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

Sundry Print Report

01/21/2025

Well Name: JAMES RANCH UNIT DI 8 WARBONNET

Well Location: T22S / R30E / SEC 36 / NESW / 32.347477 / -103.837379

County or Parish/State: EDDY / NM

Well Number: 114H

Type of Well: OIL WELL

Allottee or Tribe Name:

Lease Number: NMNM02952A

Unit or CA Name: JAMES RANCH UNIT

Unit or CA Number: NMNM70965X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2828546

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 12/19/2024

Time Sundry Submitted: 03:47

Date proposed operation will begin: 12/27/2024

Procedure Description: JAMES RANCH UNIT DI 8 WARBONNET 114H APD ID# 10400096225 SUNDRY LANGUAGE XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include the name of well, SHL, KOP, FTP, LTP, BHL, Proposed Total Depth, Casing Design, Cement Program, Mud circulation system and Pool. The API number for this well is 30-015-55828. The well name is changing from “JAMES RANCH UNIT DI 8 WARBONNET 114H” to “JAMES RANCH UNIT DI 8 EAST 114H” FROM: TO: SHL: 2236' FSL & 1715' FWL OF SECTION 36-T22S-R30E 2514' FSL & 1534' FWL OF SECTION 36-T22S-R30E KOP: 2236' FSL & 1715' FWL OF SECTION 36-T22S-R30E 980’ FSL & 670’ FWL OF SECTION 36-T22S-R30E FTP: 1870’ FSL & 2300’ FWL OF SECTION 36-T22S-R30E 980’ FSL & 1380’ FWL OF SECTION 36-T22S-R30E LTP: 1870’ FSL & 2574’ FEL OF SECTION 33-T22S-R30E 1173’ FSL & 100’ FEL OF SECTION 31-T22S-R31E BHL: 1870’ FSL & 2624’ FEL OF SECTION 33-T22S-R30E 1173’ FSL & 50’ FEL OF SECTION 31-T22S-R31E The proposed total depth & the pool are changing from 27164’ MD/11114’ TVD, Purple Sage, Wolfcamp(gas) to 22590’ MD/12583’ TVD, Los Medanos, Wolfcamp South. There will be no changes required to the facilities/surface usage that was approved along with the APD. See attached drilling program for the updated casing design, cement program & mud circulation system. Attachments: C-102, Drilling Program, Directional Drilling Plan, Choke Manifold Diagram, BOP Diagram, Non-API Spec documents for Production Casing, Well bore diagram, Flex Hose Variance, Spudder Rig Request, Wild Well Control Plan.

NOI Attachments

Procedure Description

Sundry_Attachments___James_Ranch_Unit_DI_8_Warbonnet_114H_20241219154415.pdf

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Unit or CA Name: JAMES RANCH UNIT

Unit or CA Number: NMNM70965X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

Conditions of Approval

Additional

James_Ranch_Unit_DI_8_East_114H_COA_20250121150937.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: VISHAL RAJAN

Signed on: DEC 19, 2024 03:46 PM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Clerk

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND **State:** TX

Phone: (432) 620-6704

Email address: VISHAL.RAJAN@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: 01/21/2025

Signature: Chris Walls

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

KOP: 2236' FSL & 1715' FWL OF SECTION 36-T22S-R30E 980 FSL & 670 FWL OF SECTION 36-T22S-R30E

FTP: 1870 FSL & 2300 FWL OF SECTION 36-T22S-R30E 980 FSL & 1380 FWL OF SECTION 36-T22S-R30E

LTP: 1870 FSL & 2574 FEL OF SECTION 33-T22S-R30E 1173 FSL & 100 FEL OF SECTION 31-T22S-R31E

BHL: 1870 FSL & 2624 FEL OF SECTION 33-T22S-R30E 1173 FSL & 50 FEL OF SECTION 31-T22S-R31E

The proposed total depth & the pool are changing from 27164 MD/11114 TVD, Purple Sage, Wolfcamp(gas) to 22590 MD/12583 TVD, Los Medanos, Wolfcamp South.

There will be no changes required to the facilities/surface usage that was approved along with the APD.

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

Attachments: C-102, Drilling Program, Directional Drilling Plan, Choke Manifold Diagram, BOP Diagram, Non-API Spec documents for Production Casing, Well bore diagram, Flex Hose Variance, Spudder Rig Request, Wild Well Control Plan.

Location of Well

0. SHL: NESW / 2236 FSL / 1715 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.347477 / LONG: -103.837379 (TVD: 0 feet, MD: 0 feet)

PPP: NESW / 1870 FSL / 2300 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.346466 / LONG: -103.835487 (TVD: 11114 feet, MD: 11528 feet)

PPP: NESE / 1870 FSL / 0 FWL / TWSP: 22S / RANGE: 30E / SECTION: 35 / LAT: 32.346483 / LONG: -103.842934 (TVD: 11114 feet, MD: 13838 feet)

BHL: NWSE / 1870 FSL / 2624 FEL / TWSP: 22S / RANGE: 31E / SECTION: 33 / LAT: 32.346575 / LONG: -103.886116 (TVD: 11114 feet, MD: 27164 feet)

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	**NMNM02952A**
LOCATION:	Sec. 36, T. 22S, R 30 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	James Ranch Unit DI 8 East 114H
SURFACE HOLE FOOTAGE:	2514'/S & 1534'/W
BOTTOM HOLE FOOTAGE:	1173'/S & 50'/E

Previously known as **James Ranch Unit DI 8 Warbonnet 114H_**. *Changes approved through engineering via* ***Sundry 2828546_*** *on 1-21-2025__. 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

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Castile Anhydrite** formation. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please 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 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, Capitan Reef, or potash.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

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 6481'.**

    b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, 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.

- ❖ **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).

- ❖ **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.**

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. **Operator shall provide method of verification.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **10,000 (10M)** psi. **Variance is approved to use a 5000 (5M) Annular which shall be tested to 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 doghouse 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 1/21/2025
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-	96336	LOS MEDANOS; WOLFCAMP SOUTH

Property Code	Property Name	Well Number
	JAMES RANCH UNIT DI 8 EAST	114H

OGRID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,310'

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
K	36	22S	30E		2,514 FSL	1,534 FWL	32.348240	-103.837964	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	31	22S	31E		1,173 FSL	50 FEL	32.343974	-103.808623	EDDY

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

Order Numbers.

Well Setbacks are under Common Ownership: ☒Yes ☐No

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
M	36	22S	30E		980 FSL	670 FWL	32.344030	-103.840771	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	36	22S	30E		980 FSL	1,380 FWL	32.344026	-103.838473	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
P	31	22S	31E		1,173 FSL	100 FEL	32.343975	-103.808785	EDDY

Unitized Area or Area of Interest	Spacing Unit Type : ☒Horizontal ☐Vertical	Ground Elevation
NMNM-070965X		3,310'

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.

Vishal Rajan — 12/19/2024
Signature — Date

VISHAL RAJAN
Printed Name

vishal.rajan@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 — 12/19/2024
Certificate Number — Date of Survey

DN 618.013002.09-46

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.

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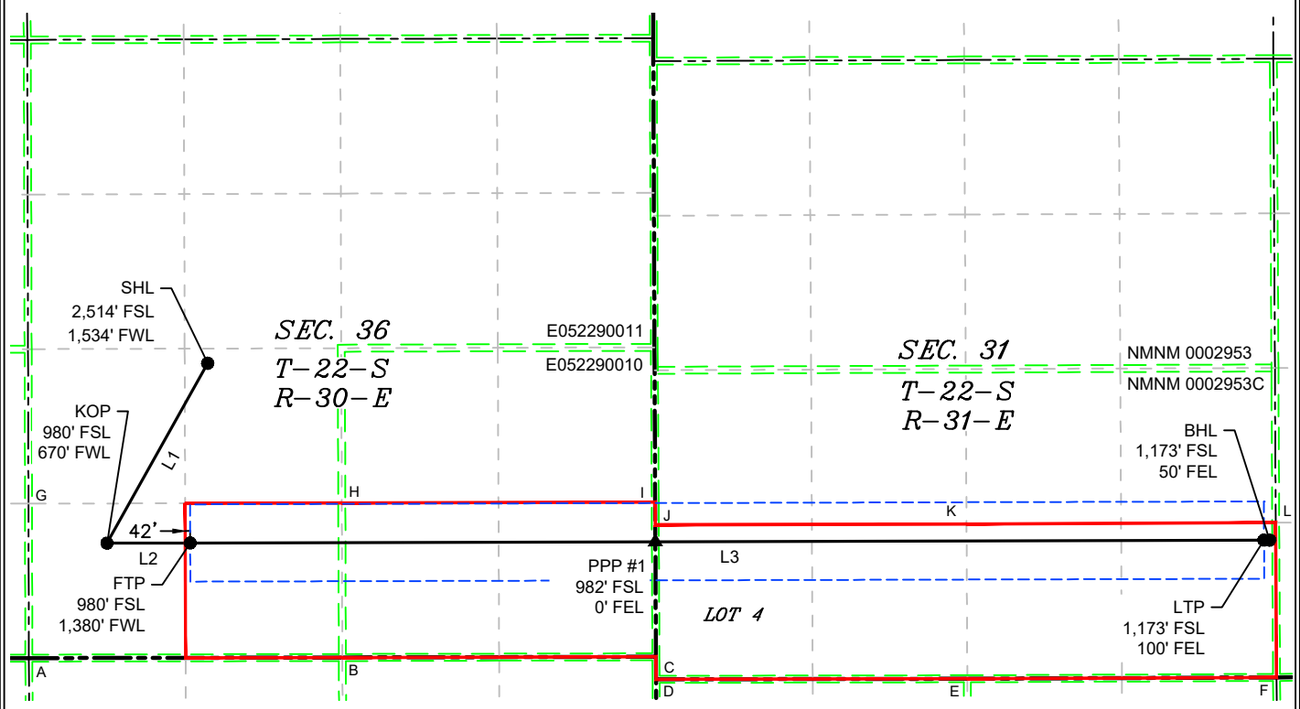
ACREAGE DEDICATION PLATS

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	209°15'01"	1,759.93'
L2	089°50'32"	709.98'
L3	089°50'43"	9,218.63'

LOT ACREAGE TABLE

SECTION 31
T-22-S R-31-E
LOT 4 = 40.51 ACRES

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 =	490,775.5	N	Y =	490,715.2	N
X =	694,313.7	E	X =	653,131.7	E
LAT. =	32.348240	°N	LAT. =	32.348117	°N
LONG. =	103.837964	°W	LONG. =	103.837472	°W
KOP (NAD 83 NME)			KOP (NAD 27 NME)		
Y =	489,239.9	N	Y =	489,179.7	N
X =	693,453.7	E	X =	652,271.7	E
LAT. =	32.344030	°N	LAT. =	32.343907	°N
LONG. =	103.840771	°W	LONG. =	103.840279	°W
FTP (NAD 83 NME)			FTP (NAD 27 NME)		
Y =	489,241.9	N	Y =	489,181.6	N
X =	694,163.7	E	X =	652,981.7	E
LAT. =	32.344026	°N	LAT. =	32.343903	°N
LONG. =	103.838473	°W	LONG. =	103.837980	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	489,252.6	N	Y =	489,192.4	N
X =	698,135.4	E	X =	656,953.3	E
LAT. =	32.344005	°N	LAT. =	32.343882	°N
LONG. =	103.825612	°W	LONG. =	103.825121	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	489,266.6	N	Y =	489,206.5	N
X =	703,332.3	E	X =	662,150.2	E
LAT. =	32.343975	°N	LAT. =	32.343852	°N
LONG. =	103.808785	°W	LONG. =	103.808294	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	489,266.8	N	Y =	489,206.6	N
X =	703,382.3	E	X =	662,200.2	E
LAT. =	32.343974	°N	LAT. =	32.343851	°N
LONG. =	103.808623	°W	LONG. =	103.808132	°W

CORNER COORDINATES (NAD 83 NME)					
A - Y =	488,258.8	N	A - X =	692,786.1	E
B - Y =	488,264.2	N	B - X =	695,462.6	E
C - Y =	488,270.4	N	C - X =	698,140.1	E
D - Y =	488,077.9	N	D - X =	698,141.0	E
E - Y =	488,082.7	N	E - X =	700,798.9	E
F - Y =	488,094.5	N	F - X =	703,438.4	E
G - Y =	489,577.8	N	G - X =	692,783.0	E
H - Y =	489,584.3	N	H - X =	695,458.2	E
I - Y =	489,591.2	N	I - X =	698,133.8	E
J - Y =	489,395.9	N	J - X =	698,134.8	E
K - Y =	489,403.9	N	K - X =	700,792.0	E
L - Y =	489,415.3	N	L - X =	703,431.5	E
CORNER COORDINATES (NAD 27 NME)					
A - Y =	488,198.6	N	A - X =	651,604.0	E
B - Y =	488,204.0	N	B - X =	654,280.5	E
C - Y =	488,210.1	N	C - X =	656,958.0	E
D - Y =	488,017.7	N	D - X =	656,958.9	E
E - Y =	488,022.6	N	E - X =	659,616.8	E
F - Y =	488,034.3	N	F - X =	662,256.3	E
G - Y =	489,517.5	N	G - X =	651,601.0	E
H - Y =	489,524.1	N	H - X =	654,276.1	E
I - Y =	489,531.0	N	I - X =	656,951.8	E
J - Y =	489,335.6	N	J - X =	656,952.7	E
K - Y =	489,343.7	N	K - X =	659,609.9	E
L - Y =	489,355.2	N	L - X =	662,249.4	E

DN 618.013002.09-46

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

XTO Energy Inc.
JAMES RANCH UNIT DI 8 EAST 114H
Projected TD: 22590.31' MD / 12583' TVD
SHL: 2514' FSL & 1534' FWL , Section 36, T22S, R30E
BHL: 1173' FSL & 50' FEL , Section 31, T22S, R31E
EDDY County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	311'	Water
Top of Salt	617'	Water
MB 126	1442'	Water
Base of Salt	3612'	Water
Delaware	3853'	Water
Brushy Canyon	6481'	Water/Oil/Gas
Bone Spring	7679'	Water
1st Bone Spring Ss	8537'	Water/Oil/Gas
2nd Bone Spring Ss	9197'	Water/Oil/Gas
3rd Bone Spring Sh	9839'	Water/Oil/Gas
Wolfcamp	10984'	Water/Oil/Gas
Wolfcamp X	10998'	Water/Oil/Gas
Wolfcamp Y	11051'	Water/Oil/Gas
Wolfcamp A	11149'	Water/Oil/Gas
Wolfcamp B	11449'	Water/Oil/Gas
Wolfcamp D	11790'	Water/Oil/Gas
Target/Land Curve	12503'	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 surface casing @ 592' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting intermediate 1 casing at 3712' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat at 11586.83' and cementing ~500' inside previous casing. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 22590.31 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' – 592'	13.375	54.5	J-55	BTC	New	2.46	4.32	28.17
12.25	0' – 3712'	9.625	40	J-55	BTC	New	1.14	2.44	4.24
8.75	0' – 3812'	7.625	29.7	RY P-110	Flush Joint	New	1.86	2.70	1.62
8.75	3812' – 11586.83'	7.625	29.7	HC L-80	Flush Joint	New	1.35	2.15	1.76
6.75	0' – 11486.83'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	1.55	1.93
6.75	11486.83' - 22590.31'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	1.41	6.27

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

Wellhead:

Multibowl well head system will be utilized. The well design chosen is 4-string slim hole.

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 +/- 592'

Lead: 210 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

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

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3712'

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 +/- 11586.83'
1st Stage
Tail: 470 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6481
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage
Tail: 480 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 3212
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6481') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to 3212' (~500 feet inside the first intermediate casing string.

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 +/- 22590.31'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 11086.83 feet

Tail: 740 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 12252.66 feet
Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

5. Pressure Control Equipment

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

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

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss	Comments
			(ppg)	(sec/qt)	(cc)	
0' - 592'	17.5	FW/Native	8.5-9	35-40	NC	Fresh water or native water
592' - 3712'	12.25	Sat Brine	10-10.5	30-32	NC	Fully Saturated salt across
3712' to 11586.83'	8.75	BDE/OBM or FW/Brine	10-10.5	30-32	NC	Depending well conditions
11586.83' to 22590.31'	6.75	OBM	12-12.5	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 190 to 210 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 7852 psi.

10. Anticipated Starting Date and Duration of Operations

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

Well Plan Report - JAMES RANCH UNIT DI 8 EAST 114H

Measured Depth:	22590.31 ft
TVD RKB:	12583.44 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	490715.20 ft
Easting:	653131.70 ft
RKB:	3342.00 ft
Ground Level:	3310.00 ft
North Reference:	Grid
Convergence Angle:	0.27 Deg

Plan Sections JAMES RANCH UNIT DI 8 EAST 114H

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	
3800.00	0.00	0.00	3800.00	0.00	0.00	0.00	0.00	0.00	
5755.41	39.11	209.25	5607.07	-560.00	-313.62	2.00	0.00	2.00	
6510.42	39.11	209.25	6192.93	-975.53	-546.33	0.00	0.00	0.00	
8465.83	0.00	0.00	8000.00	-1535.53	-859.95	-2.00	0.00	2.00	
12252.66	0.00	0.00	11786.83	-1535.53	-859.95	0.00	0.00	0.00	
13371.41	89.50	89.84	12503.00	-1533.60	-150.00	8.00	0.00	8.00	FTP 1
22540.30	89.50	89.84	12583.00	-1508.70	9018.50	0.00	-0.00	0.00	LTP 1
22590.31	89.50	89.84	12583.44	-1508.56	9068.51	0.00	0.00	0.00	BHL 1

Position Uncertainty JAMES RANCH UNIT DI 8 EAST 114H

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

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	2.309	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	2.443	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	2.530	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	2.580	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	2.633	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	2.690	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	2.749	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	2.812	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	2.876	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	2.944	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	3.013	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	3.085	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	3.159	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	3.234	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	3.311	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	3.390	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	3.470	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	3.552	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	3.636	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	3.720	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	3.806	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	3.894	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	3.983	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	4.073	0.000	0.000	11.632	10.658	129.566	MWD+IFR1+MS

3100.000	0.000	0.000	3100.000	11.606	0.000	11.422	0.000	4.164	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	4.257	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	4.351	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	4.742	0.000	0.000	14.150	13.167	129.642	MWD+IFR1+MS
3800.000	0.000	0.000	3800.000	14.117	0.000	13.934	0.000	4.843	0.000	0.000	14.509	13.525	129.650	MWD+IFR1+MS
3900.000	2.000	209.250	3899.980	14.810	-0.000	13.899	0.000	4.946	0.000	0.000	14.849	13.866	129.585	MWD+IFR1+MS
4000.000	4.000	209.250	3999.838	15.270	-0.000	14.234	0.000	5.050	0.000	0.000	15.342	14.191	130.154	MWD+IFR1+MS
4100.000	6.000	209.250	4099.452	15.707	-0.000	14.569	0.000	5.157	0.000	0.000	15.826	14.517	130.545	MWD+IFR1+MS
4200.000	8.000	209.250	4198.702	16.121	-0.000	14.905	0.000	5.268	0.000	0.000	16.301	14.843	130.832	MWD+IFR1+MS
4300.000	10.000	209.250	4297.465	16.512	-0.000	15.241	0.000	5.385	0.000	0.000	16.767	15.170	131.055	MWD+IFR1+MS
4400.000	12.000	209.250	4395.623	16.880	-0.000	15.577	0.000	5.508	0.000	0.000	17.224	15.498	131.240	MWD+IFR1+MS
4500.000	14.000	209.250	4493.055	17.226	-0.000	15.913	0.000	5.638	0.000	0.000	17.673	15.827	131.404	MWD+IFR1+MS
4600.000	16.000	209.250	4589.643	17.552	-0.000	16.251	0.000	5.778	0.000	0.000	18.112	16.157	131.556	MWD+IFR1+MS
4700.000	18.000	209.250	4685.268	17.856	-0.000	16.589	0.000	5.927	0.000	0.000	18.543	16.488	131.706	MWD+IFR1+MS
4800.000	20.000	209.250	4779.816	18.140	-0.000	16.930	0.000	6.087	0.000	0.000	18.965	16.821	131.859	MWD+IFR1+MS
4900.000	22.000	209.250	4873.169	18.404	-0.000	17.272	0.000	6.260	0.000	0.000	19.379	17.157	132.023	MWD+IFR1+MS
5000.000	24.000	209.250	4965.215	18.650	-0.000	17.617	0.000	6.445	0.000	0.000	19.785	17.495	132.201	MWD+IFR1+MS
5100.000	26.000	209.250	5055.841	18.877	-0.000	17.966	0.000	6.645	0.000	0.000	20.183	17.837	132.399	MWD+IFR1+MS
5200.000	28.000	209.250	5144.937	19.088	-0.000	18.318	0.000	6.860	0.000	0.000	20.573	18.182	132.623	MWD+IFR1+MS
5300.000	30.000	209.250	5232.394	19.282	-0.000	18.674	0.000	7.091	0.000	0.000	20.955	18.531	132.879	MWD+IFR1+MS
5400.000	32.000	209.250	5318.107	19.461	-0.000	19.035	0.000	7.340	0.000	0.000	21.330	18.885	133.172	MWD+IFR1+MS
5500.000	34.000	209.250	5401.970	19.626	-0.000	19.402	0.000	7.606	0.000	0.000	21.697	19.244	133.511	MWD+IFR1+MS
5600.000	36.000	209.250	5483.881	19.777	-0.000	19.775	0.000	7.891	0.000	0.000	22.056	19.609	133.906	MWD+IFR1+MS
5700.000	38.000	209.250	5563.740	19.917	-0.000	20.154	0.000	8.197	0.000	0.000	22.408	19.979	134.369	MWD+IFR1+MS
5755.411	39.108	209.250	5607.072	19.939	-0.000	20.363	0.000	8.325	0.000	0.000	22.571	20.187	134.611	MWD+IFR1+MS
5800.000	39.108	209.250	5641.671	20.094	-0.000	20.532	0.000	8.420	0.000	0.000	22.691	20.355	134.827	MWD+IFR1+MS
5900.000	39.108	209.250	5719.267	20.446	-0.000	20.923	0.000	8.645	0.000	0.000	22.962	20.742	-44.541	MWD+IFR1+MS
6000.000	39.108	209.250	5796.862	20.813	-0.000	21.327	0.000	8.884	0.000	0.000	23.244	21.139	-43.733	MWD+IFR1+MS
6100.000	39.108	209.250	5874.458	21.188	-0.000	21.739	0.000	9.134	0.000	0.000	23.533	21.543	-42.810	MWD+IFR1+MS
6200.000	39.108	209.250	5952.053	21.572	-0.000	22.159	0.000	9.393	0.000	0.000	23.828	21.952	-41.751	MWD+IFR1+MS

6300.000	39.108	209.250	6029.649	21.964	-0.000	22.585	0.000	9.661	0.000	0.000	24.131	22.367	-40.535	MWD+IFR1+MS
6400.000	39.108	209.250	6107.245	22.364	-0.000	23.018	0.000	9.936	0.000	0.000	24.441	22.787	-39.132	MWD+IFR1+MS
6500.000	39.108	209.250	6184.840	22.772	-0.000	23.458	0.000	10.218	0.000	0.000	24.759	23.210	-37.513	MWD+IFR1+MS
6510.423	39.108	209.250	6192.928	22.814	-0.000	23.503	0.000	10.248	0.000	0.000	24.792	23.254	-37.352	MWD+IFR1+MS
6600.000	37.317	209.250	6263.308	23.488	-0.000	23.896	0.000	10.517	0.000	0.000	25.090	23.633	-35.922	MWD+IFR1+MS
6700.000	35.317	209.250	6343.879	24.296	-0.000	24.343	0.000	10.876	0.000	0.000	25.486	24.059	-34.585	MWD+IFR1+MS
6800.000	33.317	209.250	6426.469	25.085	-0.000	24.792	0.000	11.226	0.000	0.000	25.901	24.487	-33.423	MWD+IFR1+MS
6900.000	31.317	209.250	6510.975	25.840	-0.000	25.240	0.000	11.556	0.000	0.000	26.326	24.916	-32.427	MWD+IFR1+MS
7000.000	29.317	209.250	6597.295	26.560	-0.000	25.686	0.000	11.866	0.000	0.000	26.758	25.344	-31.612	MWD+IFR1+MS
7100.000	27.317	209.250	6685.325	27.244	-0.000	26.129	0.000	12.158	0.000	0.000	27.195	25.770	-30.980	MWD+IFR1+MS
7200.000	25.317	209.250	6774.956	27.891	-0.000	26.567	0.000	12.432	0.000	0.000	27.636	26.195	-30.528	MWD+IFR1+MS
7300.000	23.317	209.250	6866.080	28.499	-0.000	27.000	0.000	12.690	0.000	0.000	28.078	26.616	-30.244	MWD+IFR1+MS
7400.000	21.317	209.250	6958.585	29.068	-0.000	27.427	0.000	12.930	0.000	0.000	28.521	27.032	-30.113	MWD+IFR1+MS
7500.000	19.317	209.250	7052.359	29.596	-0.000	27.846	0.000	13.156	0.000	0.000	28.962	27.444	-30.113	MWD+IFR1+MS
7600.000	17.317	209.250	7147.288	30.083	-0.000	28.258	0.000	13.368	0.000	0.000	29.401	27.849	-30.225	MWD+IFR1+MS
7700.000	15.317	209.250	7243.255	30.529	-0.000	28.661	0.000	13.567	0.000	0.000	29.836	28.248	-30.427	MWD+IFR1+MS
7800.000	13.317	209.250	7340.144	30.932	-0.000	29.055	0.000	13.755	0.000	0.000	30.266	28.638	-30.699	MWD+IFR1+MS
7900.000	11.317	209.250	7437.838	31.293	-0.000	29.440	0.000	13.932	0.000	0.000	30.690	29.020	-31.022	MWD+IFR1+MS
8000.000	9.317	209.250	7536.216	31.612	-0.000	29.815	0.000	14.100	0.000	0.000	31.108	29.393	-31.379	MWD+IFR1+MS
8100.000	7.317	209.250	7635.160	31.887	-0.000	30.180	0.000	14.260	0.000	0.000	31.517	29.757	-31.755	MWD+IFR1+MS
8200.000	5.317	209.250	7734.547	32.119	-0.000	30.535	0.000	14.414	0.000	0.000	31.918	30.111	-32.137	MWD+IFR1+MS
8300.000	3.317	209.250	7834.259	32.309	-0.000	30.879	0.000	14.562	0.000	0.000	32.310	30.454	-32.515	MWD+IFR1+MS
8400.000	1.317	209.250	7934.172	32.456	-0.000	31.213	0.000	14.707	0.000	0.000	32.692	30.787	-32.880	MWD+IFR1+MS
8465.834	0.000	0.000	8000.000	31.560	0.000	32.343	0.000	14.801	0.000	0.000	32.883	30.996	-32.744	MWD+IFR1+MS
8500.000	0.000	0.000	8034.166	31.664	0.000	32.442	0.000	14.850	0.000	0.000	32.981	31.103	-32.747	MWD+IFR1+MS
8600.000	0.000	0.000	8134.166	31.967	0.000	32.737	0.000	14.994	0.000	0.000	33.268	31.414	-32.724	MWD+IFR1+MS
8700.000	0.000	0.000	8234.166	32.275	0.000	33.037	0.000	15.142	0.000	0.000	33.563	31.727	-32.739	MWD+IFR1+MS
8800.000	0.000	0.000	8334.166	32.583	0.000	33.337	0.000	15.293	0.000	0.000	33.860	32.040	-32.755	MWD+IFR1+MS
8900.000	0.000	0.000	8434.166	32.893	0.000	33.639	0.000	15.448	0.000	0.000	34.157	32.355	-32.770	MWD+IFR1+MS
9000.000	0.000	0.000	8534.166	33.204	0.000	33.942	0.000	15.606	0.000	0.000	34.456	32.670	-32.786	MWD+IFR1+MS
9100.000	0.000	0.000	8634.166	33.515	0.000	34.246	0.000	15.767	0.000	0.000	34.755	32.987	-32.801	MWD+IFR1+MS
9200.000	0.000	0.000	8734.166	33.828	0.000	34.551	0.000	15.932	0.000	0.000	35.056	33.304	-32.817	MWD+IFR1+MS
9300.000	0.000	0.000	8834.166	34.141	0.000	34.856	0.000	16.101	0.000	0.000	35.358	33.622	-32.832	MWD+IFR1+MS

9400.000	0.000	0.000	8934.166	34.455	0.000	35.163	0.000	16.273	0.000	0.000	35.661	33.940	-32.848	MWD+IFR1+MS
9500.000	0.000	0.000	9034.166	34.771	0.000	35.471	0.000	16.448	0.000	0.000	35.965	34.260	-32.864	MWD+IFR1+MS
9600.000	0.000	0.000	9134.166	35.087	0.000	35.780	0.000	16.627	0.000	0.000	36.270	34.580	-32.879	MWD+IFR1+MS
9700.000	0.000	0.000	9234.166	35.403	0.000	36.090	0.000	16.810	0.000	0.000	36.575	34.901	-32.895	MWD+IFR1+MS
9800.000	0.000	0.000	9334.166	35.721	0.000	36.400	0.000	16.996	0.000	0.000	36.882	35.223	-32.910	MWD+IFR1+MS
9900.000	0.000	0.000	9434.166	36.039	0.000	36.712	0.000	17.186	0.000	0.000	37.190	35.546	-32.926	MWD+IFR1+MS
10000.000	0.000	0.000	9534.166	36.358	0.000	37.024	0.000	17.379	0.000	0.000	37.499	35.869	-32.942	MWD+IFR1+MS
10100.000	0.000	0.000	9634.166	36.678	0.000	37.337	0.000	17.576	0.000	0.000	37.808	36.193	-32.957	MWD+IFR1+MS
10200.000	0.000	0.000	9734.166	36.999	0.000	37.651	0.000	17.776	0.000	0.000	38.119	36.517	-32.973	MWD+IFR1+MS
10300.000	0.000	0.000	9834.166	37.320	0.000	37.966	0.000	17.980	0.000	0.000	38.430	36.842	-32.988	MWD+IFR1+MS
10400.000	0.000	0.000	9934.166	37.642	0.000	38.282	0.000	18.188	0.000	0.000	38.742	37.168	-33.004	MWD+IFR1+MS
10500.000	0.000	0.000	10034.166	37.964	0.000	38.598	0.000	18.399	0.000	0.000	39.055	37.494	-33.020	MWD+IFR1+MS
10600.000	0.000	0.000	10134.166	38.288	0.000	38.915	0.000	18.614	0.000	0.000	39.368	37.821	-33.035	MWD+IFR1+MS
10700.000	0.000	0.000	10234.166	38.611	0.000	39.233	0.000	18.833	0.000	0.000	39.683	38.149	-33.051	MWD+IFR1+MS
10800.000	0.000	0.000	10334.166	38.936	0.000	39.551	0.000	19.055	0.000	0.000	39.998	38.477	-33.067	MWD+IFR1+MS
10900.000	0.000	0.000	10434.166	39.261	0.000	39.870	0.000	19.281	0.000	0.000	40.314	38.805	-33.082	MWD+IFR1+MS
11000.000	0.000	0.000	10534.166	39.586	0.000	40.190	0.000	19.510	0.000	0.000	40.630	39.134	-33.098	MWD+IFR1+MS
11100.000	0.000	0.000	10634.166	39.912	0.000	40.511	0.000	19.744	0.000	0.000	40.948	39.464	-33.114	MWD+IFR1+MS
11200.000	0.000	0.000	10734.166	40.239	0.000	40.832	0.000	19.980	0.000	0.000	41.266	39.794	-33.129	MWD+IFR1+MS
11300.000	0.000	0.000	10834.166	40.566	0.000	41.153	0.000	20.221	0.000	0.000	41.584	40.125	-33.145	MWD+IFR1+MS
11400.000	0.000	0.000	10934.166	40.894	0.000	41.476	0.000	20.465	0.000	0.000	41.903	40.456	-33.161	MWD+IFR1+MS
11500.000	0.000	0.000	11034.166	41.222	0.000	41.798	0.000	20.713	0.000	0.000	42.223	40.787	-33.177	MWD+IFR1+MS
11600.000	0.000	0.000	11134.166	41.551	0.000	42.122	0.000	20.964	0.000	0.000	42.544	41.119	-33.192	MWD+IFR1+MS
11700.000	0.000	0.000	11234.166	41.880	0.000	42.446	0.000	21.219	0.000	0.000	42.865	41.451	-33.208	MWD+IFR1+MS
11800.000	0.000	0.000	11334.166	42.210	0.000	42.770	0.000	21.477	0.000	0.000	43.187	41.784	-33.224	MWD+IFR1+MS
11900.000	0.000	0.000	11434.166	42.540	0.000	43.096	0.000	21.740	0.000	0.000	43.509	42.118	-33.240	MWD+IFR1+MS
12000.000	0.000	0.000	11534.166	42.871	0.000	43.421	0.000	22.005	0.000	0.000	43.832	42.451	-33.255	MWD+IFR1+MS
12100.000	0.000	0.000	11634.166	43.202	0.000	43.747	0.000	22.275	0.000	0.000	44.155	42.785	-33.271	MWD+IFR1+MS
12200.000	0.000	0.000	11734.166	43.534	0.000	44.074	0.000	22.548	0.000	0.000	44.479	43.120	-33.287	MWD+IFR1+MS
12252.664	0.000	0.000	11786.830	43.707	0.000	44.245	0.000	22.693	0.000	0.000	44.647	43.296	-33.270	MWD+IFR1+MS
12300.000	3.787	89.844	11834.132	44.097	0.000	43.855	0.000	22.824	0.000	0.000	44.803	43.455	-32.959	MWD+IFR1+MS
12400.000	11.787	89.844	11933.129	43.814	0.000	44.161	0.000	23.124	0.000	0.000	45.459	43.912	-23.639	MWD+IFR1+MS
12500.000	19.787	89.844	12029.279	43.395	0.000	44.454	0.000	23.532	0.000	0.000	46.469	44.335	-13.667	MWD+IFR1+MS

12600.000	27.787	89.844	12120.710	42.459	0.000	44.730	0.000	24.093	0.000	0.000	47.412	44.667	-8.743	MWD+IFR1+MS
12700.000	35.787	89.844	12205.642	41.104	0.000	44.985	0.000	24.847	0.000	0.000	48.223	44.950	-5.970	MWD+IFR1+MS
12800.000	43.787	89.844	12282.423	39.461	0.000	45.220	0.000	25.806	0.000	0.000	48.879	45.201	-4.236	MWD+IFR1+MS
12900.000	51.787	89.844	12349.557	37.696	0.000	45.435	0.000	26.964	0.000	0.000	49.373	45.424	-3.093	MWD+IFR1+MS
13000.000	59.787	89.844	12405.739	36.008	0.000	45.631	0.000	28.292	0.000	0.000	49.716	45.625	-2.348	MWD+IFR1+MS
13100.000	67.787	89.844	12449.874	34.623	0.000	45.810	0.000	29.751	0.000	0.000	49.925	45.806	-1.923	MWD+IFR1+MS
13200.000	75.787	89.844	12481.104	33.767	0.000	45.972	0.000	31.290	0.000	0.000	50.028	45.969	-1.803	MWD+IFR1+MS
13300.000	83.787	89.844	12498.820	33.620	0.000	46.118	0.000	32.857	0.000	0.000	50.063	46.114	-2.006	MWD+IFR1+MS
13371.415	89.500	89.844	12503.000	33.572	0.000	46.208	0.000	33.529	0.000	0.000	50.068	46.202	-2.376	MWD+IFR1+MS
13400.000	89.500	89.844	12503.249	33.660	0.000	46.243	0.000	33.618	0.000	0.000	50.069	46.236	-2.559	MWD+IFR1+MS
13500.000	89.500	89.844	12504.122	33.933	0.000	46.384	0.000	33.893	0.000	0.000	50.074	46.372	-3.237	MWD+IFR1+MS
13600.000	89.500	89.844	12504.994	34.225	0.000	46.553	0.000	34.187	0.000	0.000	50.082	46.537	-3.992	MWD+IFR1+MS
13700.000	89.500	89.844	12505.867	34.532	0.000	46.749	0.000	34.496	0.000	0.000	50.091	46.726	-4.849	MWD+IFR1+MS
13800.000	89.500	89.844	12506.739	34.854	0.000	46.971	0.000	34.820	0.000	0.000	50.103	46.939	-5.842	MWD+IFR1+MS
13900.000	89.500	89.844	12507.612	35.191	0.000	47.219	0.000	35.159	0.000	0.000	50.118	47.175	-7.020	MWD+IFR1+MS
14000.000	89.500	89.844	12508.485	35.542	0.000	47.492	0.000	35.511	0.000	0.000	50.136	47.434	-8.455	MWD+IFR1+MS
14100.000	89.500	89.844	12509.357	35.906	0.000	47.789	0.000	35.878	0.000	0.000	50.161	47.712	-10.253	MWD+IFR1+MS
14200.000	89.500	89.844	12510.230	36.284	0.000	48.111	0.000	36.257	0.000	0.000	50.192	48.007	-12.577	MWD+IFR1+MS
14300.000	89.500	89.844	12511.102	36.675	0.000	48.456	0.000	36.650	0.000	0.000	50.235	48.316	-15.682	MWD+IFR1+MS
14400.000	89.500	89.844	12511.975	37.078	0.000	48.825	0.000	37.055	0.000	0.000	50.295	48.631	-19.954	MWD+IFR1+MS
14500.000	89.500	89.844	12512.847	37.494	0.000	49.216	0.000	37.472	0.000	0.000	50.385	48.940	-25.917	MWD+IFR1+MS
14600.000	89.500	89.844	12513.720	37.921	0.000	49.630	0.000	37.901	0.000	0.000	50.523	49.224	-33.975	MWD+IFR1+MS
14700.000	89.500	89.844	12514.592	38.359	0.000	50.066	0.000	38.341	0.000	0.000	50.731	49.460	-43.628	MWD+IFR1+MS
14800.000	89.500	89.844	12515.465	38.809	0.000	50.522	0.000	38.792	0.000	0.000	51.023	49.634	126.933	MWD+IFR1+MS
14900.000	89.500	89.844	12516.337	39.268	0.000	50.999	0.000	39.253	0.000	0.000	51.391	49.753	119.314	MWD+IFR1+MS
15000.000	89.500	89.844	12517.210	39.738	0.000	51.496	0.000	39.725	0.000	0.000	51.817	49.834	113.757	MWD+IFR1+MS
15100.000	89.500	89.844	12518.082	40.218	0.000	52.013	0.000	40.206	0.000	0.000	52.286	49.893	109.788	MWD+IFR1+MS
15200.000	89.500	89.844	12518.955	40.708	0.000	52.548	0.000	40.697	0.000	0.000	52.787	49.938	106.905	MWD+IFR1+MS
15300.000	89.500	89.844	12519.827	41.206	0.000	53.102	0.000	41.197	0.000	0.000	53.316	49.975	104.751	MWD+IFR1+MS
15400.000	89.500	89.844	12520.700	41.713	0.000	53.673	0.000	41.706	0.000	0.000	53.869	50.007	103.093	MWD+IFR1+MS
15500.000	89.500	89.844	12521.572	42.229	0.000	54.261	0.000	42.223	0.000	0.000	54.443	50.035	101.782	MWD+IFR1+MS
15600.000	89.500	89.844	12522.445	42.753	0.000	54.866	0.000	42.748	0.000	0.000	55.036	50.061	100.723	MWD+IFR1+MS
15700.000	89.500	89.844	12523.317	43.285	0.000	55.488	0.000	43.281	0.000	0.000	55.647	50.086	99.849	MWD+IFR1+MS

15800.000	89.500	89.844	12524.190	43.824	0.000	56.124	0.000	43.822	0.000	0.000	56.276	50.110	99.116	MWD+IFR1+MS
15900.000	89.500	89.844	12525.062	44.371	0.000	56.776	0.000	44.370	0.000	0.000	56.920	50.133	98.492	MWD+IFR1+MS
16000.000	89.500	89.844	12525.935	44.925	0.000	57.442	0.000	44.925	0.000	0.000	57.580	50.156	97.954	MWD+IFR1+MS
16100.000	89.500	89.844	12526.807	45.485	0.000	58.122	0.000	45.486	0.000	0.000	58.255	50.179	97.486	MWD+IFR1+MS
16200.000	89.500	89.844	12527.680	46.052	0.000	58.815	0.000	46.055	0.000	0.000	58.943	50.202	97.074	MWD+IFR1+MS
16300.000	89.500	89.844	12528.552	46.626	0.000	59.522	0.000	46.629	0.000	0.000	59.646	50.225	96.708	MWD+IFR1+MS
16400.000	89.500	89.844	12529.425	47.205	0.000	60.241	0.000	47.210	0.000	0.000	60.361	50.248	96.382	MWD+IFR1+MS
16500.000	89.500	89.844	12530.297	47.791	0.000	60.972	0.000	47.796	0.000	0.000	61.089	50.272	96.088	MWD+IFR1+MS
16600.000	89.500	89.844	12531.170	48.382	0.000	61.715	0.000	48.388	0.000	0.000	61.828	50.295	95.822	MWD+IFR1+MS
16700.000	89.500	89.844	12532.042	48.978	0.000	62.469	0.000	48.986	0.000	0.000	62.580	50.320	95.580	MWD+IFR1+MS
16800.000	89.500	89.844	12532.915	49.580	0.000	63.234	0.000	49.589	0.000	0.000	63.342	50.345	95.359	MWD+IFR1+MS
16900.000	89.500	89.844	12533.787	50.187	0.000	64.010	0.000	50.196	0.000	0.000	64.115	50.370	95.156	MWD+IFR1+MS
17000.000	89.500	89.844	12534.660	50.798	0.000	64.795	0.000	50.809	0.000	0.000	64.898	50.396	94.969	MWD+IFR1+MS
17100.000	89.500	89.844	12535.533	51.415	0.000	65.591	0.000	51.426	0.000	0.000	65.691	50.422	94.796	MWD+IFR1+MS
17200.000	89.500	89.844	12536.405	52.036	0.000	66.395	0.000	52.048	0.000	0.000	66.494	50.449	94.635	MWD+IFR1+MS
17300.000	89.500	89.844	12537.278	52.661	0.000	67.209	0.000	52.674	0.000	0.000	67.306	50.476	94.486	MWD+IFR1+MS
17400.000	89.500	89.844	12538.150	53.290	0.000	68.032	0.000	53.305	0.000	0.000	68.126	50.504	94.346	MWD+IFR1+MS
17500.000	89.500	89.844	12539.023	53.924	0.000	68.863	0.000	53.939	0.000	0.000	68.956	50.532	94.215	MWD+IFR1+MS
17600.000	89.500	89.844	12539.895	54.562	0.000	69.702	0.000	54.577	0.000	0.000	69.793	50.561	94.093	MWD+IFR1+MS
17700.000	89.500	89.844	12540.768	55.203	0.000	70.549	0.000	55.219	0.000	0.000	70.638	50.591	93.977	MWD+IFR1+MS
17800.000	89.500	89.844	12541.640	55.848	0.000	71.403	0.000	55.865	0.000	0.000	71.491	50.621	93.868	MWD+IFR1+MS
17900.000	89.500	89.844	12542.513	56.496	0.000	72.265	0.000	56.514	0.000	0.000	72.351	50.652	93.766	MWD+IFR1+MS
18000.000	89.500	89.844	12543.385	57.148	0.000	73.134	0.000	57.167	0.000	0.000	73.219	50.683	93.669	MWD+IFR1+MS
18100.000	89.500	89.844	12544.258	57.803	0.000	74.009	0.000	57.823	0.000	0.000	74.093	50.715	93.577	MWD+IFR1+MS
18200.000	89.500	89.844	12545.130	58.462	0.000	74.891	0.000	58.482	0.000	0.000	74.973	50.748	93.489	MWD+IFR1+MS
18300.000	89.500	89.844	12546.003	59.123	0.000	75.780	0.000	59.144	0.000	0.000	75.861	50.781	93.406	MWD+IFR1+MS
18400.000	89.500	89.844	12546.875	59.788	0.000	76.674	0.000	59.809	0.000	0.000	76.754	50.814	93.327	MWD+IFR1+MS
18500.000	89.500	89.844	12547.748	60.455	0.000	77.575	0.000	60.477	0.000	0.000	77.653	50.849	93.252	MWD+IFR1+MS
18600.000	89.500	89.844	12548.620	61.125	0.000	78.481	0.000	61.148	0.000	0.000	78.558	50.884	93.180	MWD+IFR1+MS
18700.000	89.500	89.844	12549.493	61.798	0.000	79.392	0.000	61.821	0.000	0.000	79.468	50.919	93.111	MWD+IFR1+MS
18800.000	89.500	89.844	12550.365	62.474	0.000	80.309	0.000	62.497	0.000	0.000	80.384	50.955	93.045	MWD+IFR1+MS
18900.000	89.500	89.844	12551.238	63.151	0.000	81.231	0.000	63.176	0.000	0.000	81.305	50.992	92.982	MWD+IFR1+MS
19000.000	89.500	89.844	12552.110	63.832	0.000	82.158	0.000	63.857	0.000	0.000	82.231	51.029	92.922	MWD+IFR1+MS

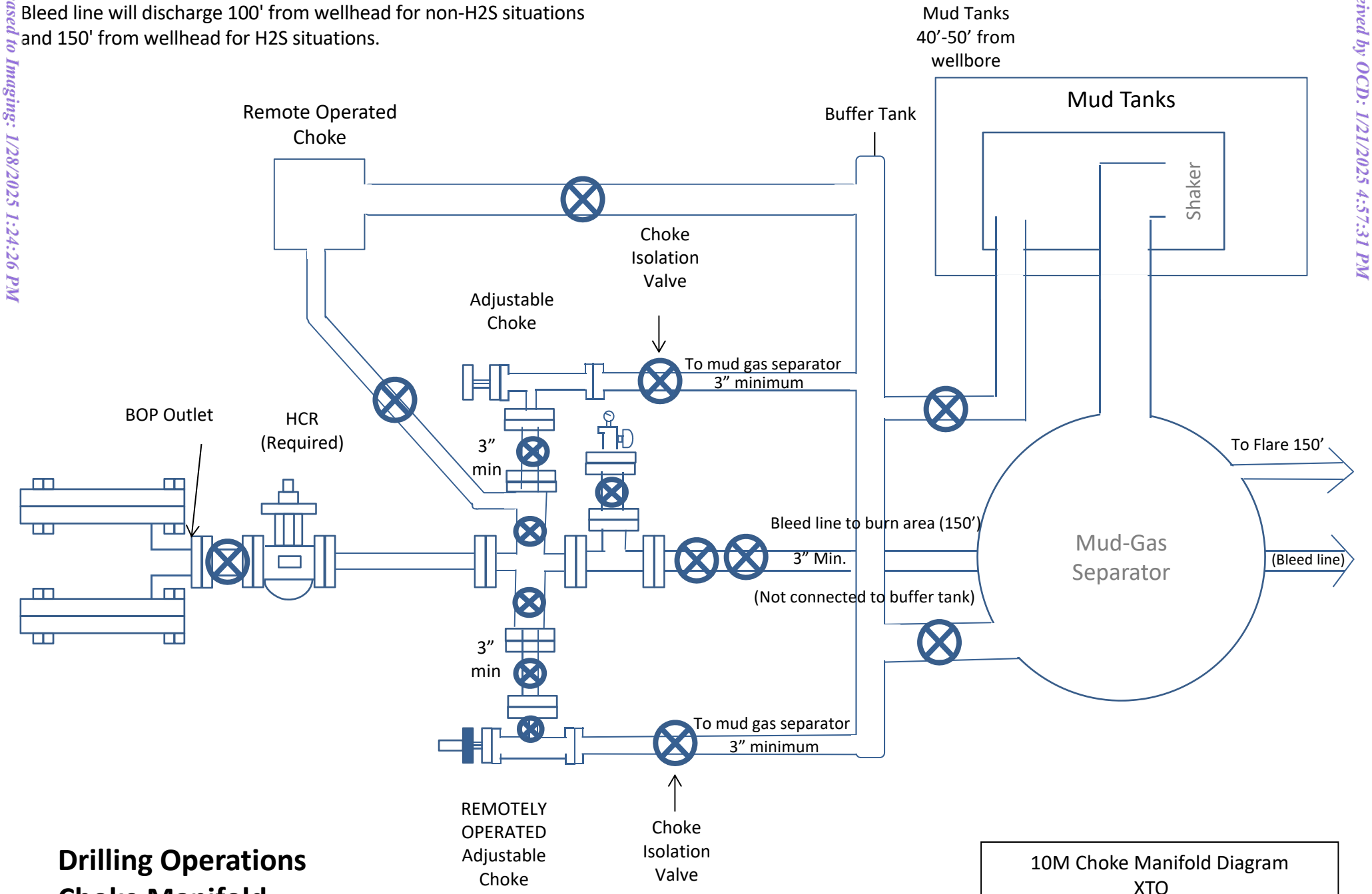
19100.000	89.500	89.844	12552.983	64.515	0.000	83.089	0.000	64.540	0.000	0.000	83.161	51.067	92.864	MWD+IFR1+MS
19200.000	89.500	89.844	12553.855	65.200	0.000	84.026	0.000	65.226	0.000	0.000	84.096	51.106	92.808	MWD+IFR1+MS
19300.000	89.500	89.844	12554.728	65.887	0.000	84.966	0.000	65.914	0.000	0.000	85.036	51.145	92.754	MWD+IFR1+MS
19400.000	89.500	89.844	12555.600	66.577	0.000	85.911	0.000	66.604	0.000	0.000	85.980	51.185	92.703	MWD+IFR1+MS
19500.000	89.500	89.844	12556.473	67.268	0.000	86.861	0.000	67.296	0.000	0.000	86.929	51.225	92.653	MWD+IFR1+MS
19600.000	89.500	89.844	12557.345	67.962	0.000	87.814	0.000	67.990	0.000	0.000	87.881	51.266	92.605	MWD+IFR1+MS
19700.000	89.500	89.844	12558.218	68.657	0.000	88.771	0.000	68.686	0.000	0.000	88.837	51.307	92.559	MWD+IFR1+MS
19800.000	89.500	89.844	12559.090	69.355	0.000	89.732	0.000	69.384	0.000	0.000	89.798	51.350	92.515	MWD+IFR1+MS
19900.000	89.500	89.844	12559.963	70.054	0.000	90.697	0.000	70.084	0.000	0.000	90.761	51.392	92.472	MWD+IFR1+MS
20000.000	89.500	89.844	12560.835	70.755	0.000	91.665	0.000	70.785	0.000	0.000	91.729	51.436	92.430	MWD+IFR1+MS
20100.000	89.500	89.844	12561.708	71.458	0.000	92.636	0.000	71.488	0.000	0.000	92.700	51.480	92.390	MWD+IFR1+MS
20200.000	89.500	89.844	12562.581	72.162	0.000	93.611	0.000	72.193	0.000	0.000	93.674	51.524	92.351	MWD+IFR1+MS
20300.000	89.500	89.844	12563.453	72.869	0.000	94.590	0.000	72.900	0.000	0.000	94.651	51.570	92.313	MWD+IFR1+MS
20400.000	89.500	89.844	12564.326	73.576	0.000	95.571	0.000	73.608	0.000	0.000	95.632	51.615	92.277	MWD+IFR1+MS
20500.000	89.500	89.844	12565.198	74.286	0.000	96.555	0.000	74.318	0.000	0.000	96.616	51.662	92.241	MWD+IFR1+MS
20600.000	89.500	89.844	12566.071	74.996	0.000	97.543	0.000	75.029	0.000	0.000	97.602	51.709	92.207	MWD+IFR1+MS
20700.000	89.500	89.844	12566.943	75.709	0.000	98.533	0.000	75.742	0.000	0.000	98.592	51.756	92.174	MWD+IFR1+MS
20800.000	89.500	89.844	12567.816	76.422	0.000	99.526	0.000	76.456	0.000	0.000	99.584	51.804	92.141	MWD+IFR1+MS
20900.000	89.500	89.844	12568.688	77.137	0.000	100.521	0.000	77.171	0.000	0.000	100.579	51.853	92.110	MWD+IFR1+MS
21000.000	89.500	89.844	12569.561	77.854	0.000	101.520	0.000	77.888	0.000	0.000	101.577	51.902	92.079	MWD+IFR1+MS
21100.000	89.500	89.844	12570.433	78.572	0.000	102.520	0.000	78.606	0.000	0.000	102.577	51.952	92.050	MWD+IFR1+MS
21200.000	89.500	89.844	12571.306	79.291	0.000	103.524	0.000	79.325	0.000	0.000	103.579	52.003	92.021	MWD+IFR1+MS
21300.000	89.500	89.844	12572.178	80.011	0.000	104.529	0.000	80.046	0.000	0.000	104.584	52.054	91.993	MWD+IFR1+MS
21400.000	89.500	89.844	12573.051	80.732	0.000	105.537	0.000	80.767	0.000	0.000	105.592	52.106	91.965	MWD+IFR1+MS
21500.000	89.500	89.844	12573.923	81.455	0.000	106.547	0.000	81.490	0.000	0.000	106.601	52.158	91.939	MWD+IFR1+MS
21600.000	89.500	89.844	12574.796	82.179	0.000	107.560	0.000	82.214	0.000	0.000	107.613	52.211	91.913	MWD+IFR1+MS
21700.000	89.500	89.844	12575.668	82.903	0.000	108.574	0.000	82.940	0.000	0.000	108.627	52.264	91.887	MWD+IFR1+MS
21800.000	89.500	89.844	12576.541	83.629	0.000	109.591	0.000	83.666	0.000	0.000	109.643	52.319	91.863	MWD+IFR1+MS
21900.000	89.500	89.844	12577.413	84.356	0.000	110.609	0.000	84.393	0.000	0.000	110.661	52.373	91.839	MWD+IFR1+MS
22000.000	89.500	89.844	12578.286	85.084	0.000	111.630	0.000	85.121	0.000	0.000	111.681	52.428	91.815	MWD+IFR1+MS
22100.000	89.500	89.844	12579.158	85.813	0.000	112.652	0.000	85.851	0.000	0.000	112.703	52.484	91.792	MWD+IFR1+MS
22200.000	89.500	89.844	12580.031	86.543	0.000	113.677	0.000	86.581	0.000	0.000	113.727	52.541	91.770	MWD+IFR1+MS
22300.000	89.500	89.844	12580.903	87.274	0.000	114.703	0.000	87.312	0.000	0.000	114.753	52.598	91.748	MWD+IFR1+MS

22400.000	89.500	89.844	12581.776	88.006	0.000	115.731	0.000	88.044	0.000	0.000	115.780	52.655	91.727	MWD+IFR1+MS
22500.000	89.500	89.844	12582.648	88.739	0.000	116.760	0.000	88.777	0.000	0.000	116.809	52.713	91.706	MWD+IFR1+MS
22540.298	89.500	89.844	12583.000	89.034	0.000	117.175	0.000	89.072	0.000	0.000	117.224	52.737	91.698	MWD+IFR1+MS
22590.306	89.500	89.844	12583.436	89.400	0.000	117.690	0.000	89.438	0.000	0.000	117.738	52.766	91.688	MWD+IFR1+MS

Plan Targets JAMES RANCH UNIT DI 8 EAST 114H

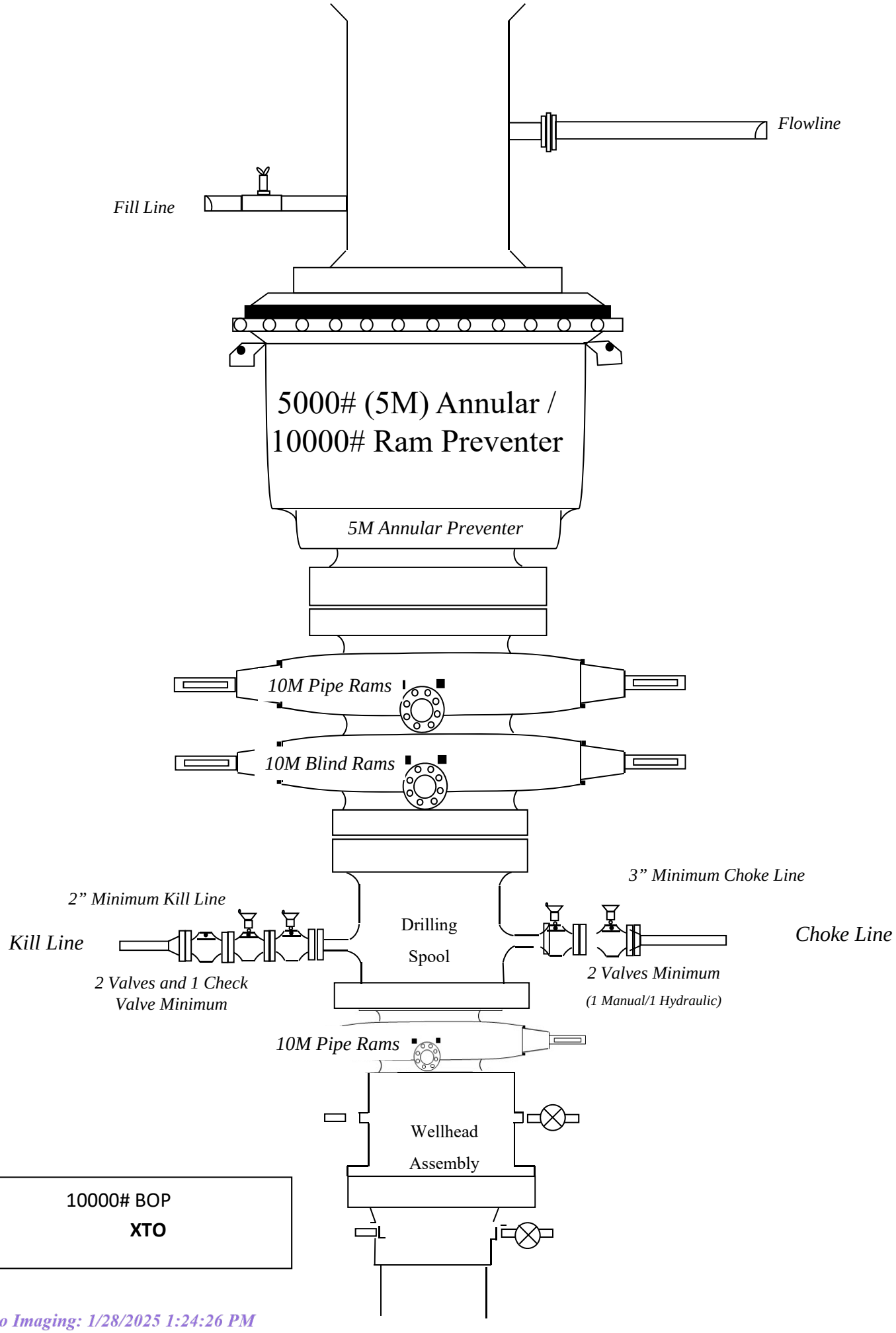
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 1	13371.39	489181.60	652981.70	9161.00	CIRCLE
LTP 1	22540.30	489206.50	662150.20	9241.00	CIRCLE
BHL 1	22590.30	489206.60	662200.20	9241.00	CIRCLE

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



10000# BOP

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	--

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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Spring, Texas 77380

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connections@uss.com
www.usstubular.com

U. S. Steel Tubular Products

11/29/2021 4:16:04 PM

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

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

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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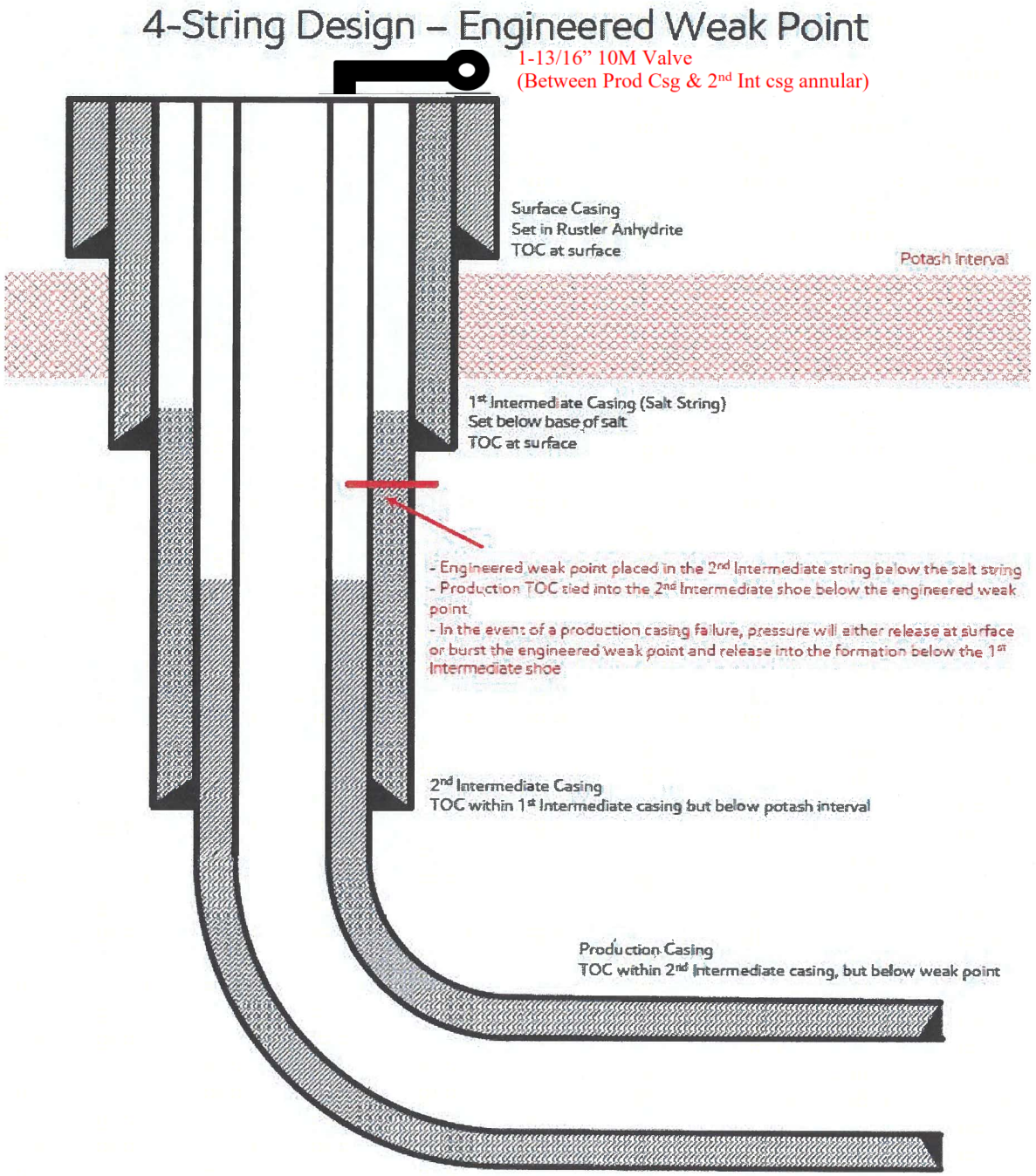

[Figure F] 4 String – 2nd Intermediate casing engineered weak point

31592723_v1

Update May 2024:
XTO is aware of the R111-Q update and will comply with these requirements including (but not limited to):
1) Alignment with KPLA requirements per schematic above, leaving open annulus for pressure monitoring during frac and utilizing new casing that meets API standards
2) Contingency plans in place to divert formation fluids away from salt interval in event of production casing failure
3) Bradenhead squeeze to be completed within 180days to tie back TOC to salt string at least 500ft but with top below Marker Bed 126
4) Production cement to be tied back no less than 500ft inside previous casing shoe

BLACK GOLD®

GATES ENGINEERING & SERVICES NORTH AMERICA
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Houston, TX. 77086

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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

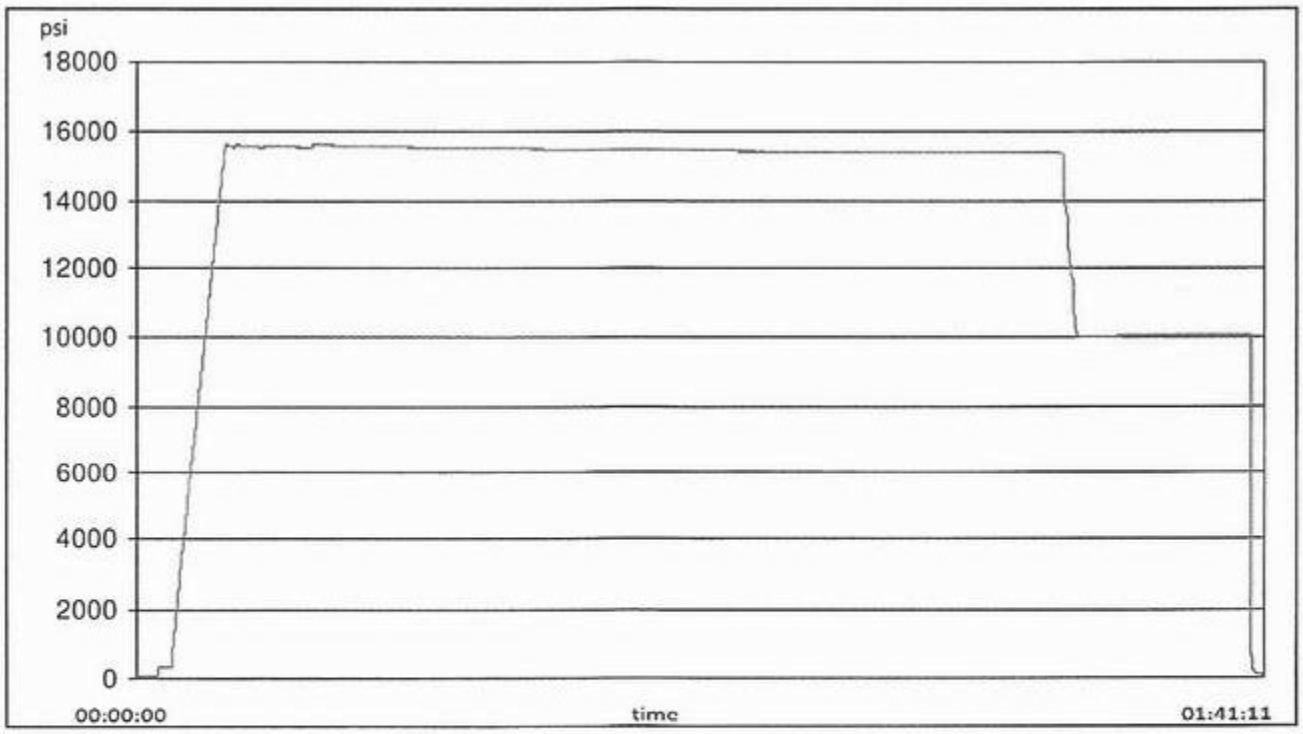
DATE: 1/25/2024

H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER			TEST OBJECT		
Company:	Nabors Industries Inc.		Serial number:	H3-012524-1	
			Lot number:		
Production description:	74621/66-1531		Description:	74621/66-1531	
Sales order #:	529480				
Customer reference:	FG1213		Hose ID:	3" 16C CK	
			Part number:		
TEST INFORMATION					
Test procedure:	GTS-04-053		Fitting 1:	3.0 x 4-1/16 10K	
Test pressure:	15000.00	psi	Part number:		
Test pressure hold:	3600.00	sec	Description:		
Work pressure:	10000.00	psi			
Work pressure hold:	900.00	sec	Fitting 2:	3.0 x 4-1/16 10K	
Length difference:	0.00	%	Part number:		
Length difference:	0.00	inch	Description:		
Visual check:			Length:	45	feet
Pressure test result:	PASS				
Length measurement result:					
Test operator:	Travis				



H3-15/16

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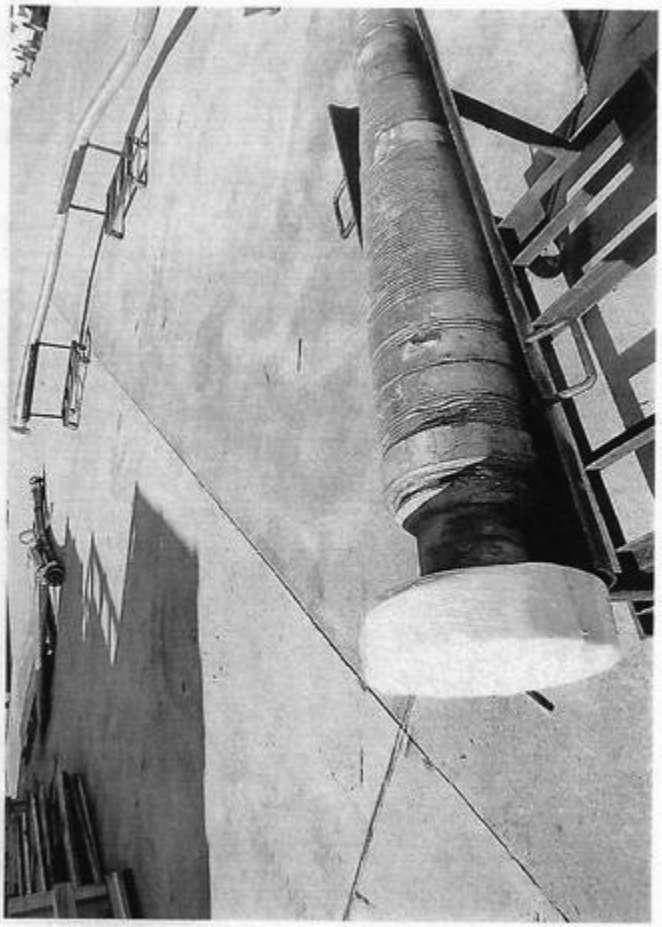
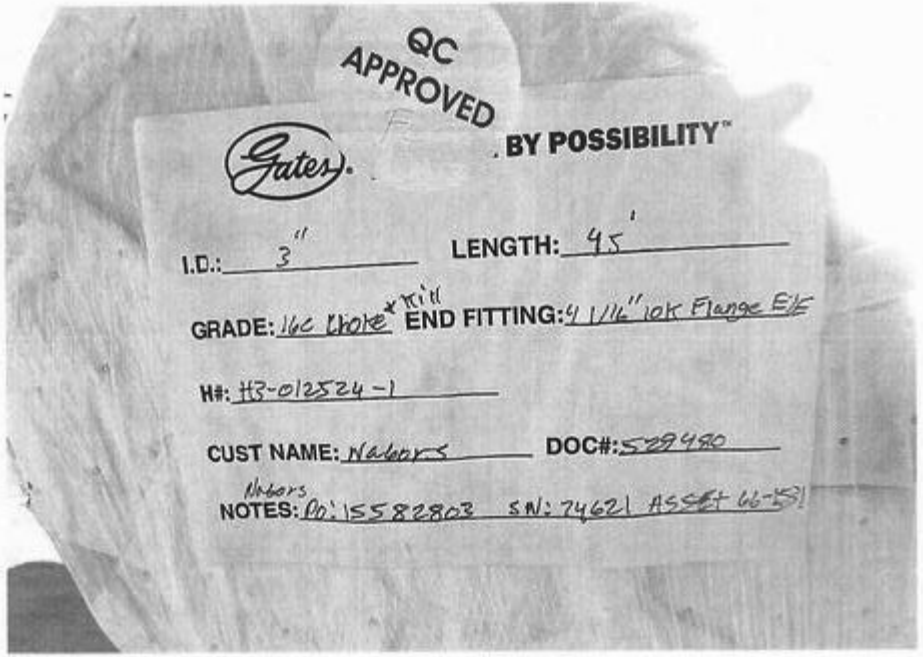
TEST REPORT

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





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.

10,000 PSI Annular BOP Variance Request

XTO Energy/Permian request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOPL).

1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

12-1/4" Intermediate Hole Section 10M psi Requirement					
Component	**OD**	**Primary Preventer**	**RWP**	**Alternate Preventer(s)**	**RWP**
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	8.000"-9.625"	Annular	5M	-	-
Intermediate Casing	9.625"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

8-3/4" Production Hole Section 10M psi Requirement					
Component	**OD**	**Primary Preventer**	**RWP**	**Alternate Preventer(s)**	**RWP**
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	6.750"-8.000"	Annular	5M	-	-
Production Casing	7"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

6-1/8" Lateral Hole Section 10M psi Requirement					
Component	**OD**	**Primary Preventer**	**RWP**	**Alternate Preventer(s)**	**RWP**
Drillpipe	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
DCs and MWD tools	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Mud Motor	4.750"-5.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Production Casing	4.500"	Annular	5M	Upper 3.5"-5.5" VBR Upper 3.5"-5.5" VBR	10M 10M
Open-Hole	-	Blind Rams	10M	-	-

VBR = Variable Bore Ram

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the Mewbourne Oil Company drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP & SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full-opening safety valve & close
3. Space out drill string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP & SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

1. Sound alarm (alert crew)
2. Stab crossover and full-opening safety valve and close
3. Space out string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
    a. SIDPP & SICP
    b. Pit gain
    c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams (HCR & choke will already be in the closed position)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
    a. SICP
    b. Pit gain
    c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA Through Stack

1. PRIOR to pulling last joint of drillpipe through stack:
    a. Perform flow check. If flowing, continue to (b).
    b. Sound alarm (alert crew)
    c. Stab full-opening safety valve and close
    d. Space out drill string with tool joint just beneath the upper variable bore rams
    e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
    f. Confirm shut-in
    g. Notify toolpusher/company representative
    h. Read and record the following:
        i. SIDPP & SICP
        ii. Pit gain
        iii. Time
    i. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
    a. Sound alarm (alert crew)
    b. Stab crossover and full-opening safety valve and close
    c. Space out drill string with upset just beneath the upper variable bore rams
    d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
    e. Confirm shut-in
    f. Notify toolpusher/company representative
    g. Read and record the following:
        i. SIDPP & SICP

ii. Pit gain
iii. Time

h. Regroup and identify forward plan

3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
   a. Sound alarm (alert crew)
   b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
   c. If impossible to pull string clear of the stack:
   d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
   e. Space out drill string with tooljoint just beneath the upper variable bore ram
   f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
   g. Confirm shut-in
   h. Notify toolpusher/company representative
   i. Read and record the following:
      i. SIDPP & SICP
      ii. Pit gain
      iii. Time
   j. Regroup and identify forward plan

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:	OGRID:
XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	373075
	Action Number: 423163
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing.	1/28/2025
ward.rikala	If cement is not circulated to surface during cementing operations, a Cement Bond Log (CBL) is required.	1/28/2025
ward.rikala	Any previous COA's not addressed within the updated COA's still apply.	1/28/2025