amendment - Notification to Operators (Potash)

a) Indication of any well collision event,

b) Suspected well fluid flow (oil, gas, or produced water) outside of casing,

c) Sustained annulus pressure between the 1st intermediate and next innermost casing string in excess of 500 psi above the baseline pressure of the well, or above 1500 psi total,

d) Increasing pressure buildup rates (psi/day) across multiple successive bleed-off cycles on the annulus between the 1st intermediate and next innermost casing during well production, or

e) Sustained losses in excess of 50% through the salt formation during drilling.

The operator can email the required information to OilGasReports@wipp.ws. Attached files must not be greater than 20 MB. Call WIPP Tech Support at 575-234-7422, during the hours 7:00am to 4:30pm, if there are any issues sending to this address.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200’ TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

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

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

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

GENERAL REQUIREMENTS

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

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

Contact Eddy County Petroleum Engineering Inspection Staff:
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM_NM_CFO_DrillingNotifications@BLM.GOV**; (575) 361-2822

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

3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which

have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated

four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

v. The results of the test shall be reported to the appropriate BLM office.

vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This

test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

Approved by Zota Stevens on 4/2/2025

575-234-5998 / zstevens@blm.gov

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: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015-	96597	LOS MEDANOS; WOLFCAMP (GAS)

Property Code	Property Name	Well Number
	JRU Apache Federal Com	112H

OGRID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,348'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
I	13	22S	30E		2,516 FSL	868 FEL	32.391765	-103.828393	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
E	14	22S	30E		1,600 FNL	50 FWL	32.395012	-103.860077	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
480.00	DEFINING		Y	U

Order Numbers.	Well Setbacks are under Common Ownership:
R-279-C	☒ Yes ☐ No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	13	22S	30E		1,600 FNL	330 FEL	32.394976	-103.826650	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
H	13	22S	30E		1,600 FNL	330 FEL	32.394976	-103.826650	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
E	14	22S	30E		1,600 FNL	100 FWL	32.395012	-103.859915	EDDY

Unitized Area of Area of Interest	Spacing Unit Type :	Ground Elevation
NMNM-070965X	☒ Horizontal ☐ Vertical	3,348'

OPERATOR CERTIFICATIONS

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.

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.

Srinivas Naveen 12/12/24

Signature Date

Srinivas Naveen Laghuvarapu

Printed Name

srinivas.n.laghuvarapu@exxonmobil.com

Email Address

SURVEYOR CERTIFICATIONS

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

MARK DILLON HARP 23786

Certificate Number

12/9/2024

Date of Survey

DN

618.013002.10-25

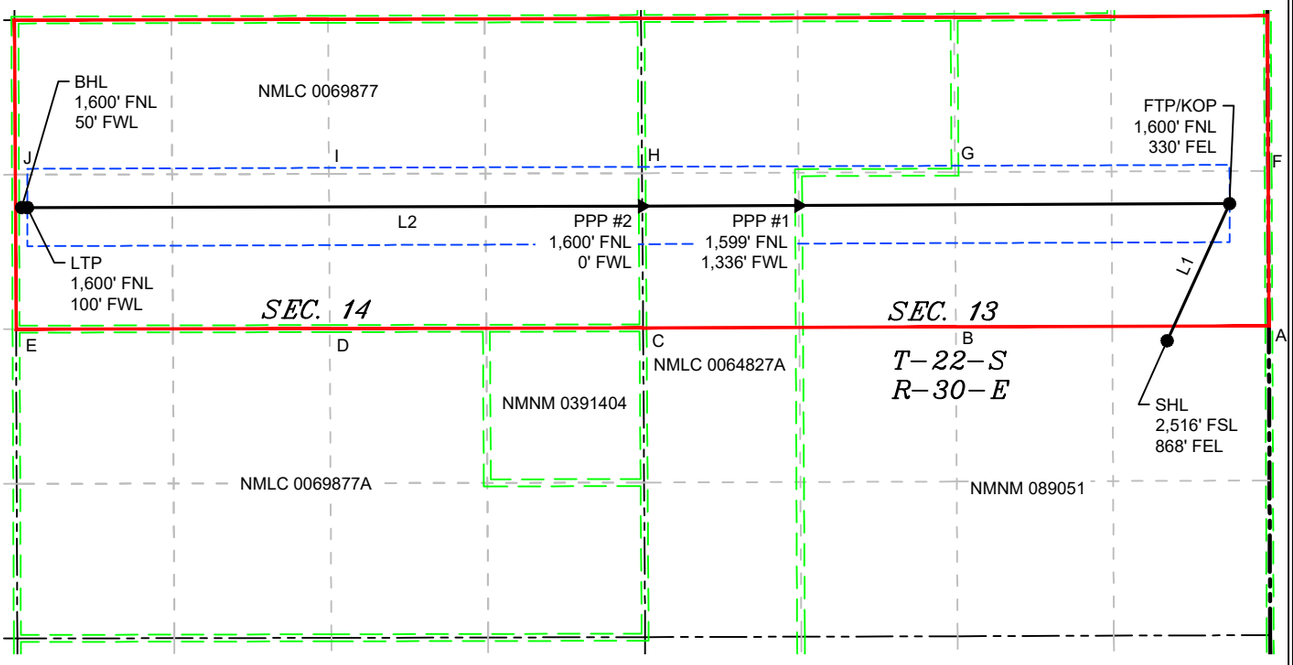
Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

P:\618.013 XTO Energy - NM\002 James Ranch Unit\.10 - APACHE DI - EDDY\Wells\-25 - 112H\DWG\APACHE 112H C-102 LOS MEDANOS, WOLFCAMP.dwg

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 acreage in a red box, clearly show the well surface location and bottom hole location, if it is a 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 then the First Take Point and Last Take Point) that is closest to any outer boundary of the tract.

Surveyor 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 in not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	024°27'30.83"	1,286.09
L2	269°48'41.60"	10,317.34

LEGEND

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

COORDINATE TABLE					
SHL (NAD 83 NME)			SHL (NAD 27 NME)		
Y =	506,623.3	N	Y =	506,562.7	N
X =	697,194.5	E	X =	656,013.1	E
LAT. =	32.391765	°N	LAT. =	32.391642	°N
LONG. =	103.828393	°W	LONG. =	103.827899	°W
FTP/KOP (NAD 83 NME)			FTP/KOP (NAD 27 NME)		
Y =	507,794.0	N	Y =	507,733.3	N
X =	697,727.0	E	X =	656,545.6	E
LAT. =	32.394976	°N	LAT. =	32.394853	°N
LONG. =	103.826650	°W	LONG. =	103.826156	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 83 NME)		
Y =	507,778.5	N	Y =	507,717.8	N
X =	694,047.1	E	X =	652,865.7	E
LAT. =	32.394980	°N	LAT. =	32.394858	°N
LONG. =	103.838573	°W	LONG. =	103.838078	°W
PPP #2 (NAD 83 NME)			PPP #2 (NAD 83 NME)		
Y =	507,772.8	N	Y =	507,712.1	N
X =	692,711.1	E	X =	651,529.7	E
LAT. =	32.394982	°N	LAT. =	32.394859	°N
LONG. =	103.842901	°W	LONG. =	103.842407	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	507,760.2	N	Y =	507,699.5	N
X =	687,459.7	E	X =	646,278.4	E
LAT. =	32.395012	°N	LAT. =	32.394889	°N
LONG. =	103.859915	°W	LONG. =	103.859419	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	507,760.1	N	Y =	507,699.3	N
X =	687,409.7	E	X =	646,228.4	E
LAT. =	32.395012	°N	LAT. =	32.394890	°N
LONG. =	103.860077	°W	LONG. =	103.859581	°W

CORNER COORDINATES (NAD 83 NME)					
A - Y =	506,750.2	N	A - X =	698,061.8	E
B - Y =	506,741.3	N	B - X =	695,389.1	E
C - Y =	506,732.3	N	C - X =	692,717.9	E
D - Y =	506,727.2	N	D - X =	690,042.0	E
E - Y =	506,721.9	N	E - X =	687,363.8	E
F - Y =	508,072.9	N	F - X =	698,055.8	E
G - Y =	508,062.1	N	G - X =	695,381.7	E
H - Y =	508,052.6	N	H - X =	692,709.2	E
I - Y =	508,046.7	N	I - X =	690,034.9	E
J - Y =	508,040.4	N	J - X =	687,358.6	E
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A - Y =	506,689.5	N	A - X =	656,880.3	E
B - Y =	506,680.6	N	B - X =	654,207.6	E
C - Y =	506,671.6	N	C - X =	651,536.5	E
D - Y =	506,666.5	N	D - X =	648,860.6	E
E - Y =	506,661.2	N	E - X =	646,182.4	E
F - Y =	508,012.2	N	F - X =	656,874.3	E
G - Y =	508,001.4	N	G - X =	654,200.3	E
H - Y =	507,991.9	N	H - X =	651,527.8	E
I - Y =	507,986.0	N	I - X =	648,853.5	E
J - Y =	507,979.7	N	J - X =	646,177.3	E

DN 618.013002.10-25

P:\618.013 XTO Energy - NM\002 James Ranch Unit\10 - APACHE DI - EDDY\Wells\-25 - 112H\DWG\APACHE 112H C-102 LOS MEDANOS, WOLFCAMP.dwg

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: ☐ Initial Submittal ☒ Amended Report ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015-	96921	LOS MEDANOS, WOLFCAMP, NORTH (GAS)

Property Code	Property Name	Well Number
	JRU Apache Federal Com	112H

OGRID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,348'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
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Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
160.00	DEFINING		Y	U

Order Numbers.	Well Setbacks are under Common Ownership:
R-279-C	☒ Yes ☐ No

Kick Off Point (KOP)

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Srinivas Naveen 12/12/24

Signature Date

Srinivas Naveen Laghuvarapu

Printed Name

srinivas.n.laghuvarapu@exxonmobil.com

Email Address

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MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

Signature and Seal of Professional Surveyor

MARK DILLON HARP 23786

Certificate Number

12/9/2024

Date of Survey

DN

618.013002.10-25

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.

P:\618.013 XTO Energy - NM\002 James Ranch Unit\10 - APACHE DI - EDDY\Wells\-25 - 112H\DWG\APACHE 112H C-102 LOS MEDANOS, WOLFCAMP, NORTH.dwg

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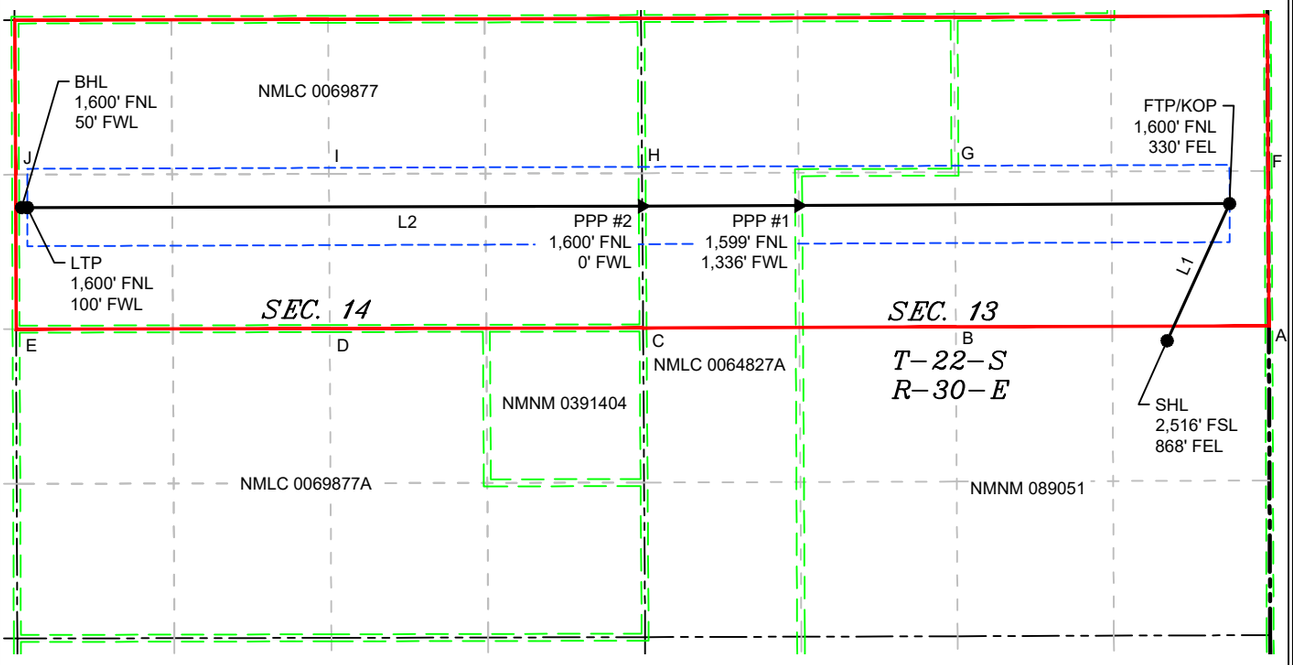

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J - Y =	508,040.4	N	J - X =	687,358.6	E
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D - Y =	506,666.5	N	D - X =	648,860.6	E
E - Y =	506,661.2	N	E - X =	646,182.4	E
F - Y =	508,012.2	N	F - X =	656,874.3	E
G - Y =	508,001.4	N	G - X =	654,200.3	E
H - Y =	507,991.9	N	H - X =	651,527.8	E
I - Y =	507,986.0	N	I - X =	648,853.5	E
J - Y =	507,979.7	N	J - X =	646,177.3	E

DN 618.013002.10-25

G:\618.013 XTO Energy - NM\002 James Ranch Unit\10 - APACHE DI - EDDY\Wells\-25 - 112H\DWG\APACHE 112H C-102 LOS MEDANOS, WOLFCAMP, NORTH.dwg

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

XTO Energy Inc.
JRU Apache Federal Com 112H
Projected TD: 21235.38' MD / 11084' TVD
SHL: 2516' FSL & 868' FEL , Section 13, T22S, R30E
BHL: 1600' FNL & 50' FWL , Section 14, T22S, R30E
EDDY County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	456'	Water
Top of Salt	756'	Water
MB 126	1440'	Water
Base of Salt	3608'	Water
Delaware	3869'	Water
Brushy Canyon	6377'	Water/Oil/Gas
Bone Spring	7786'	Water
1st Bone Spring Ss	8633'	Water/Oil/Gas
2nd Bone Spring Ss	9241'	Water/Oil/Gas
3rd Bone Spring Sh	9857'	Water/Oil/Gas
Wolfcamp	10987'	Water/Oil/Gas
Wolfcamp X	11002'	Water/Oil/Gas
Wolfcamp Y	11056'	Water/Oil/Gas
Target/Land Curve	11084'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon
*** Groundwater depth 40' (per NM State Engineers Office).

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 731' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3708' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 10167.8'. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 21235.38 MD/TD and 5.5 inch production casing will be set at TD.

3. Casing Design

Hole Size	TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 731'	13.375	54.5	J-55	BTC	New	2.46	3.50	22.82
12.25	0' – 3708'	9.625	40	J-55	BTC	New	1.42	2.44	4.25
8.75	0' – 3808'	7.625	29.7	RY P-110	Flush Joint	New	2.26	2.84	1.85
8.75	3808' – 10167.8'	7.625	29.7	HC L-80	Flush Joint	New	1.64	2.76	2.15
6.75	0' – 10067.8'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.26	1.84	2.14
6.75	10067.8' - 21235.38'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.26	1.67	6.51

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

Wellhead:

Permanent Wellhead
Multibowl System for 4 String desing as per attachement.

4. Cement Program

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

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 731'

Lead: 320 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 300 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Top of Cement: Surface
Compressives: 12-hr = 250 psi 24 hr = 500 psi

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3708'

Lead: 1530 sxs Class C (mixed at 12.9 ppg, 1.39 ft3/sx, 10.13 gal/sx water)
Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Top of Cement: Surface
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 10167.8'
Tail: 220 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC:@ 7786
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Tail: 580 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 3208
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the intermediate casing string with the first stage being pumped conventionally with the calculated (TOC:@ 7786') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to 3208 (~500' inside 1st Intermediate csg string but below MB126 @ 1440 ').

XTO will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

Production Casing: 5.5, 20 New Semi-Flush / Talon, RY P-110 casing to be set at +/- 21235.38'

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9667.8 feet
Tail: 770 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10509.32 feet
Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

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

5. Pressure Control Equipment

Once the permanent WH is installed on the casing, the blow out preventer equipment (BOP) will consist of 5M Hydril and 10M 3-Ram BOP.

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

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. .

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

A break testing 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.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss	Comments
			(ppg)	(sec/qt)	(cc)	
0' - 731'	17.5	FW/Native	8.5-9	35-40	NC	Fresh water or native water
731' - 3708'	12.25	Sat Brine	10-10.5	30-32	NC	Fully Saturated salt across salado
3708' to 10167.8'	8.75	BDE/OBM or FW/Brine	9.5-10	30-32	NC	Depending on well conditions
10167.8' to 21235.38'	6.75	OBM	11.5-12	50-60	NC - 20	N/A

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

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

7. Auxiliary Well Control and Monitoring Equipment

A. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 175 to 195 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6628 psi.

10. Anticipated Starting Date and Duration of Operations

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

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Well Plan Report

Measured Depth:	21235.38 ft	**Site:**	C
TVD RKB:	11084.00 ft	**Slot:**	
Location			
Cartographic Reference System:	New Mexico East - NAD 27		
Northing:	506562.70 ft		
Easting:	656013.10 ft		
RKB:	3380.00 ft		
Ground Level:	3348.00 ft		
North Reference:	Grid		
Convergence Angle:	0.27 Deg		

Plan Sections

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	
4352.97	13.06	24.46	4347.33	67.44	30.68	2.00	0.00	2.00	
9388.55	13.06	24.46	9252.67	1103.16	501.82	0.00	0.00	0.00	
10041.52	0.00	0.00	9900.00	1170.60	532.50	-2.00	0.00	2.00	
10509.32	0.00	0.00	10367.80	1170.60	532.50	0.00	0.00	0.00	
11634.32	90.00	269.81	11084.00	1168.24	-183.69	8.00	0.00	8.00	
21185.82	90.00	269.81	11084.00	1136.73	-9735.14	0.00	0.00	0.00	LTP 12
21235.38	90.00	269.81	11084.00	1136.57	-9784.70	0.00	0.00	0.00	BHL 12

Position Uncertainty

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

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Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	of Bias (ft)	Error (ft)	Error (ft)	Azimuth (°)	Used
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.310	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.374	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.406	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.444	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.485	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.531	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.581	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.634	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.779	0.000	4.589	0.000	2.691	0.000	0.000	5.119	4.207	128.954	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.140	0.000	4.950	0.000	2.750	0.000	0.000	5.484	4.565	129.034	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.500	0.000	5.311	0.000	2.813	0.000	0.000	5.849	4.924	129.102	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.860	0.000	5.672	0.000	2.878	0.000	0.000	6.213	5.282	129.161	MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	6.219	0.000	6.032	0.000	2.945	0.000	0.000	6.577	5.640	129.212	MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.579	0.000	6.392	0.000	3.015	0.000	0.000	6.939	5.999	129.257	MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.938	0.000	6.752	0.000	3.086	0.000	0.000	7.302	6.357	129.297	MWD+IFR1+MS
1900.000	0.000	0.000	1900.000	7.298	0.000	7.112	0.000	3.160	0.000	0.000	7.664	6.715	129.333	MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.657	0.000	7.471	0.000	3.236	0.000	0.000	8.026	7.074	129.365	MWD+IFR1+MS
2100.000	0.000	0.000	2100.000	8.016	0.000	7.831	0.000	3.313	0.000	0.000	8.387	7.432	129.394	MWD+IFR1+MS
2200.000	0.000	0.000	2200.000	8.375	0.000	8.190	0.000	3.391	0.000	0.000	8.748	7.791	129.420	MWD+IFR1+MS
2300.000	0.000	0.000	2300.000	8.734	0.000	8.550	0.000	3.472	0.000	0.000	9.109	8.149	129.444	MWD+IFR1+MS
2400.000	0.000	0.000	2400.000	9.093	0.000	8.909	0.000	3.554	0.000	0.000	9.470	8.507	129.466	MWD+IFR1+MS
2500.000	0.000	0.000	2500.000	9.452	0.000	9.268	0.000	3.637	0.000	0.000	9.831	8.866	129.486	MWD+IFR1+MS
2600.000	0.000	0.000	2600.000	9.811	0.000	9.627	0.000	3.722	0.000	0.000	10.191	9.224	129.505	MWD+IFR1+MS
2700.000	0.000	0.000	2700.000	10.170	0.000	9.986	0.000	3.808	0.000	0.000	10.552	9.583	129.522	MWD+IFR1+MS
2800.000	0.000	0.000	2800.000	10.529	0.000	10.345	0.000	3.895	0.000	0.000	10.912	9.941	129.538	MWD+IFR1+MS
2900.000	0.000	0.000	2900.000	10.888	0.000	10.705	0.000	3.984	0.000	0.000	11.272	10.299	129.552	MWD+IFR1+MS
3000.000	0.000	0.000	3000.000	11.247	0.000	11.063	0.000	4.074	0.000	0.000	11.632	10.658	129.566	MWD+IFR1+MS

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3100.000	0.000	0.000	3100.000	11.606	0.000	11.422	0.000	4.165	0.000	0.000	11.992	11.016	129.579	MWD+IFR1+MS
3200.000	0.000	0.000	3200.000	11.965	0.000	11.781	0.000	4.258	0.000	0.000	12.352	11.375	129.591	MWD+IFR1+MS
3300.000	0.000	0.000	3300.000	12.323	0.000	12.140	0.000	4.352	0.000	0.000	12.712	11.733	129.603	MWD+IFR1+MS
3400.000	0.000	0.000	3400.000	12.682	0.000	12.499	0.000	4.447	0.000	0.000	13.071	12.092	129.613	MWD+IFR1+MS
3500.000	0.000	0.000	3500.000	13.041	0.000	12.858	0.000	4.544	0.000	0.000	13.431	12.450	129.623	MWD+IFR1+MS
3600.000	0.000	0.000	3600.000	13.400	0.000	13.217	0.000	4.642	0.000	0.000	13.790	12.809	129.633	MWD+IFR1+MS
3700.000	0.000	0.000	3700.000	13.758	0.000	13.576	0.000	4.741	0.000	0.000	14.150	13.167	129.642	MWD+IFR1+MS
3800.000	2.000	24.461	3799.980	14.498	0.000	13.598	0.000	4.842	0.000	0.000	14.575	13.524	129.584	MWD+IFR1+MS
3900.000	4.000	24.461	3899.838	14.991	0.000	13.963	0.000	4.945	0.000	0.000	15.099	13.879	129.340	MWD+IFR1+MS
4000.000	6.000	24.461	3999.452	15.459	0.000	14.326	0.000	5.050	0.000	0.000	15.612	14.233	129.153	MWD+IFR1+MS
4100.000	8.000	24.461	4098.702	15.901	0.000	14.688	0.000	5.159	0.000	0.000	16.114	14.586	129.007	MWD+IFR1+MS
4200.000	10.000	24.461	4197.465	16.319	0.000	15.047	0.000	5.274	0.000	0.000	16.605	14.938	128.894	MWD+IFR1+MS
4300.000	12.000	24.461	4295.623	16.714	0.000	15.405	0.000	5.395	0.000	0.000	17.086	15.289	128.806	MWD+IFR1+MS
4352.966	13.059	24.461	4347.327	16.854	0.000	15.590	0.000	5.452	0.000	0.000	17.278	15.474	128.748	MWD+IFR1+MS
4400.000	13.059	24.461	4393.144	17.009	0.000	15.752	0.000	5.503	0.000	0.000	17.428	15.638	128.716	MWD+IFR1+MS
4500.000	13.059	24.461	4490.558	17.337	0.000	16.105	0.000	5.618	0.000	0.000	17.748	15.992	128.783	MWD+IFR1+MS
4600.000	13.059	24.461	4587.972	17.672	0.000	16.464	0.000	5.736	0.000	0.000	18.076	16.350	128.986	MWD+IFR1+MS
4700.000	13.059	24.461	4685.385	18.010	0.000	16.824	0.000	5.857	0.000	0.000	18.407	16.709	129.186	MWD+IFR1+MS
4800.000	13.059	24.461	4782.799	18.350	0.000	17.185	0.000	5.980	0.000	0.000	18.740	17.069	129.382	MWD+IFR1+MS
4900.000	13.059	24.461	4880.213	18.692	0.000	17.546	0.000	6.106	0.000	0.000	19.075	17.430	129.575	MWD+IFR1+MS
5000.000	13.059	24.461	4977.626	19.036	0.000	17.909	0.000	6.234	0.000	0.000	19.411	17.791	129.763	MWD+IFR1+MS
5100.000	13.059	24.461	5075.040	19.382	0.000	18.272	0.000	6.365	0.000	0.000	19.750	18.154	129.948	MWD+IFR1+MS
5200.000	13.059	24.461	5172.454	19.730	0.000	18.636	0.000	6.498	0.000	0.000	20.090	18.517	130.129	MWD+IFR1+MS
5300.000	13.059	24.461	5269.867	20.079	0.000	19.001	0.000	6.634	0.000	0.000	20.431	18.881	130.307	MWD+IFR1+MS
5400.000	13.059	24.461	5367.281	20.430	0.000	19.367	0.000	6.772	0.000	0.000	20.774	19.246	130.480	MWD+IFR1+MS
5500.000	13.059	24.461	5464.695	20.783	0.000	19.733	0.000	6.913	0.000	0.000	21.119	19.611	130.650	MWD+IFR1+MS
5600.000	13.059	24.461	5562.108	21.137	0.000	20.099	0.000	7.056	0.000	0.000	21.465	19.977	130.816	MWD+IFR1+MS
5700.000	13.059	24.461	5659.522	21.492	0.000	20.466	0.000	7.201	0.000	0.000	21.812	20.344	130.979	MWD+IFR1+MS
5800.000	13.059	24.461	5756.936	21.848	0.000	20.834	0.000	7.349	0.000	0.000	22.160	20.711	131.137	MWD+IFR1+MS
5900.000	13.059	24.461	5854.349	22.206	0.000	21.202	0.000	7.500	0.000	0.000	22.510	21.079	131.292	MWD+IFR1+MS
6000.000	13.059	24.461	5951.763	22.565	0.000	21.571	0.000	7.653	0.000	0.000	22.860	21.447	131.443	MWD+IFR1+MS
6100.000	13.059	24.461	6049.177	22.925	0.000	21.940	0.000	7.808	0.000	0.000	23.212	21.815	131.590	MWD+IFR1+MS
6200.000	13.059	24.461	6146.590	23.286	0.000	22.310	0.000	7.965	0.000	0.000	23.565	22.184	131.733	MWD+IFR1+MS

6300.000	13.059	24.461	6244.004	23.648	0.000	22.680	0.000	8.125	0.000	0.000	23.919	22.554	131.873	MWD+IFR1+MS
6400.000	13.059	24.461	6341.418	24.011	0.000	23.050	0.000	8.288	0.000	0.000	24.273	22.924	132.008	MWD+IFR1+MS
6500.000	13.059	24.461	6438.831	24.375	0.000	23.421	0.000	8.452	0.000	0.000	24.629	23.294	132.140	MWD+IFR1+MS
6600.000	13.059	24.461	6536.245	24.740	0.000	23.792	0.000	8.620	0.000	0.000	24.985	23.665	132.268	MWD+IFR1+MS
6700.000	13.059	24.461	6633.659	25.105	0.000	24.163	0.000	8.789	0.000	0.000	25.343	24.036	132.392	MWD+IFR1+MS
6800.000	13.059	24.461	6731.072	25.472	0.000	24.535	0.000	8.961	0.000	0.000	25.701	24.408	132.512	MWD+IFR1+MS
6900.000	13.059	24.461	6828.486	25.839	0.000	24.907	0.000	9.135	0.000	0.000	26.060	24.779	132.629	MWD+IFR1+MS
7000.000	13.059	24.461	6925.900	26.207	0.000	25.279	0.000	9.312	0.000	0.000	26.419	25.151	132.741	MWD+IFR1+MS
7100.000	13.059	24.461	7023.313	26.575	0.000	25.652	0.000	9.491	0.000	0.000	26.779	25.524	132.850	MWD+IFR1+MS
7200.000	13.059	24.461	7120.727	26.945	0.000	26.024	0.000	9.673	0.000	0.000	27.140	25.897	132.955	MWD+IFR1+MS
7300.000	13.059	24.461	7218.141	27.315	0.000	26.398	0.000	9.857	0.000	0.000	27.502	26.270	133.056	MWD+IFR1+MS
7400.000	13.059	24.461	7315.554	27.685	0.000	26.771	0.000	10.043	0.000	0.000	27.864	26.643	133.153	MWD+IFR1+MS
7500.000	13.059	24.461	7412.968	28.057	0.000	27.144	0.000	10.232	0.000	0.000	28.227	27.016	133.247	MWD+IFR1+MS
7600.000	13.059	24.461	7510.382	28.429	0.000	27.518	0.000	10.424	0.000	0.000	28.591	27.390	133.336	MWD+IFR1+MS
7700.000	13.059	24.461	7607.795	28.801	0.000	27.892	0.000	10.617	0.000	0.000	28.955	27.764	133.421	MWD+IFR1+MS
7800.000	13.059	24.461	7705.209	29.174	0.000	28.266	0.000	10.814	0.000	0.000	29.319	28.138	133.503	MWD+IFR1+MS
7900.000	13.059	24.461	7802.623	29.547	0.000	28.641	0.000	11.012	0.000	0.000	29.684	28.513	133.581	MWD+IFR1+MS
8000.000	13.059	24.461	7900.036	29.921	0.000	29.016	0.000	11.213	0.000	0.000	30.050	28.888	133.655	MWD+IFR1+MS
8100.000	13.059	24.461	7997.450	30.295	0.000	29.390	0.000	11.417	0.000	0.000	30.416	29.263	133.725	MWD+IFR1+MS
8200.000	13.059	24.461	8094.864	30.670	0.000	29.765	0.000	11.623	0.000	0.000	30.782	29.638	133.791	MWD+IFR1+MS
8300.000	13.059	24.461	8192.277	31.046	0.000	30.140	0.000	11.832	0.000	0.000	31.149	30.013	133.853	MWD+IFR1+MS
8400.000	13.059	24.461	8289.691	31.421	0.000	30.516	0.000	12.043	0.000	0.000	31.517	30.389	133.912	MWD+IFR1+MS
8500.000	13.059	24.461	8387.105	31.797	0.000	30.891	0.000	12.257	0.000	0.000	31.885	30.764	133.966	MWD+IFR1+MS
8600.000	13.059	24.461	8484.518	32.174	0.000	31.267	0.000	12.473	0.000	0.000	32.253	31.140	134.017	MWD+IFR1+MS
8700.000	13.059	24.461	8581.932	32.551	0.000	31.643	0.000	12.691	0.000	0.000	32.622	31.516	134.064	MWD+IFR1+MS
8800.000	13.059	24.461	8679.346	32.928	0.000	32.018	0.000	12.913	0.000	0.000	32.991	31.892	134.107	MWD+IFR1+MS
8900.000	13.059	24.461	8776.759	33.306	0.000	32.394	0.000	13.136	0.000	0.000	33.361	32.269	134.146	MWD+IFR1+MS
9000.000	13.059	24.461	8874.173	33.684	0.000	32.771	0.000	13.363	0.000	0.000	33.730	32.645	134.181	MWD+IFR1+MS
9100.000	13.059	24.461	8971.587	34.062	0.000	33.147	0.000	13.591	0.000	0.000	34.101	33.022	134.212	MWD+IFR1+MS
9200.000	13.059	24.461	9069.000	34.441	0.000	33.523	0.000	13.823	0.000	0.000	34.471	33.399	134.240	MWD+IFR1+MS
9300.000	13.059	24.461	9166.414	34.820	0.000	33.900	0.000	14.057	0.000	0.000	34.842	33.776	134.263	MWD+IFR1+MS
9388.549	13.059	24.461	9252.673	35.154	0.000	34.232	0.000	14.266	0.000	0.000	35.170	34.109	134.240	MWD+IFR1+MS
9400.000	12.830	24.461	9263.833	35.209	0.000	34.275	0.000	14.293	0.000	0.000	35.211	34.152	134.219	MWD+IFR1+MS

9500.000	10.830	24.461	9361.704	35.685	0.000	34.646	0.000	14.534	0.000	0.000	35.597	34.525	133.915	MWD+IFR1+MS
9600.000	8.830	24.461	9460.231	36.169	0.000	35.017	0.000	14.777	0.000	0.000	36.033	34.895	133.412	MWD+IFR1+MS
9700.000	6.830	24.461	9559.293	36.609	0.000	35.384	0.000	15.018	0.000	0.000	36.465	35.260	132.972	MWD+IFR1+MS
9800.000	4.830	24.461	9658.771	37.004	0.000	35.746	0.000	15.257	0.000	0.000	36.892	35.620	132.595	MWD+IFR1+MS
9900.000	2.830	24.461	9758.542	37.353	0.000	36.103	0.000	15.494	0.000	0.000	37.312	35.975	132.279	MWD+IFR1+MS
10000.000	0.830	24.461	9858.486	37.656	0.000	36.454	0.000	15.729	0.000	0.000	37.725	36.325	132.021	MWD+IFR1+MS
10041.515	0.000	0.000	9900.000	37.249	0.000	37.101	0.000	15.826	0.000	0.000	37.869	36.468	131.952	MWD+IFR1+MS
10100.000	0.000	0.000	9958.485	37.448	0.000	37.297	0.000	15.964	0.000	0.000	38.063	36.670	131.890	MWD+IFR1+MS
10200.000	0.000	0.000	10058.485	37.789	0.000	37.637	0.000	16.201	0.000	0.000	38.399	37.015	131.847	MWD+IFR1+MS
10300.000	0.000	0.000	10158.485	38.131	0.000	37.978	0.000	16.442	0.000	0.000	38.738	37.360	131.812	MWD+IFR1+MS
10400.000	0.000	0.000	10258.485	38.474	0.000	38.320	0.000	16.686	0.000	0.000	39.078	37.705	131.777	MWD+IFR1+MS
10509.315	0.000	0.000	10367.800	38.851	0.000	38.695	0.000	16.957	0.000	0.000	39.451	38.083	131.745	MWD+IFR1+MS
10600.000	7.255	269.811	10458.243	38.678	-0.000	39.146	0.000	17.188	0.000	0.000	39.787	38.497	134.885	MWD+IFR1+MS
10700.000	15.255	269.811	10556.240	38.904	-0.000	39.458	0.000	17.516	0.000	0.000	40.649	39.191	-25.335	MWD+IFR1+MS
10800.000	23.255	269.811	10650.569	38.652	-0.000	39.760	0.000	18.007	0.000	0.000	41.699	39.642	-13.865	MWD+IFR1+MS
10900.000	31.255	269.811	10739.395	37.884	-0.000	40.046	0.000	18.712	0.000	0.000	42.673	39.986	-8.644	MWD+IFR1+MS
11000.000	39.255	269.811	10820.988	36.685	-0.000	40.315	0.000	19.659	0.000	0.000	43.497	40.282	-5.896	MWD+IFR1+MS
11100.000	47.255	269.811	10893.760	35.174	-0.000	40.566	0.000	20.845	0.000	0.000	44.147	40.547	-4.294	MWD+IFR1+MS
11200.000	55.255	269.811	10956.295	33.503	-0.000	40.799	0.000	22.240	0.000	0.000	44.625	40.787	-3.336	MWD+IFR1+MS
11300.000	63.255	269.811	11007.376	31.862	-0.000	41.016	0.000	23.798	0.000	0.000	44.943	41.007	-2.822	MWD+IFR1+MS
11400.000	71.255	269.811	11046.008	30.471	-0.000	41.216	0.000	25.460	0.000	0.000	45.127	41.208	-2.675	MWD+IFR1+MS
11500.000	79.255	269.811	11071.439	29.562	-0.000	41.399	0.000	27.169	0.000	0.000	45.210	41.391	-2.885	MWD+IFR1+MS
11600.000	87.255	269.811	11083.175	29.334	-0.000	41.565	0.000	28.866	0.000	0.000	45.234	41.552	-3.465	MWD+IFR1+MS
11634.315	90.000	269.811	11083.997	29.007	0.000	41.614	0.000	29.007	0.000	0.000	45.238	41.600	-3.755	MWD+IFR1+MS
11700.000	90.000	269.811	11083.997	29.152	0.000	41.715	0.000	29.152	0.000	0.000	45.244	41.695	-4.360	MWD+IFR1+MS
11800.000	90.000	269.811	11083.997	29.358	0.000	41.895	0.000	29.358	0.000	0.000	45.255	41.866	-5.379	MWD+IFR1+MS
11900.000	90.000	269.811	11083.997	29.586	0.000	42.106	0.000	29.586	0.000	0.000	45.270	42.065	-6.550	MWD+IFR1+MS
12000.000	90.000	269.811	11083.997	29.832	0.000	42.346	0.000	29.832	0.000	0.000	45.288	42.290	-7.925	MWD+IFR1+MS
12100.000	90.000	269.811	11083.997	30.096	0.000	42.614	0.000	30.096	0.000	0.000	45.312	42.537	-9.582	MWD+IFR1+MS
12200.000	90.000	269.811	11083.997	30.379	0.000	42.909	0.000	30.379	0.000	0.000	45.342	42.806	-11.631	MWD+IFR1+MS
12300.000	90.000	269.811	11083.997	30.679	0.000	43.232	0.000	30.679	0.000	0.000	45.383	43.093	-14.234	MWD+IFR1+MS
12400.000	90.000	269.811	11083.997	30.996	0.000	43.581	0.000	30.996	0.000	0.000	45.437	43.393	-17.625	MWD+IFR1+MS
12500.000	90.000	269.811	11083.997	31.329	0.000	43.955	0.000	31.329	0.000	0.000	45.513	43.698	-22.124	MWD+IFR1+MS

12600.000	90.000	269.811	11083.997	31.679	0.000	44.355	0.000	31.679	0.000	0.000	45.623	43.994	-28.075	MWD+IFR1+MS
12700.000	90.000	269.811	11083.997	32.044	0.000	44.780	0.000	32.044	0.000	0.000	45.783	44.265	-35.586	MWD+IFR1+MS
12800.000	90.000	269.811	11083.997	32.423	0.000	45.228	0.000	32.423	0.000	0.000	46.012	44.491	-44.067	MWD+IFR1+MS
12900.000	90.000	269.811	11083.997	32.817	0.000	45.700	0.000	32.817	0.000	0.000	46.318	44.664	127.763	MWD+IFR1+MS
13000.000	90.000	269.811	11083.997	33.225	0.000	46.194	0.000	33.225	0.000	0.000	46.696	44.789	120.947	MWD+IFR1+MS
13100.000	90.000	269.811	11083.997	33.647	0.000	46.709	0.000	33.647	0.000	0.000	47.130	44.879	115.712	MWD+IFR1+MS
13200.000	90.000	269.811	11083.997	34.081	0.000	47.246	0.000	34.081	0.000	0.000	47.610	44.945	111.794	MWD+IFR1+MS
13300.000	90.000	269.811	11083.997	34.527	0.000	47.803	0.000	34.527	0.000	0.000	48.126	44.996	108.845	MWD+IFR1+MS
13400.000	90.000	269.811	11083.997	34.986	0.000	48.379	0.000	34.986	0.000	0.000	48.671	45.038	106.581	MWD+IFR1+MS
13500.000	90.000	269.811	11083.997	35.456	0.000	48.974	0.000	35.456	0.000	0.000	49.242	45.073	104.805	MWD+IFR1+MS
13600.000	90.000	269.811	11083.997	35.937	0.000	49.588	0.000	35.937	0.000	0.000	49.837	45.103	103.382	MWD+IFR1+MS
13700.000	90.000	269.811	11083.997	36.428	0.000	50.219	0.000	36.428	0.000	0.000	50.452	45.131	102.218	MWD+IFR1+MS
13800.000	90.000	269.811	11083.997	36.930	0.000	50.867	0.000	36.930	0.000	0.000	51.087	45.157	101.249	MWD+IFR1+MS
13900.000	90.000	269.811	11083.997	37.441	0.000	51.531	0.000	37.441	0.000	0.000	51.740	45.182	100.431	MWD+IFR1+MS
14000.000	90.000	269.811	11083.997	37.962	0.000	52.211	0.000	37.962	0.000	0.000	52.410	45.205	99.731	MWD+IFR1+MS
14100.000	90.000	269.811	11083.997	38.491	0.000	52.906	0.000	38.491	0.000	0.000	53.097	45.228	99.126	MWD+IFR1+MS
14200.000	90.000	269.811	11083.997	39.030	0.000	53.615	0.000	39.030	0.000	0.000	53.799	45.250	98.596	MWD+IFR1+MS
14300.000	90.000	269.811	11083.997	39.576	0.000	54.338	0.000	39.576	0.000	0.000	54.516	45.273	98.128	MWD+IFR1+MS
14400.000	90.000	269.811	11083.997	40.131	0.000	55.075	0.000	40.131	0.000	0.000	55.246	45.295	97.712	MWD+IFR1+MS
14500.000	90.000	269.811	11083.997	40.693	0.000	55.824	0.000	40.693	0.000	0.000	55.990	45.317	97.339	MWD+IFR1+MS
14600.000	90.000	269.811	11083.997	41.262	0.000	56.586	0.000	41.262	0.000	0.000	56.747	45.339	97.004	MWD+IFR1+MS
14700.000	90.000	269.811	11083.997	41.838	0.000	57.359	0.000	41.838	0.000	0.000	57.516	45.362	96.699	MWD+IFR1+MS
14800.000	90.000	269.811	11083.997	42.421	0.000	58.144	0.000	42.421	0.000	0.000	58.297	45.385	96.422	MWD+IFR1+MS
14900.000	90.000	269.811	11083.997	43.010	0.000	58.940	0.000	43.010	0.000	0.000	59.088	45.408	96.168	MWD+IFR1+MS
15000.000	90.000	269.811	11083.997	43.606	0.000	59.746	0.000	43.606	0.000	0.000	59.891	45.431	95.935	MWD+IFR1+MS
15100.000	90.000	269.811	11083.997	44.207	0.000	60.562	0.000	44.207	0.000	0.000	60.704	45.455	95.719	MWD+IFR1+MS
15200.000	90.000	269.811	11083.997	44.814	0.000	61.388	0.000	44.814	0.000	0.000	61.526	45.479	95.520	MWD+IFR1+MS
15300.000	90.000	269.811	11083.997	45.427	0.000	62.223	0.000	45.427	0.000	0.000	62.358	45.504	95.335	MWD+IFR1+MS
15400.000	90.000	269.811	11083.997	46.044	0.000	63.067	0.000	46.044	0.000	0.000	63.199	45.529	95.162	MWD+IFR1+MS
15500.000	90.000	269.811	11083.997	46.667	0.000	63.919	0.000	46.667	0.000	0.000	64.049	45.554	95.001	MWD+IFR1+MS
15600.000	90.000	269.811	11083.997	47.295	0.000	64.780	0.000	47.295	0.000	0.000	64.907	45.580	94.850	MWD+IFR1+MS
15700.000	90.000	269.811	11083.997	47.927	0.000	65.648	0.000	47.927	0.000	0.000	65.773	45.606	94.708	MWD+IFR1+MS
15800.000	90.000	269.811	11083.997	48.564	0.000	66.525	0.000	48.564	0.000	0.000	66.647	45.633	94.575	MWD+IFR1+MS

15900.000	90.000	269.811	11083.997	49.205	0.000	67.408	0.000	49.205	0.000	0.000	67.528	45.661	94.449	MWD+IFR1+MS
16000.000	90.000	269.811	11083.997	49.850	0.000	68.298	0.000	49.850	0.000	0.000	68.416	45.688	94.330	MWD+IFR1+MS
16100.000	90.000	269.811	11083.997	50.499	0.000	69.195	0.000	50.499	0.000	0.000	69.311	45.717	94.218	MWD+IFR1+MS
16200.000	90.000	269.811	11083.997	51.151	0.000	70.099	0.000	51.151	0.000	0.000	70.212	45.745	94.111	MWD+IFR1+MS
16300.000	90.000	269.811	11083.997	51.808	0.000	71.008	0.000	51.808	0.000	0.000	71.120	45.775	94.010	MWD+IFR1+MS
16400.000	90.000	269.811	11083.997	52.468	0.000	71.924	0.000	52.468	0.000	0.000	72.034	45.805	93.914	MWD+IFR1+MS
16500.000	90.000	269.811	11083.997	53.131	0.000	72.846	0.000	53.131	0.000	0.000	72.954	45.835	93.822	MWD+IFR1+MS
16600.000	90.000	269.811	11083.997	53.798	0.000	73.772	0.000	53.798	0.000	0.000	73.879	45.866	93.735	MWD+IFR1+MS
16700.000	90.000	269.811	11083.997	54.468	0.000	74.705	0.000	54.468	0.000	0.000	74.809	45.897	93.651	MWD+IFR1+MS
16800.000	90.000	269.811	11083.997	55.141	0.000	75.642	0.000	55.141	0.000	0.000	75.745	45.929	93.572	MWD+IFR1+MS
16900.000	90.000	269.811	11083.997	55.816	0.000	76.585	0.000	55.816	0.000	0.000	76.686	45.961	93.495	MWD+IFR1+MS
17000.000	90.000	269.811	11083.997	56.495	0.000	77.532	0.000	56.495	0.000	0.000	77.632	45.994	93.422	MWD+IFR1+MS
17100.000	90.000	269.811	11083.997	57.176	0.000	78.483	0.000	57.176	0.000	0.000	78.582	46.028	93.352	MWD+IFR1+MS
17200.000	90.000	269.811	11083.997	57.860	0.000	79.440	0.000	57.860	0.000	0.000	79.537	46.062	93.285	MWD+IFR1+MS
17300.000	90.000	269.811	11083.997	58.547	0.000	80.400	0.000	58.547	0.000	0.000	80.496	46.096	93.220	MWD+IFR1+MS
17400.000	90.000	269.811	11083.997	59.236	0.000	81.365	0.000	59.236	0.000	0.000	81.459	46.131	93.158	MWD+IFR1+MS
17500.000	90.000	269.811	11083.997	59.927	0.000	82.333	0.000	59.927	0.000	0.000	82.426	46.167	93.099	MWD+IFR1+MS
17600.000	90.000	269.811	11083.997	60.620	0.000	83.305	0.000	60.620	0.000	0.000	83.397	46.203	93.041	MWD+IFR1+MS
17700.000	90.000	269.811	11083.997	61.316	0.000	84.281	0.000	61.316	0.000	0.000	84.372	46.240	92.985	MWD+IFR1+MS
17800.000	90.000	269.811	11083.997	62.014	0.000	85.261	0.000	62.014	0.000	0.000	85.350	46.277	92.932	MWD+IFR1+MS
17900.000	90.000	269.811	11083.997	62.714	0.000	86.244	0.000	62.714	0.000	0.000	86.332	46.314	92.880	MWD+IFR1+MS
18000.000	90.000	269.811	11083.997	63.416	0.000	87.230	0.000	63.416	0.000	0.000	87.317	46.352	92.830	MWD+IFR1+MS
18100.000	90.000	269.811	11083.997	64.120	0.000	88.220	0.000	64.120	0.000	0.000	88.306	46.391	92.782	MWD+IFR1+MS
18200.000	90.000	269.811	11083.997	64.825	0.000	89.213	0.000	64.825	0.000	0.000	89.298	46.430	92.736	MWD+IFR1+MS
18300.000	90.000	269.811	11083.997	65.533	0.000	90.209	0.000	65.533	0.000	0.000	90.292	46.470	92.690	MWD+IFR1+MS
18400.000	90.000	269.811	11083.997	66.242	0.000	91.207	0.000	66.242	0.000	0.000	91.290	46.510	92.647	MWD+IFR1+MS
18500.000	90.000	269.811	11083.997	66.953	0.000	92.209	0.000	66.953	0.000	0.000	92.290	46.551	92.604	MWD+IFR1+MS
18600.000	90.000	269.811	11083.997	67.666	0.000	93.213	0.000	67.666	0.000	0.000	93.294	46.592	92.563	MWD+IFR1+MS
18700.000	90.000	269.811	11083.997	68.380	0.000	94.220	0.000	68.380	0.000	0.000	94.300	46.634	92.523	MWD+IFR1+MS
18800.000	90.000	269.811	11083.997	69.095	0.000	95.229	0.000	69.095	0.000	0.000	95.308	46.677	92.485	MWD+IFR1+MS
18900.000	90.000	269.811	11083.997	69.813	0.000	96.241	0.000	69.813	0.000	0.000	96.319	46.719	92.447	MWD+IFR1+MS
19000.000	90.000	269.811	11083.997	70.531	0.000	97.255	0.000	70.531	0.000	0.000	97.332	46.763	92.411	MWD+IFR1+MS
19100.000	90.000	269.811	11083.997	71.251	0.000	98.272	0.000	71.251	0.000	0.000	98.348	46.807	92.375	MWD+IFR1+MS

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19200.000	90.000	269.811	11083.997	71.972	0.000	99.291	0.000	71.972	0.000	0.000	99.366	46.851	92.341	MWD+IFR1+MS
19300.000	90.000	269.811	11083.997	72.695	0.000	100.312	0.000	72.695	0.000	0.000	100.386	46.896	92.308	MWD+IFR1+MS
19400.000	90.000	269.811	11083.997	73.419	0.000	101.335	0.000	73.419	0.000	0.000	101.409	46.941	92.275	MWD+IFR1+MS
19500.000	90.000	269.811	11083.997	74.144	0.000	102.360	0.000	74.144	0.000	0.000	102.433	46.987	92.243	MWD+IFR1+MS
19600.000	90.000	269.811	11083.997	74.871	0.000	103.387	0.000	74.871	0.000	0.000	103.460	47.034	92.212	MWD+IFR1+MS
19700.000	90.000	269.811	11083.997	75.598	0.000	104.417	0.000	75.598	0.000	0.000	104.488	47.081	92.182	MWD+IFR1+MS
19800.000	90.000	269.811	11083.997	76.327	0.000	105.448	0.000	76.327	0.000	0.000	105.518	47.128	92.153	MWD+IFR1+MS
19900.000	90.000	269.811	11083.997	77.057	0.000	106.481	0.000	77.057	0.000	0.000	106.550	47.176	92.125	MWD+IFR1+MS
20000.000	90.000	269.811	11083.997	77.787	0.000	107.515	0.000	77.787	0.000	0.000	107.584	47.225	92.097	MWD+IFR1+MS
20100.000	90.000	269.811	11083.997	78.519	0.000	108.552	0.000	78.519	0.000	0.000	108.620	47.274	92.069	MWD+IFR1+MS
20200.000	90.000	269.811	11083.997	79.252	0.000	109.590	0.000	79.252	0.000	0.000	109.657	47.323	92.043	MWD+IFR1+MS
20300.000	90.000	269.811	11083.997	79.986	0.000	110.629	0.000	79.986	0.000	0.000	110.696	47.373	92.017	MWD+IFR1+MS
20400.000	90.000	269.811	11083.997	80.721	0.000	111.670	0.000	80.721	0.000	0.000	111.737	47.424	91.992	MWD+IFR1+MS
20500.000	90.000	269.811	11083.997	81.457	0.000	112.713	0.000	81.457	0.000	0.000	112.779	47.475	91.967	MWD+IFR1+MS
20600.000	90.000	269.811	11083.997	82.193	0.000	113.757	0.000	82.193	0.000	0.000	113.823	47.526	91.943	MWD+IFR1+MS
20700.000	90.000	269.811	11083.997	82.931	0.000	114.803	0.000	82.931	0.000	0.000	114.868	47.578	91.919	MWD+IFR1+MS
20800.000	90.000	269.811	11083.997	83.669	0.000	115.850	0.000	83.669	0.000	0.000	115.914	47.630	91.896	MWD+IFR1+MS
20900.000	90.000	269.811	11083.997	84.409	0.000	116.899	0.000	84.409	0.000	0.000	116.962	47.683	91.874	MWD+IFR1+MS
21000.000	90.000	269.811	11083.997	85.149	0.000	117.949	0.000	85.149	0.000	0.000	118.011	47.737	91.852	MWD+IFR1+MS
21100.000	90.000	269.811	11083.997	85.890	0.000	119.000	0.000	85.890	0.000	0.000	119.062	47.791	91.830	MWD+IFR1+MS
21185.817	90.000	269.811	11083.997	86.526	0.000	119.902	0.000	86.526	0.000	0.000	119.964	47.837	91.812	MWD+IFR1+MS
21200.000	90.000	269.811	11083.997	86.631	0.000	120.051	0.000	86.631	0.000	0.000	120.113	47.845	91.809	MWD+IFR1+MS
21235.378	90.000	269.811	11083.997	86.892	0.000	120.423	0.000	86.892	0.000	0.000	120.484	47.864	91.802	MWD+IFR1+MS

Plan Targets

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 12	11398.55	507733.30	656545.60	7704.00	CIRCLE
LTP 12	21185.37	507699.50	646278.40	7704.00	CIRCLE
BHL 12	21235.37	507699.30	646228.40	7704.00	CIRCLE

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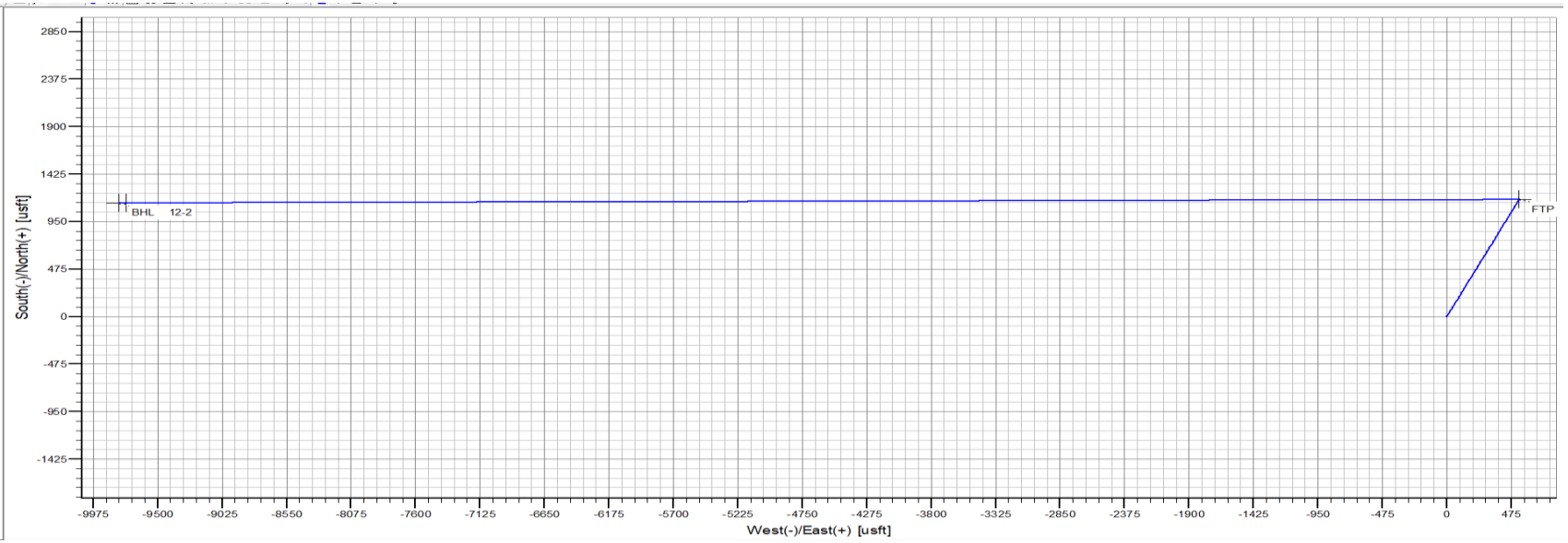

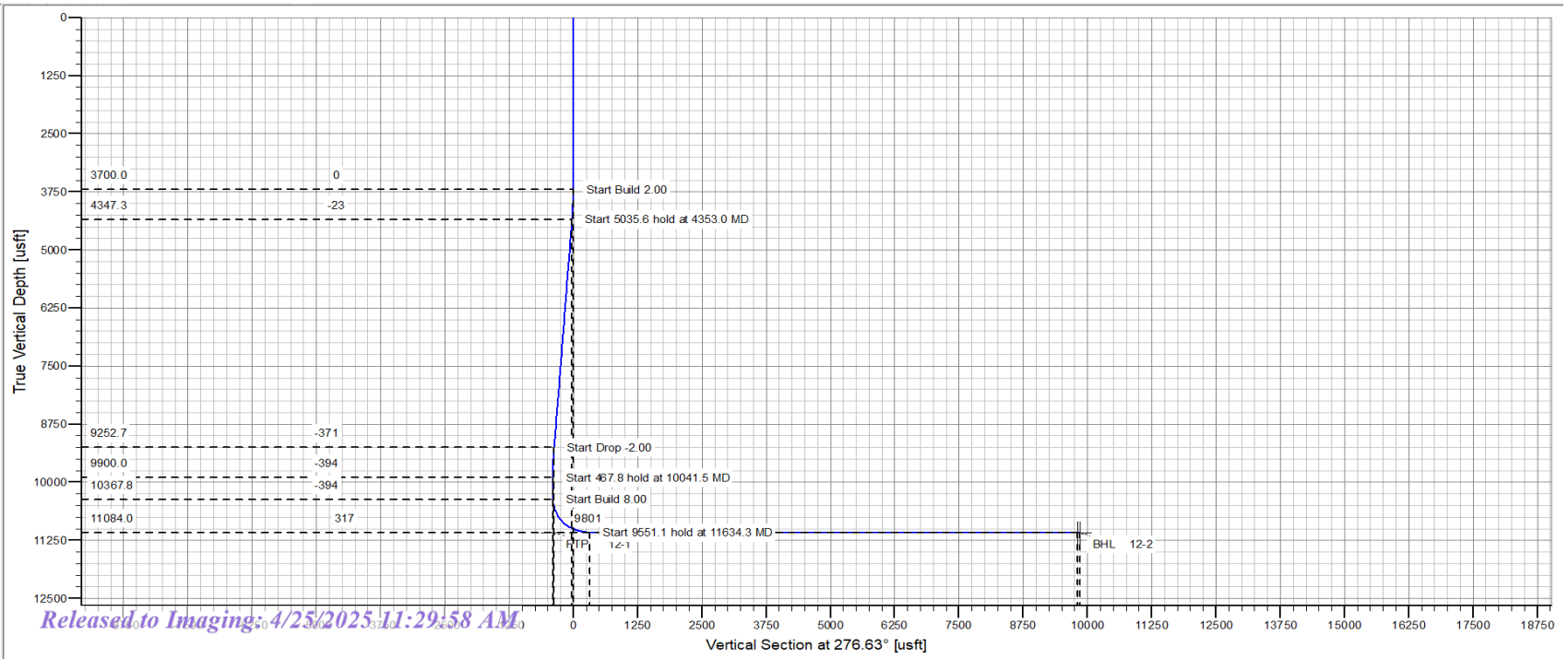

Formation	TVDSS (feet)	MD TVD (feet)
Alluvium	surface	surface
Rustler	2,924'	456'
Salado/Top of Salt	2,624'	756'
MB 126	1,940'	1,440'
Castile Anhydrite 1 Top	880'	2,500'
Castile Anhydrite 1 Base	455'	2,925'
Castile Anhydrite 2 Top	219'	3,161'
Castile Anhydrite 2 Base	124'	3,256'
Base Salt	-228'	3,608'
Delaware/Lamar	-489'	3,869'
Bell Canyon	-530'	3,910'
Cherry Canyon	-1,635'	5,015'
Brushy Canyon Ss.	-2,997'	6,377'
Bone Spring Lm.	-4,406'	7,786'
Avalon Ss.	-4,471'	7,851'
Upper Avalon Carb.	-4,694'	8,074'
Upper Avalon Sh.	-4,779'	8,159'
Middle Avalon Carb.	-4,923'	8,303'
Lw. Avalon Sh.	-4,997'	8,377'
First Bone Spring Carb.	-5,253'	8,633'
First Bone Spring Ss.	-5,424'	8,804'
Second Bone Spring Carb.	-5,861'	9,241'
Second Bone Spring A Ss.	-6,130'	9,510'
Second Bone Spring A/B Carb.	-6,294'	9,674'
Second Bone Spring B Ss.	-6,343'	9,723'
Third Bone Spring Carb.	-6,477'	9,857'
Harkey Ss.	-6,687'	10,067'
Third Bone Spring Shale	-6,782'	10,162'
Third Bone Spring Ss.	-7,163'	10,543'
Third Bone Spring Ss.- Red Hills	-7,479'	10,859'
Wolfcamp Shale	-7,607'	10,987'
Wolfcamp X Ss.	-7,622'	11,002'
Wolfcamp Y Ss.	-7,676'	11,056'
Landing Point	-7,704'	11,084'
Horizontal TD	-7,604'	10,984'
Wolfcamp A	-7,724'	11,104'
Wolfcamp B	-7,997'	11,377'

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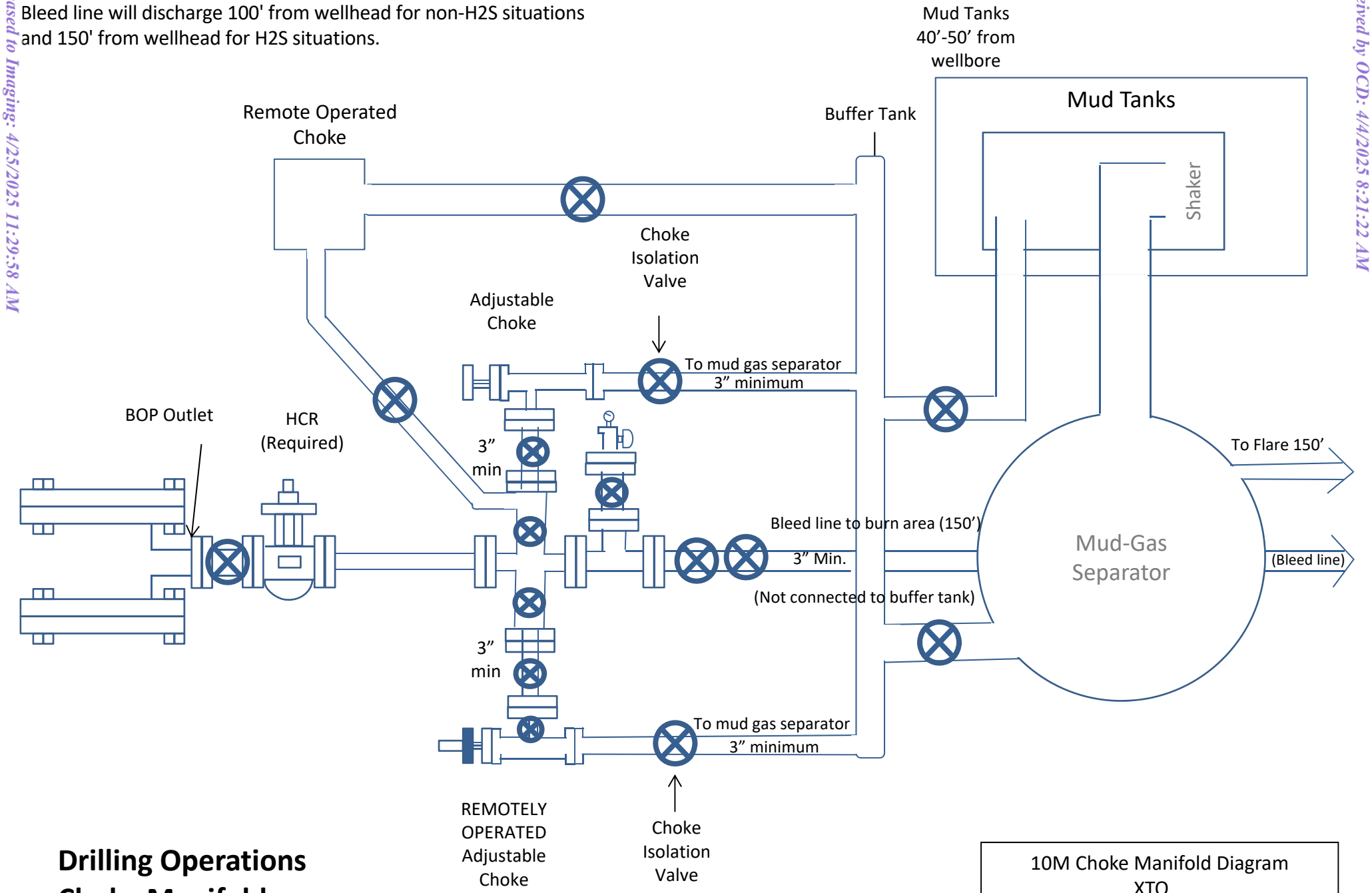
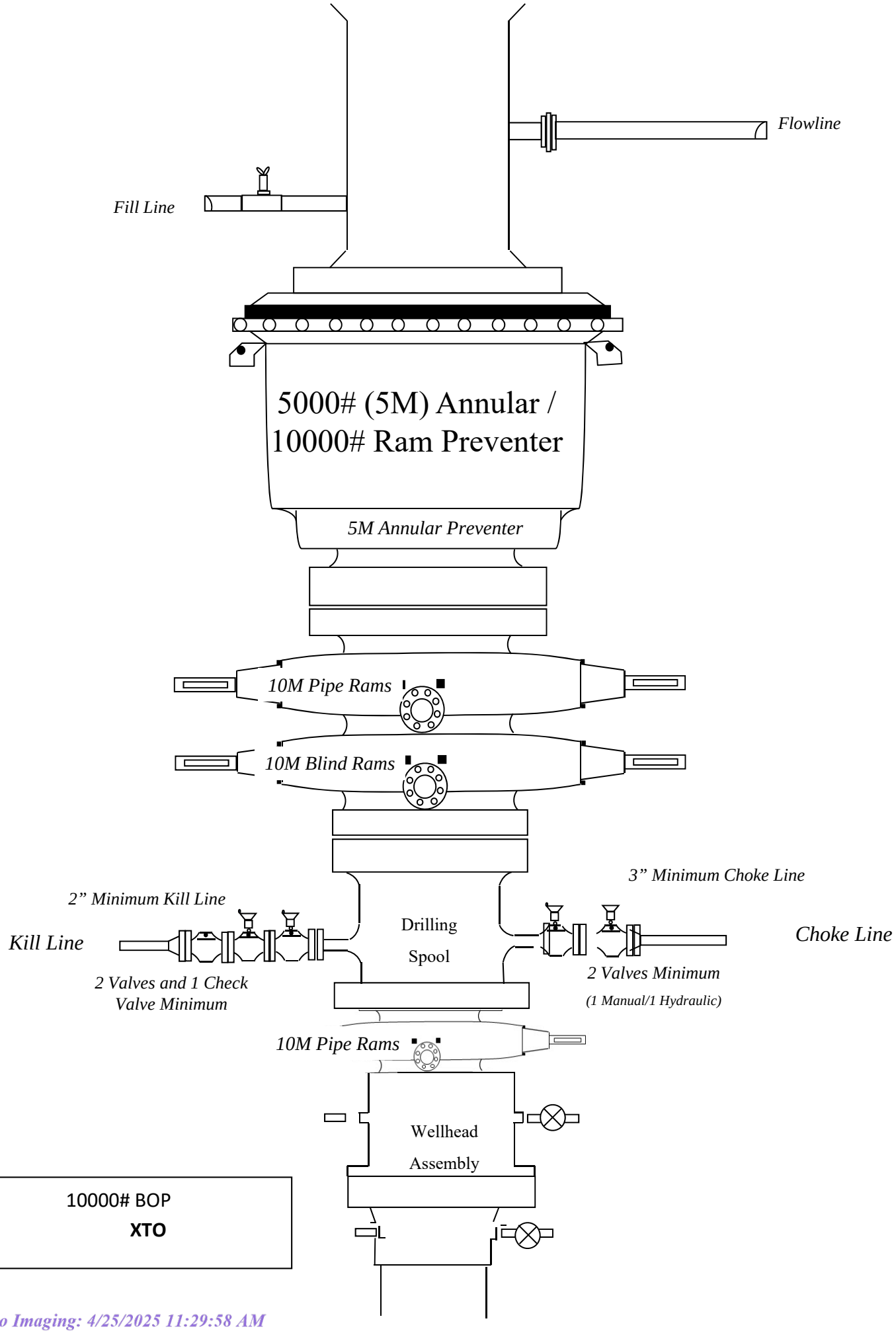
Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



Drilling Operations
Choke Manifold
10M Service

10M Choke Manifold Diagram
XTO



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XTO

U. S. Steel Tubular Products

11/8/2023 1:08:50 PM

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

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

UNCONTROLLED

Notes

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

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

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

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11/29/2021 4:16:04 PM

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

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	**Pipe**	**USS-TALON HTQ™ RD**		**--**
Outside Diameter	5.500	5.900	in.	--
Wall Thickness	0.361	--	in.	--
Inside Diameter	4.778	4.778	in.	--
Standard Drift	4.653	4.653	in.	--
Alternate Drift	--	--	in.	--
Nominal Linear Weight, T&C	20.00	--	lb/ft	--
Plain End Weight	19.83	--	lb/ft	--
SECTION AREA	**Pipe**	**USS-TALON HTQ™ RD**		**--**
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	[2]
PERFORMANCE	**Pipe**	**USS-TALON HTQ™ RD**		**--**
Minimum Collapse Pressure	11,100	11,100	psi	--
Minimum Internal Yield Pressure	12,640	12,640	psi	--
Minimum Pipe Body Yield Strength	641,000	--	lb	--
Joint Strength	--	641,000	lb	--
Compression Rating	--	641,000	lb	--
Reference Length	--	21,370	ft	[5]
Maximum Uniaxial Bend Rating	--	91.7	deg/100 ft	[3]
MAKE-UP DATA	**Pipe**	**USS-TALON HTQ™ RD**		**--**
Make-Up Loss	--	5.58	in.	--
Minimum Make-Up Torque	--	17,000	ft-lb	[4]
Maximum Make-Up Torque	--	20,000	ft-lb	[4]
Maximum Operating Torque	--	39,500	ft-lb	[4]

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Notes

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

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1-877-893-9461
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State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description
Effective May 25, 2021

I. Operator: XTO PERMIAN OPERATING, LLC **OGRID:** 373075 **Date:** 08/19/2024

II. Type: ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	3 yr Anticipated decline Oil BBL/D	Anticipated Gas MCF/D	3 yr anticipated decline Gas MCF/D	Anticipated Produced Water BBL/D	3 yr anticipated decline Water BBL/D
James Ranch Unit Apache 149H	TBD	13 22S 30E	507 FSL, 864 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 150H	TBD	13 22S 30E	477 FSL, 863 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 142H	TBD	24 22S 30E	1524 FNL, 829 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 135H	TBD	24 22S 30E	2228 FSL, 871 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 136H	TBD	24 22S 30E	2227 FSL, 971 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 137H	TBD	24 22S 30E	2257 FSL, 971 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 138H	TBD	24 22S 30E	2167 FSL, 971 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 139H	TBD	24 22S 30E	2258 FSL, 871 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 140H	TBD	24 22S 30E	2288 FSL, 871 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 141H	TBD	24 22S 30E	2197 FSL, 971 FEL	600	100	2500	1500	5000	200

James Ranch Unit Apache 131H	TBD	24 22S 30E	419 FSL, 890 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 132H	TBD	24 22S 30E	389 FSL, 889 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 133H	TBD	24 22S 30E	359 FSL, 889 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 134H	TBD	24 22S 30E	329 FSL, 889 FEL	600	100	2500	1500	5000	200
James Ranch Unit Apache 111H	TBD	13 22S 30E	2576 FSL, 867 FEL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 112H	TBD	13 22S 30E	2516 FSL, 868 FEL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 113H	TBD	13 22S 30E	416 FSL, 962 FEL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 114H	TBD	24 22S 30E	350 FNL, 949 FEL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 115H	TBD	24 22S 30E	408 FNL, 848 FEL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 701H	TBD	13 22S 30E	2577 FSL, 967 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 702H	TBD	13 22S 30E	2517 FSL, 968 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 703H	TBD	13 22S 30E	2486 FSL, 868 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 704H	TBD	13 22S 30E	2547 FSL, 967 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 705H	TBD	13 22S 30E	2487 FSL, 968 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 706H	TBD	13 22S 30E	2456 FSL, 869 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 707H	TBD	24 22S 30E	320 FNL, 950 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 708H	TBD	24 22S 30E	380 FNL, 949 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 709H	TBD	24 22S 30E	348 FNL, 849 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 710H	TBD	24 22S 30E	410 FNL, 948 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 711H	TBD	24 22S 30E	318 FNL, 850 FEL	1000	100	2000	1300	4500	400
James Ranch Unit Apache 801H	TBD	13 22S 30E	2546 FSL, 867 FEL	2000	100	6000	1000	7000	300
James Ranch Unit Apache 802H	TBD	13 22S 30E	446 FSL, 963 FEL	2000	100	6000	1000	7000	300

James Ranch Unit Apache 803H	TBD	13 22S 30E	476 FSL, 963 FEL	2000	100	6000	1000	7000	300
James Ranch Unit Apache 804H	TBD	24 22S 30E	378 FNL, 849 FEL	2000	100	6000	1000	7000	300
James Ranch Unit Apache 901H	TBD	13 22S 30E	2457 FSL, 969 FEL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 902H	TBD	13 22S 30E	506 FSL, 964 FEL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 903H	TBD	13 22S 30E	386 FSL, 962 FEL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 904H	TBD	24 22S 30E	440 FNL, 948 FEL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 906H	TBD	24 22S 30E	2287 FSL, 971 FEL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 805H	TBD	24 22S 30E	909 FEL, 1526 FNL	2000	100	6000	1000	7000	300
James Ranch Unit Apache 116H	TBD	24 22S 30E	909 FEL, 1556 FNL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 905H	TBD	24 22S 30E	908 FEL, 1616 FNL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 806H	TBD	24 22S 30E	906 FEL, 1646 FNL	2000	100	6000	1000	7000	300
James Ranch Unit Apache 117H	TBD	24 22S 30E	907 FEL, 1676 FNL	2000	200	5000	1400	7000	400
James Ranch Unit Apache 907H	TBD	24 22S 30E	930 FEL, 389 FSL	2000	200	5000	1100	8000	500
James Ranch Unit Apache 807H	TBD	24 22S 30E	929 FEL, 359 FSL	2000	100	6000	1000	7000	300
James Ranch Unit Apache 808H	TBD	24 22S 30E	929 FEL, 329 FSL	2000	100	6000	1000	7000	300

IV. Central Delivery Point Name: Longhorn Compressor Station [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
James Ranch Unit Apache 149H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 150H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 142H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 135H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 136H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 137H	TBD	TBD	TBD	TBD	TBD	TBD

James Ranch Unit Apache 138H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 139H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 140H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 141H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 131H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 132H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 133H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 134H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 111H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 112H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 113H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 114H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 115H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 701H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 702H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 703H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 704H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 705H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 706H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 707H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 708H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 709H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 710H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 711H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 801H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 802H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 803H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 804H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 901H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 902H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 903H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 904H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 906H	TBD	TBD	TBD	TBD	TBD	TBD

James Ranch Unit Apache 805H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 116H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 905H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 806H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 117H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 907H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 807H	TBD	TBD	TBD	TBD	TBD	TBD
James Ranch Unit Apache 808H	TBD	TBD	TBD	TBD	TBD	TBD

VI. Separation Equipment: ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☒ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

XIV. Confidentiality: ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system. ***If Operator checks this box, Operator will select one of the following:***

Well Shut-In. ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- **(a)** power generation on lease;
- **(b)** power generation for grid;
- **(c)** compression on lease;
- **(d)** liquids removal on lease;
- **(e)** reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- **(h)** fuel cell production; and
- **(i)** other alternative beneficial uses approved by the division.

Section 4 - Notices

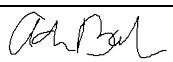
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

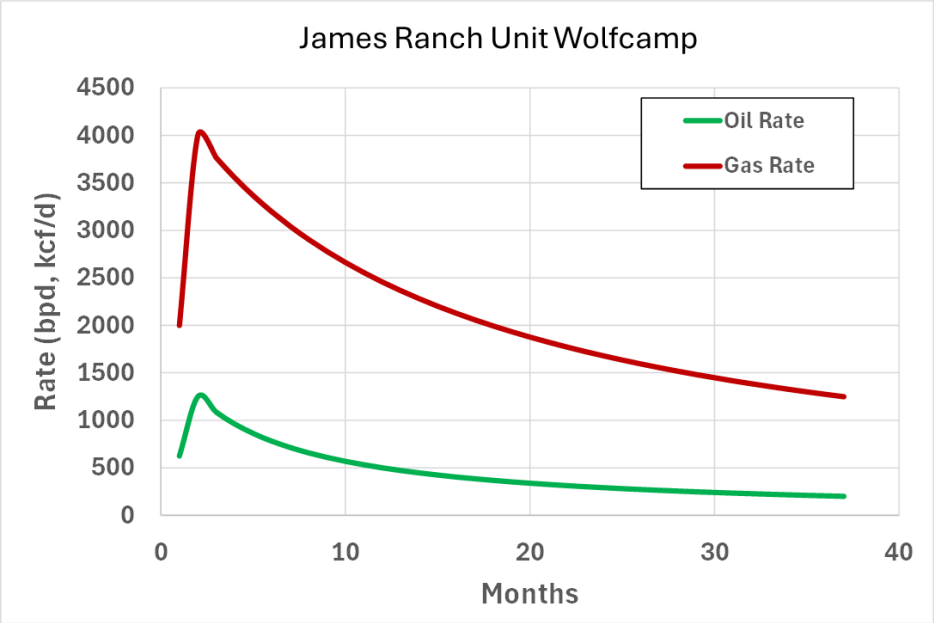
Signature:	
Printed Name:	Adrian Baker
Title:	Environmental and Regulatory Advisor
E-mail Address:	adrian.baker@exxonmobil.com
Date:	9/26/24
Phone:	4322363808

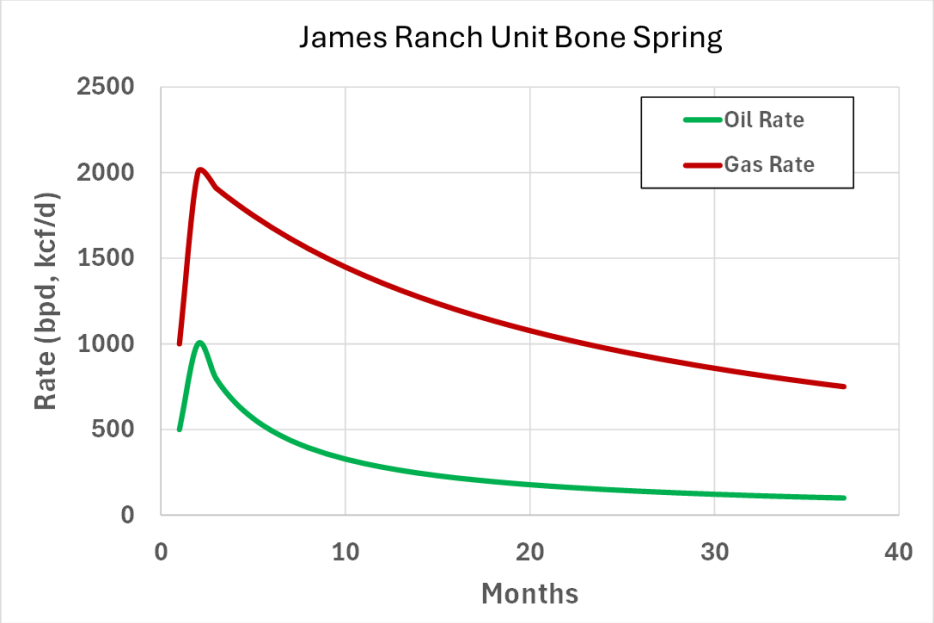
OIL CONSERVATION DIVISION

(Only applicable when submitted as a standalone form)

Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

JRU Decline Curves – Wolfcamp and Bone Spring





VI. Separation Equipment:

XTO Permian Operating LLC. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. XTO utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.

VII. Operational Practices

XTO Permian Operating LLC will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.

- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO Permian Operating LLCwill turn operations to onsite separation vessels and flow to the gathering pipeline.

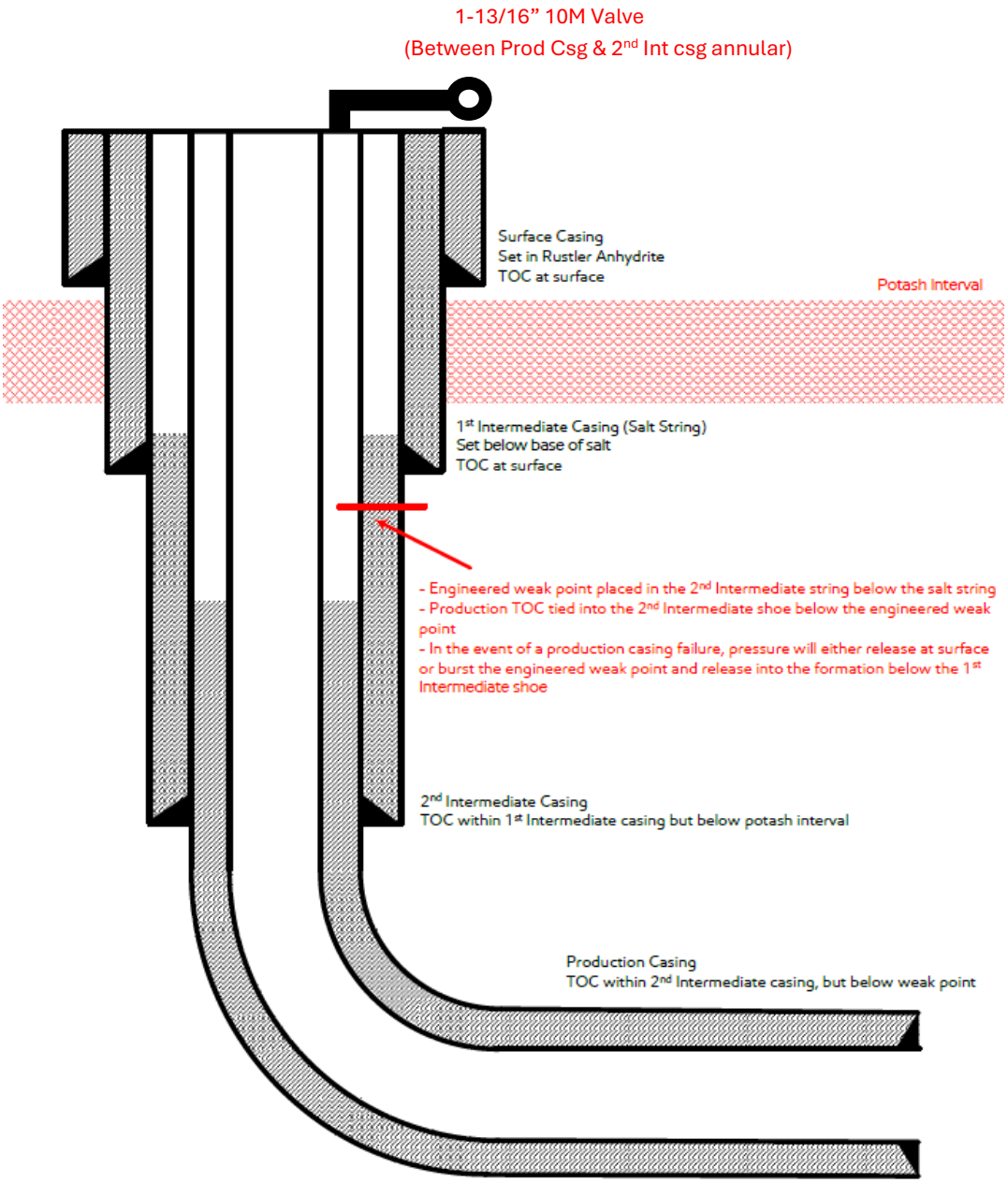
- During production operations, XTO Permian Operating LLC will take every practical effort to minimize waste of natural gas through venting and flaring by:

  - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
  - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
  - Flaring in lieu of venting, where technically feasible
  - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
  - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
  - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
  - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications

- Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible.

VIII. Best Management Practices during Maintenance

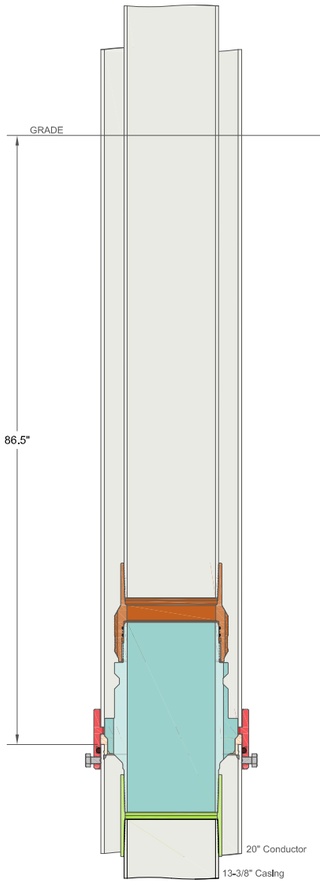
XTO Permian Operating LLC. will utilize best management practices to minimize venting during active and planned maintenance activities. XTO is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high-pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. XTO will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.

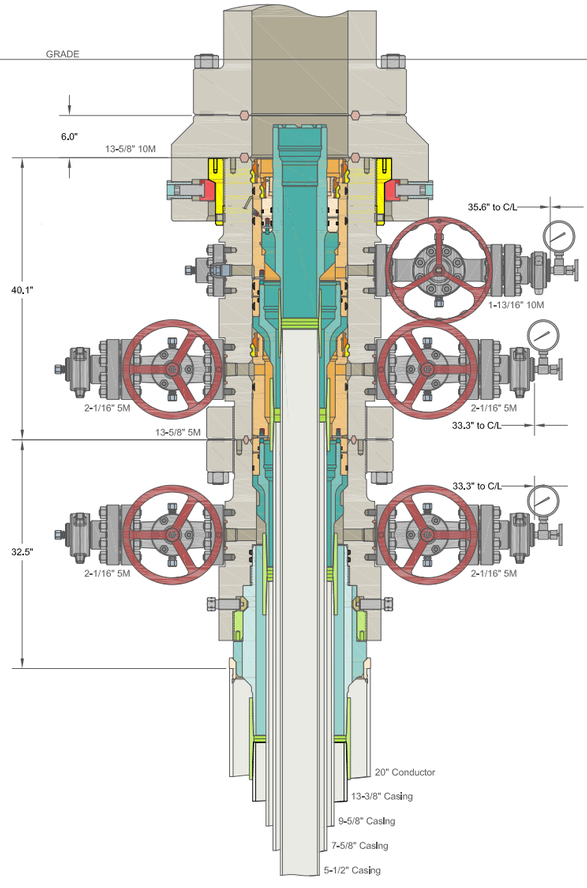


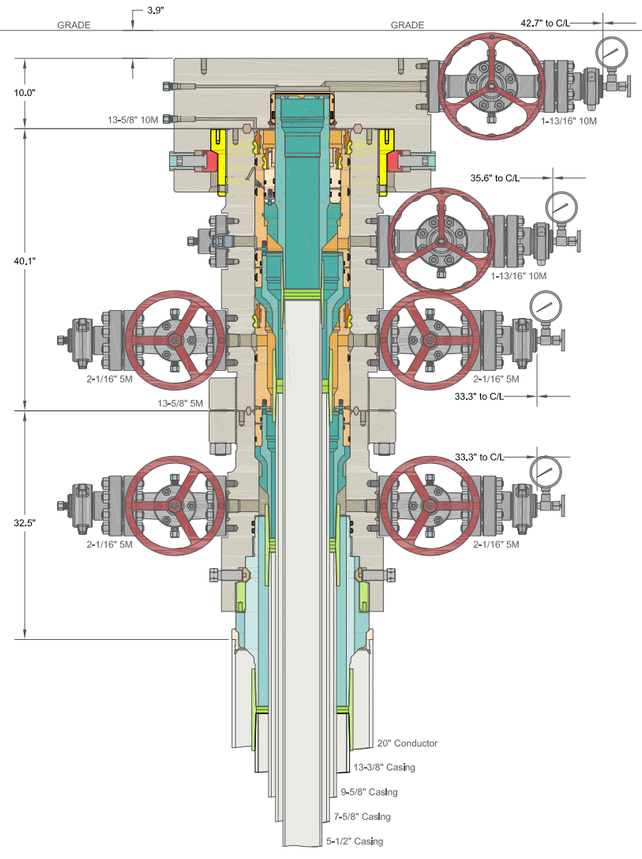
[Figure F] 4 String – 2nd Intermediate casing engineered weak point

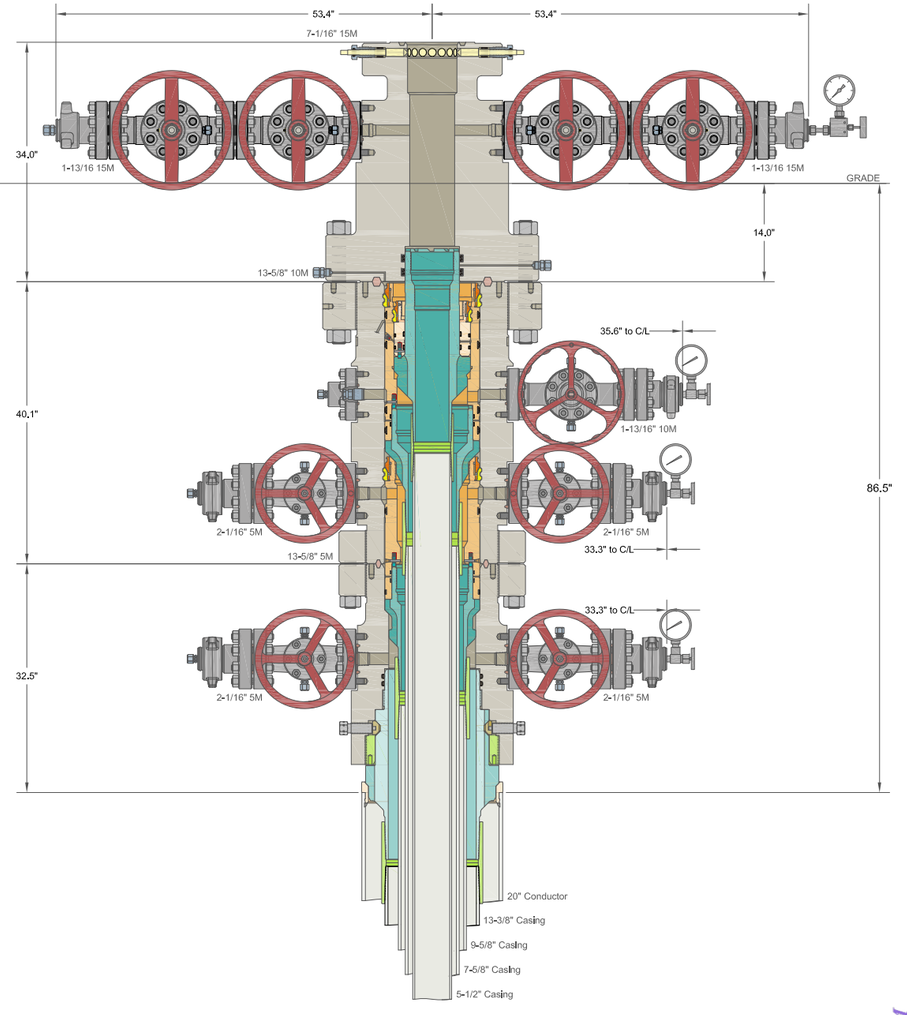
Update May 2024:
XTO is aware of R-111-Q update and will comply with these requirements including (but not limited to):

1) Alignment with KPLA requirements per schematic below, with engineering weak point casing design and utilizing new casing that meets API standards.
2) Contingency plans in place to divert fluids away from salt interval in event of production casing failure.
3) Intermediate 2 casing will consist of a primary cement job with TOC at the top of the Brushy Canyon formation within the Delaware Mountain Group.
    a. Bradenhead squeeze to be completed after primary cement job to tie back TOC to intermediate 1 "Salt string" & below Marker Bed 126 "Potash Interval".
4) Production cement to be tied back no less than 500' inside previous casing shoe (intermediate 2 casing) and below the engineered weak point.









ALL DIMENSIONS APPROXIMA

CACTUS WELLHEAD LLC

(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head
And Drilling & Skid Configurations

XTO ENERGY INC
DELAWARE BASIN

DRAWN	VJK	31MAR22
APPRV		

DRAWING NO. SDT-3301

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.

Received by OCD: 4/4/2025 8:21:22 AM

Released to Imaging: 4/25/2025 11:29:58 AM

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

Description of Operations:

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

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. OSPINOS

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

H3-15716

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

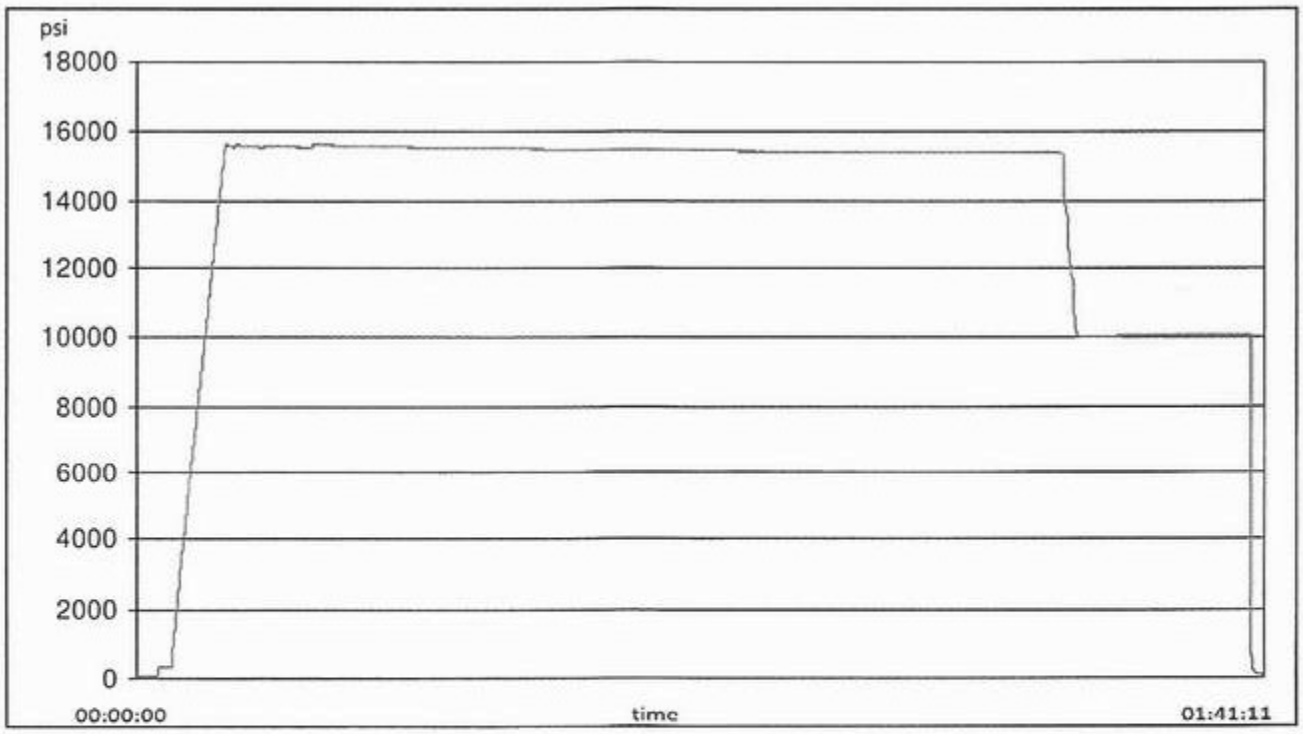
Test procedure:	GTS-04-053	
Test pressure:	15000.00	psi
Test pressure hold:	3600.00	sec
Work pressure:	10000.00	psi
Work pressure hold:	900.00	sec
Length difference:	0.00	%
Length difference:	0.00	inch

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

Length:	45	feet

Visual check:	
Pressure test result:	PASS
Length measurement result:	

Test operator: Travis



H3-15/16

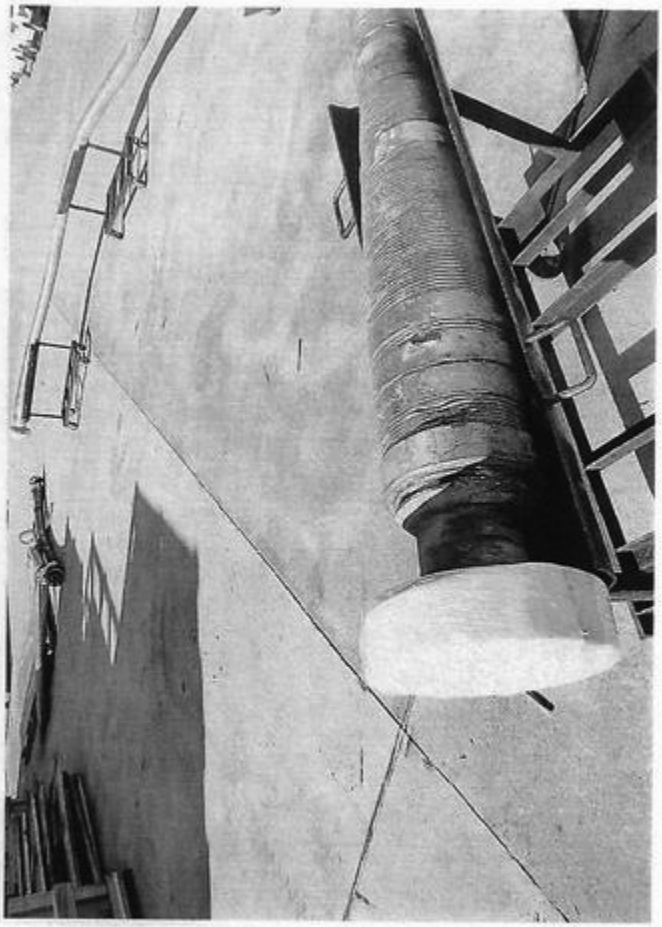
1/25/2024 11:48:06 AM

TEST REPORT

GAUGE TRACEABILITY

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

Comment



Released to Imaging: 4/25/2025 11:29:58 AM

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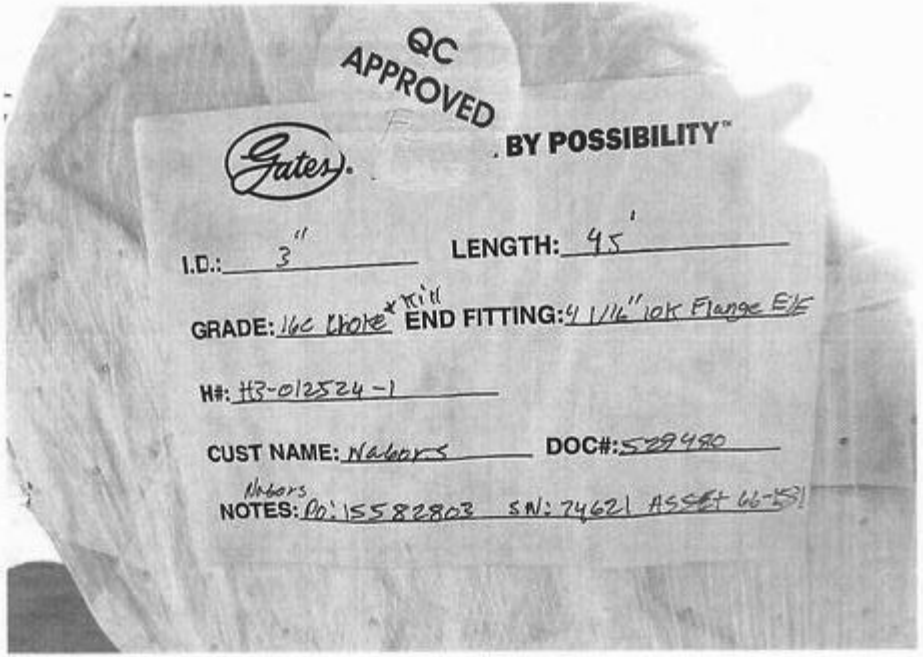


Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

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

Background

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

Supporting Documentation

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

Figure 1: Winch System attached to BOP Stack

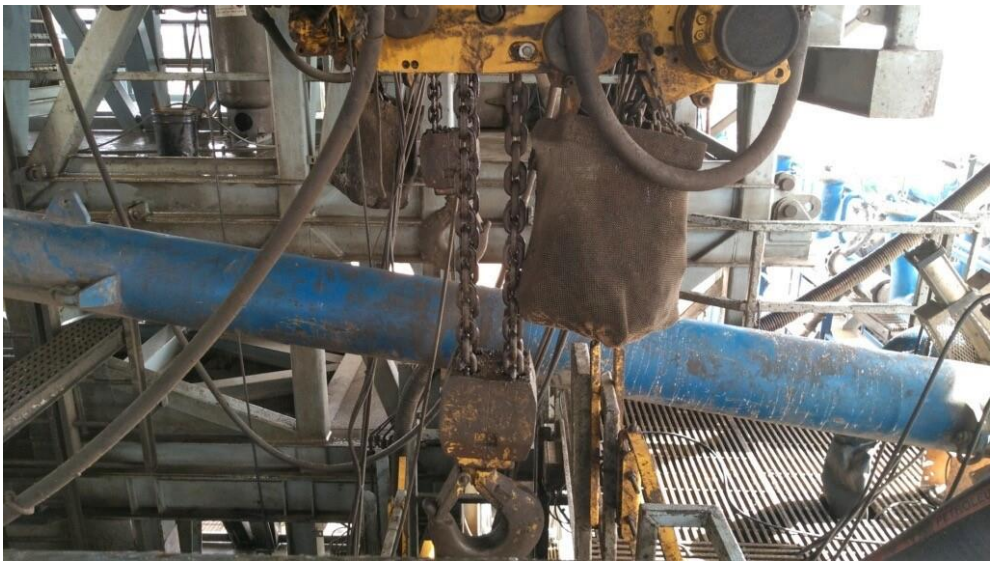


Figure 2: BOP Winch System

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

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.

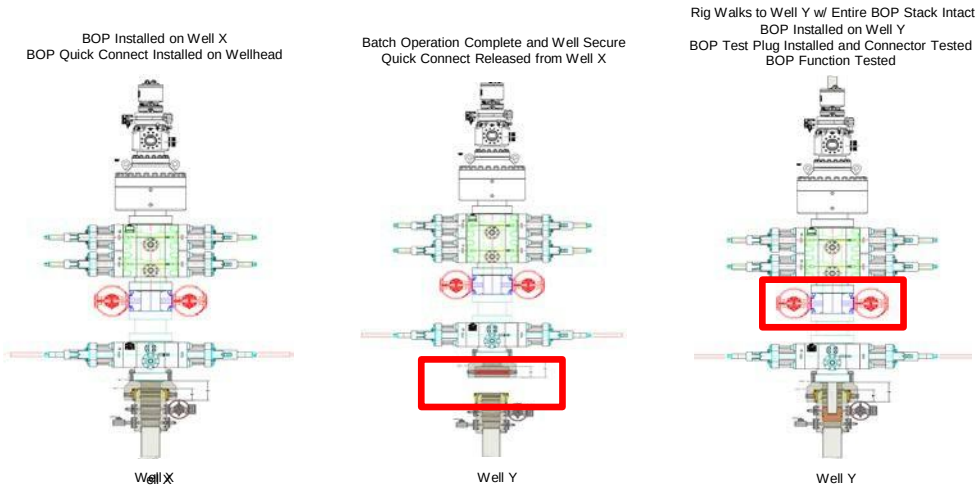
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often 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.

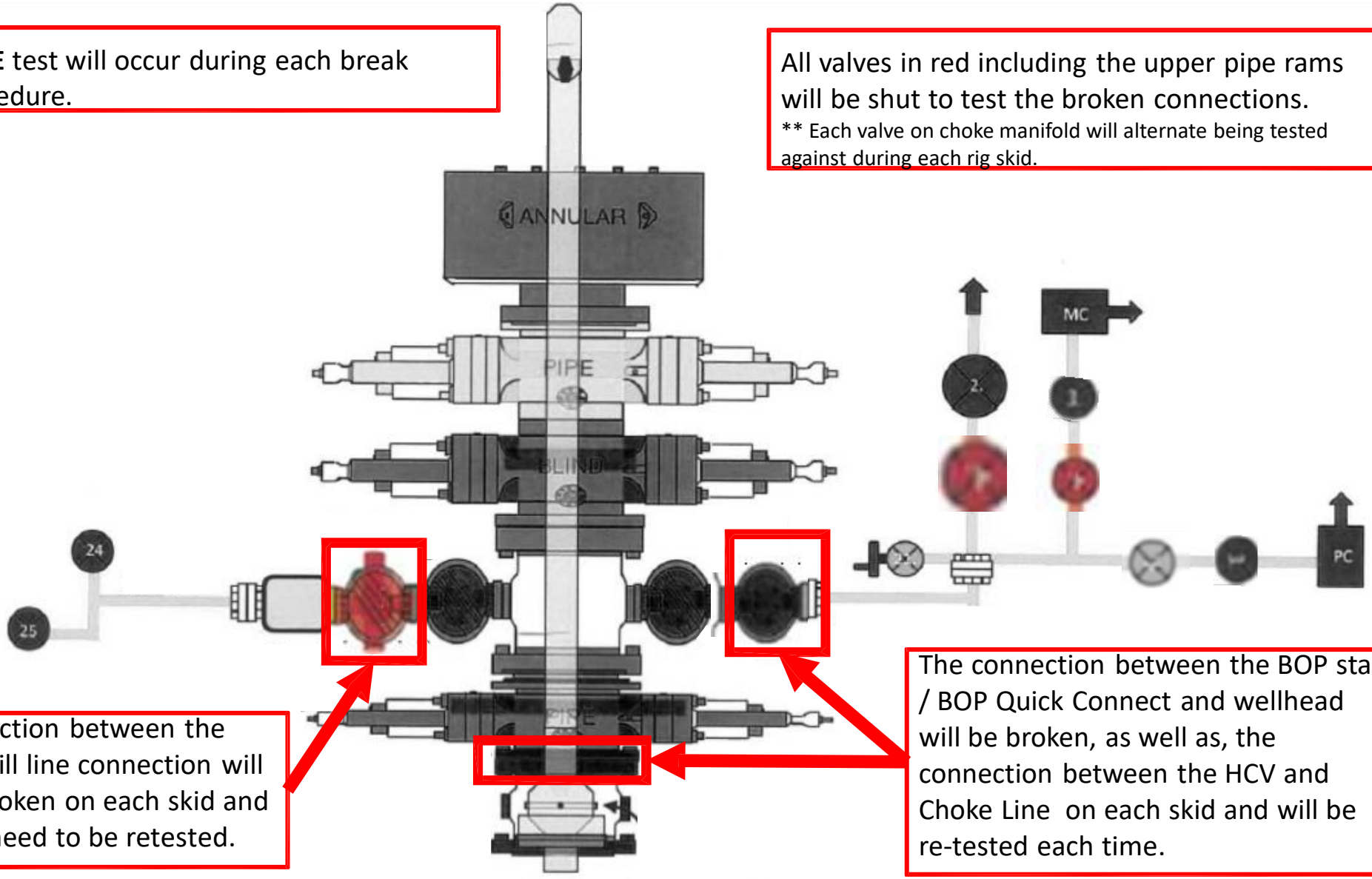
3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

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.

XTO Permian Operating, LLC Offline Cementing Variance Request

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

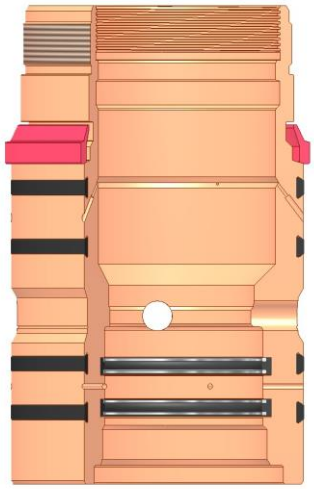
1. Cement Program

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

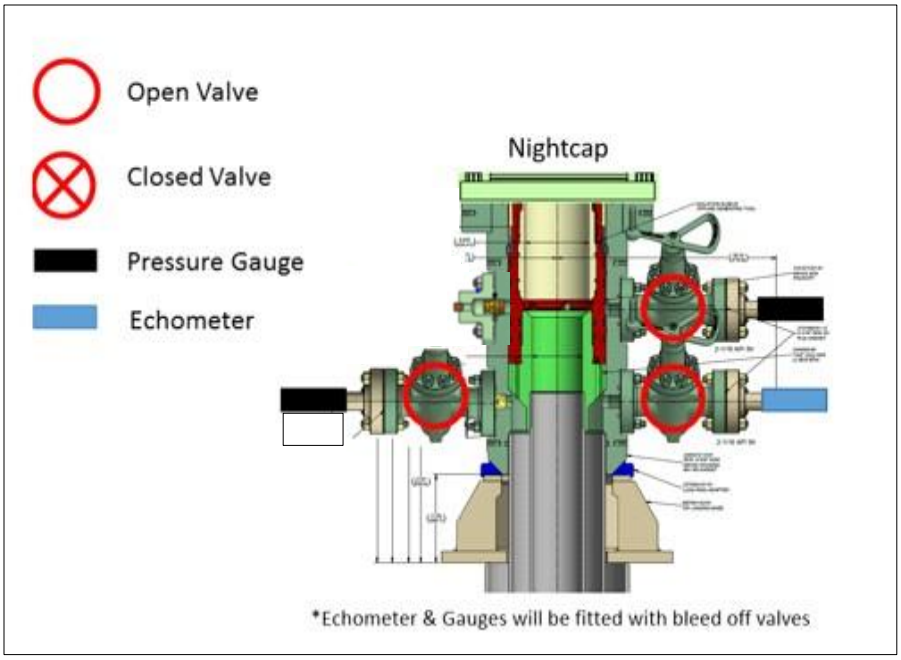
2. Offline Cementing Procedure

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

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



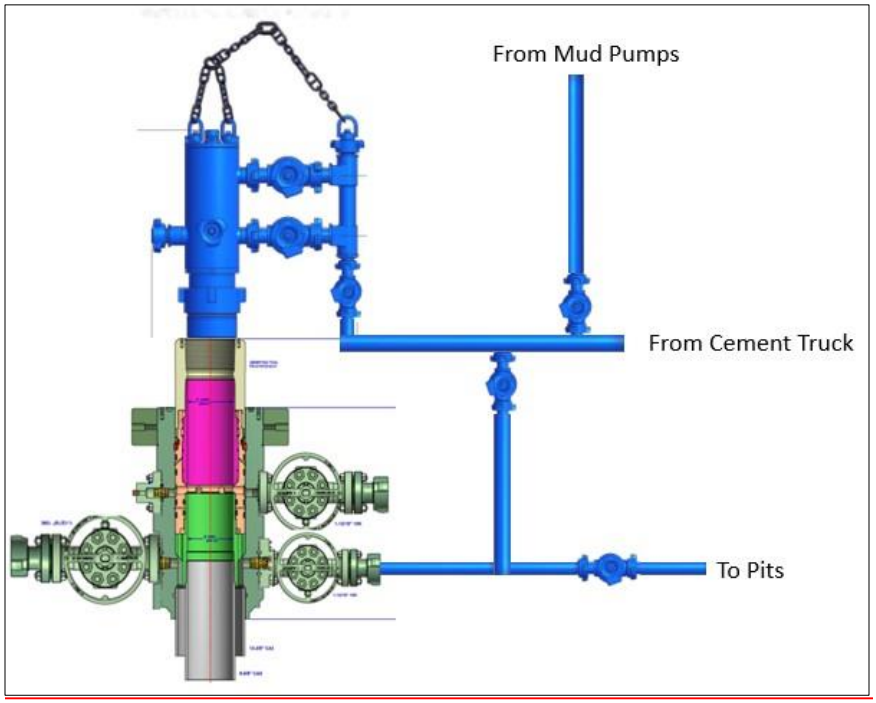
Annular packoff with both external and internal seals



Wellhead diagram during skidding operations

6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
    a. Well Control Plan
        i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
        ii. Rig pumps or a 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.

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

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 448756
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Operator must comply with all of the R-111-Q requirements.	4/25/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	4/25/2025