Well Name: JAMES RANCH UNIT DI 8 WARBONNET

Well Location: T22S / R30E / SEC 36 / NESW / 32.347483 / -103.837881

County or Parish/State: EDDY / NM

Well Number: 804H

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: 2828541

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 12/19/2024

Time Sundry Submitted: 03:39

Date proposed operation will begin: 12/26/2024

Procedure Description: JAMES RANCH UNIT DI 8 WARBONNET 804H APD ID# 10400096347 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 formation (Pool). The API number for this well is 30-015-55829. The well name is changing from “JAMES RANCH UNIT DI 8 WARBONNET 804H” to “JAMES RANCH UNIT DI 8 EAST 804H” FROM: TO: SHL: 2238' FSL & 1560' FWL OF SECTION 36-T22S-R30E 2513' FSL & 1564' FWL OF SECTION 36-T22S-R30E KOP: 2238' FSL & 1560' FWL OF SECTION 36-T22S-R30E 1305' FNL & 664' FWL OF SECTION 36-T22S-R30E FTP: 1870’ FSL & 2300’ FWL OF SECTION 36-T22S-R30E 1305’ FNL & 1380’ FWL OF SECTION 36-T22S-R30E LTP: 1870’ FSL & 2574’ FEL OF SECTION 33-T22S-R30E 1108’ FNL & 100’ FEL OF SECTION 31-T22S-R31E BHL: 1870’ FSL & 2624’ FEL OF SECTION 33-T22S-R30E 1108’ FNL & 50’ FEL OF SECTION 31-T22S-R31E The proposed total depth & the formation (pool) are changing from 26500’ MD/10417’ TVD, Bone Spring (WC-015 G-06 S243119C) to 21982’ MD/12022.87’ TVD, Wolfcamp (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

Well Name: JAMES RANCH UNIT DI 8 WARBONNET

Well Location: T22S / R30E / SEC 36 / NESW / 32.347483 / -103.837881

County or Parish/State: EDDY / NM

Well Number: 804H

Type of Well: OIL WELL

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Lease Number: NMNM02952A

Unit or CA Name: JAMES RANCH UNIT

Unit or CA Number: NMNM70965X

US Well Number:

Operator: XTO PERMIAN OPERATING LLC

NOI Attachments

Procedure Description

Sundry_Attachments___James_Ranch_Unit_DI_8_Warbonnet_804H_20241219153318.pdf

Conditions of Approval

Additional

James_Ranch_Unit_DI_8_East_804H_COA_20250121105439.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 03:39 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: 2238' FSL & 1560' FWL OF SECTION 36-T22S-R30E 1305' FNL & 664' FWL OF SECTION 36-T22S-R30E

FTP: 1870 FSL & 2300 FWL OF SECTION 36-T22S-R30E 1305 FNL & 1380 FWL OF SECTION 36-T22S-R30E

LTP: 1870 FSL & 2574 FEL OF SECTION 33-T22S-R30E 1108 FNL & 100 FEL OF SECTION 31-T22S-R31E

BHL: 1870 FSL & 2624 FEL OF SECTION 33-T22S-R30E 1108 FNL & 50 FEL OF SECTION 31-T22S-R31E

The proposed total depth & the formation (pool) are changing from 26500 MD/10417 TVD, Bone Spring (WC-015 G-06 S243119C) to 21982 MD/12022.87 TVD, Wolfcamp (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 / 2238 FSL / 1560 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.347483 / LONG: -103.837881 (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: 10417 feet, MD: 10864 feet)

PPP: NESE / 1870 FSL / 0 FWL / TWSP: 22S / RANGE: 30E / SECTION: 35 / LAT: 32.346483 / LONG: -103.842934 (TVD: 10417 feet, MD: 13174 feet)

BHL: NWSE / 1870 FSL / 2624 FEL / TWSP: 22S / RANGE: 31E / SECTION: 33 / LAT: 32.346575 / LONG: -103.886116 (TVD: 10417 feet, MD: 26500 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 804H
SURFACE HOLE FOOTAGE:	2513'/S & 1564'/W
BOTTOM HOLE FOOTAGE:	1108'/S & 50'/E

Previously known as **James Ranch Unit DI 8 Warbonnet 804H_**. *Changes approved through engineering via* ***Sundry 2828541_*** *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	804H

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		2,513 FSL	1,564 FWL	32.348239	-103.837867	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	31	22S	31E		1,108 FNL	50 FEL	32.352223	-103.808625	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
560.86	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
D	36	22S	30E		1,305 FNL	664 FWL	32.352259	-103.840772	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	36	22S	30E		1,305 FNL	1,380 FWL	32.352256	-103.838452	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
A	31	22S	31E		1,108 FNL	100 FEL	32.352223	-103.808787	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 618.013002.09-47

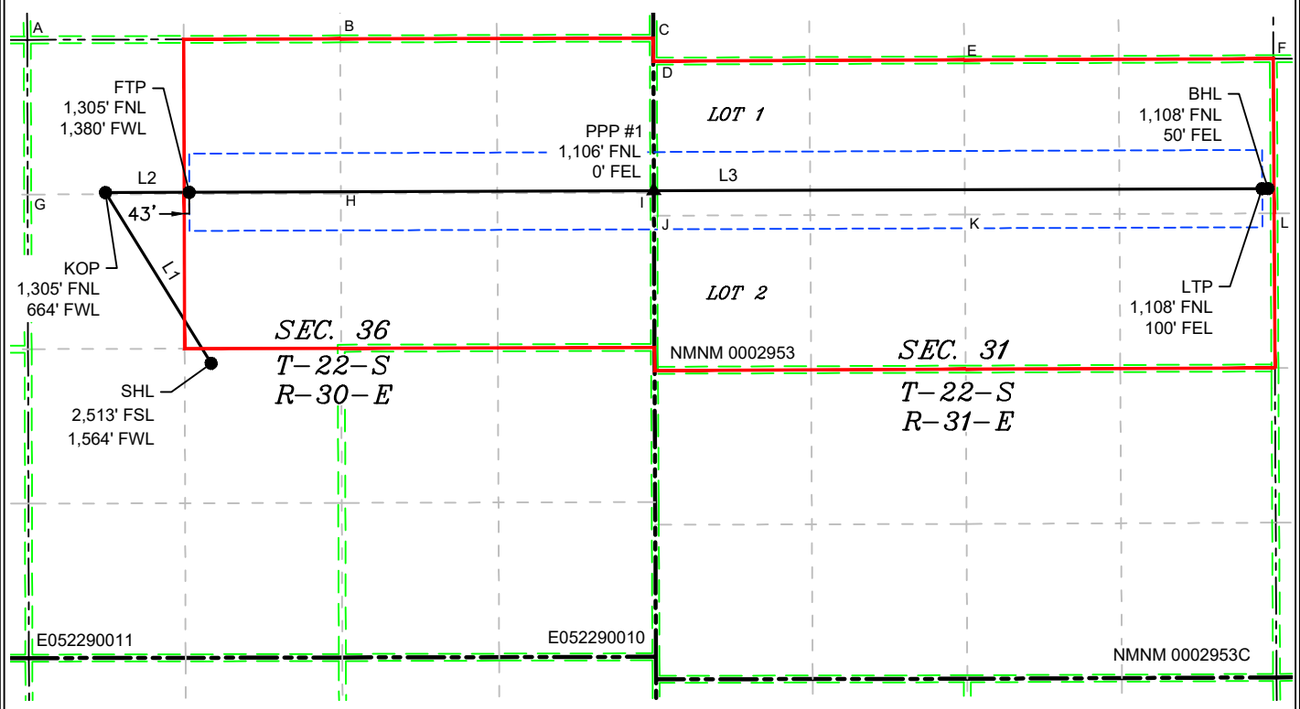
Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

P:\618.013 XTO Energy - NM\002 James Ranch Unit\09 - DI 8 - EDDY\Wells\47 - E 804H\DWG\EAST 804H C-102.dwg

ACREAGE DEDICATION PLATS

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

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



LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	328°12'47"	1,715.55'
L2	089°48'14"	716.21'
L3	089°48'14"	9,210.92'

LOT ACREAGE TABLE

SECTION 31
T-22-S R-31-E
LOT 1 = 40.41 ACRES
LOT 2 = 40.45 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 =	490,775.2	N	Y =	490,714.9	N
X =	694,343.6	E	X =	653,161.7	E
LAT. =	32.348239	°N	LAT. =	32.348116	°N
LONG. =	103.837867	°W	LONG. =	103.837375	°W
KOP (NAD 83 NME)			KOP (NAD 27 NME)		
Y =	492,233.5	N	Y =	492,173.1	N
X =	693,439.9	E	X =	652,258.0	E
LAT. =	32.352259	°N	LAT. =	32.352136	°N
LONG. =	103.840772	°W	LONG. =	103.840279	°W
FTP (NAD 83 NME)			FTP (NAD 27 NME)		
Y =	492,235.9	N	Y =	492,175.6	N
X =	694,156.1	E	X =	652,974.2	E
LAT. =	32.352256	°N	LAT. =	32.352133	°N
LONG. =	103.838452	°W	LONG. =	103.837960	°W
PPP #1 (NAD 83 NME)			PPP #1 (NAD 27 NME)		
Y =	492,249.5	N	Y =	492,189.2	N
X =	698,122.3	E	X =	656,940.4	E
LAT. =	32.352243	°N	LAT. =	32.352120	°N
LONG. =	103.825609	°W	LONG. =	103.825117	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	492,267.2	N	Y =	492,207.0	N
X =	703,317.0	E	X =	662,135.0	E
LAT. =	32.352223	°N	LAT. =	32.352100	°N
LONG. =	103.808787	°W	LONG. =	103.808295	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	492,267.4	N	Y =	492,207.2	N
X =	703,367.0	E	X =	662,185.0	E
LAT. =	32.352223	°N	LAT. =	32.352100	°N
LONG. =	103.808625	°W	LONG. =	103.808133	°W

CORNER COORDINATES (NAD 83 NME)					
A - Y =	493,536.7	N	A - X =	692,773.0	E
B - Y =	493,545.0	N	B - X =	695,445.0	E
C - Y =	493,552.3	N	C - X =	698,117.5	E
D - Y =	493,355.3	N	D - X =	698,118.3	E
E - Y =	493,365.7	N	E - X =	700,771.4	E
F - Y =	493,376.0	N	F - X =	703,411.4	E
G - Y =	492,215.6	N	G - X =	692,776.4	E
H - Y =	492,224.7	N	H - X =	695,449.4	E
I - Y =	492,232.2	N	I - X =	698,122.5	E
J - Y =	492,034.6	N	J - X =	698,123.4	E
K - Y =	492,045.4	N	K - X =	700,778.3	E
L - Y =	492,056.1	N	L - X =	703,418.0	E
CORNER COORDINATES (NAD 27 NME)					
A - Y =	493,476.3	N	A - X =	651,591.1	E
B - Y =	493,484.7	N	B - X =	654,263.1	E
C - Y =	493,491.9	N	C - X =	656,935.6	E
D - Y =	493,295.0	N	D - X =	656,936.4	E
E - Y =	493,305.4	N	E - X =	659,589.5	E
F - Y =	493,315.7	N	F - X =	662,229.5	E
G - Y =	492,155.3	N	G - X =	651,594.5	E
H - Y =	492,164.4	N	H - X =	654,267.4	E
I - Y =	492,171.9	N	I - X =	656,940.6	E
J - Y =	491,974.3	N	J - X =	656,941.5	E
K - Y =	491,985.1	N	K - X =	659,596.3	E
L - Y =	491,995.9	N	L - X =	662,236.0	E

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

XTO Energy Inc.
JAMES RANCH UNIT DI 8 EAST 804H
Projected TD: 21982' MD / 12022.87' TVD
SHL: 2513' FSL & 1564' FWL , Section 36, T22S, R30E
BHL: 1108' FNL & 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	291'	Water
Top of Salt	597'	Water
MB 126	1422'	Water
Base of Salt	3592'	Water
Delaware	3833'	Water
Brushy Canyon	6461'	Water/Oil/Gas
Bone Spring	7659'	Water
1st Bone Spring Ss	8517'	Water/Oil/Gas
2nd Bone Spring Ss	9177'	Water/Oil/Gas
3rd Bone Spring Sh	9819'	Water/Oil/Gas
Wolfcamp	10954'	Water/Oil/Gas
Wolfcamp X	10968'	Water/Oil/Gas
Wolfcamp Y	11021'	Water/Oil/Gas
Wolfcamp A	11119'	Water/Oil/Gas
Wolfcamp B	11419'	Water/Oil/Gas
Wolfcamp D	11760'	Water/Oil/Gas
Target/Land Curve	11942'	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 @ 572' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting intermediate 1 casing at 3692' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat at 11025.8' and cementing ~500' inside previous casing. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 21982 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' – 572'	13.375	54.5	J-55	BTC	New	2.47	4.47	29.16
12.25	0' – 3692'	9.625	40	J-55	BTC	New	1.19	2.45	4.27
8.75	0' – 3792'	7.625	29.7	RY P-110	Flush Joint	New	1.95	2.71	1.70
8.75	3792' – 11025.8'	7.625	29.7	HC L-80	Flush Joint	New	1.42	2.26	1.89
6.75	0' – 10925.8'	5.5	20	RY P-110	Semi-Premium / Freedom	New	1.05	1.63	2.00
6.75	10925.8' - 21982'	5.5	20	RY P-110	Semi-Flush / Talon	New	1.05	1.48	6.32

· 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 +/- 572'

Lead: 200 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 +/- 3692'

Lead: 1520 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 +/- 11025.8'
1st Stage
Tail: 420 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6461
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: 3192
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 (6461') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to 3192 (~500' feet inside 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 +/- 21982'

Lead: 40 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement:							10525.8 feet
Tail: 740 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement:							11646 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 Triple 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' - 572'	17.5	FW/Native	8.5-9	35-40	NC	Fresh water or native water
572' - 3692'	12.25	Sat Brine	10-10.5	30-32	NC	Fully Saturated salt across salado
3692' to 11025.8'	8.75	BDE/OBM or FW/Brine	10-10.5	30-32	NC	Depending well conditions
11025.8' to 21982'	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 180 to 200 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 7502 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 804H

Measured Depth:	21982.39 ft
TVD RKB:	12022.87 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	490714.90 ft
Easting:	653161.70 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 804H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00	
5394.11	33.88	328.21	5297.08	413.52	-256.26	2.00	0.00	2.00	
6726.14	33.88	328.21	6402.92	1044.73	-647.43	0.00	0.00	0.00	
8420.25	0.00	0.00	8000.00	1458.24	-903.69	-2.00	0.00	2.00	
11646.06	0.00	0.00	11225.80	1458.24	-903.69	0.00	0.00	0.00	
12771.06	90.00	89.80	11942.00	1460.70	-187.50	8.00	0.00	8.00	FTP 2
21932.37	89.00	89.80	12022.00	1492.10	8973.30	-0.01	0.00	0.01	LTP 2
21982.39	89.00	89.80	12022.87	1492.27	9023.30	0.00	0.00	0.00	BHL 2

Position Uncertainty JAMES RANCH UNIT DI 8 EAST 804H

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	2.000	328.213	3799.980	13.677	0.000	14.405	0.000	4.843	0.000	0.000	14.525	13.557	127.288	MWD+IFR1+MS
3900.000	4.000	328.213	3899.838	14.200	0.000	14.750	0.000	4.946	0.000	0.000	14.933	14.037	121.025	MWD+IFR1+MS
4000.000	6.000	328.213	3999.452	14.696	0.000	15.095	0.000	5.052	0.000	0.000	15.359	14.485	114.496	MWD+IFR1+MS
4100.000	8.000	328.213	4098.702	15.166	0.000	15.439	0.000	5.161	0.000	0.000	15.800	14.904	108.386	MWD+IFR1+MS
4200.000	10.000	328.213	4197.465	15.610	0.000	15.783	0.000	5.276	0.000	0.000	16.253	15.299	103.171	MWD+IFR1+MS
4300.000	12.000	328.213	4295.623	16.030	0.000	16.126	0.000	5.398	0.000	0.000	16.711	15.677	98.981	MWD+IFR1+MS
4400.000	14.000	328.213	4393.055	16.426	0.000	16.469	0.000	5.527	0.000	0.000	17.169	16.042	95.717	MWD+IFR1+MS
4500.000	16.000	328.213	4489.643	16.799	0.000	16.811	0.000	5.666	0.000	0.000	17.625	16.398	93.208	MWD+IFR1+MS
4600.000	18.000	328.213	4585.268	17.149	0.000	17.154	0.000	5.814	0.000	0.000	18.075	16.748	91.287	MWD+IFR1+MS
4700.000	20.000	328.213	4679.816	17.477	0.000	17.498	0.000	5.974	0.000	0.000	18.520	17.094	89.825	MWD+IFR1+MS
4800.000	22.000	328.213	4773.169	17.784	0.000	17.842	0.000	6.146	0.000	0.000	18.958	17.438	88.722	MWD+IFR1+MS
4900.000	24.000	328.213	4865.215	18.071	0.000	18.188	0.000	6.331	0.000	0.000	19.389	17.780	87.909	MWD+IFR1+MS
5000.000	26.000	328.213	4955.841	18.339	0.000	18.536	0.000	6.531	0.000	0.000	19.812	18.122	87.336	MWD+IFR1+MS
5100.000	28.000	328.213	5044.937	18.588	0.000	18.887	0.000	6.746	0.000	0.000	20.228	18.464	86.969	MWD+IFR1+MS
5200.000	30.000	328.213	5132.394	18.819	0.000	19.241	0.000	6.977	0.000	0.000	20.637	18.808	86.786	MWD+IFR1+MS
5300.000	32.000	328.213	5218.107	19.034	0.000	19.600	0.000	7.227	0.000	0.000	21.039	19.153	86.773	MWD+IFR1+MS
5394.112	33.882	328.213	5297.085	19.206	0.000	19.940	0.000	7.466	0.000	0.000	21.400	19.479	86.972	MWD+IFR1+MS
5400.000	33.882	328.213	5301.973	19.226	0.000	19.961	0.000	7.471	0.000	0.000	21.419	19.500	86.995	MWD+IFR1+MS
5500.000	33.882	328.213	5384.992	19.572	0.000	20.325	0.000	7.653	0.000	0.000	21.723	19.848	87.936	MWD+IFR1+MS
5600.000	33.882	328.213	5468.010	19.933	0.000	20.702	0.000	7.849	0.000	0.000	22.044	20.202	89.048	MWD+IFR1+MS
5700.000	33.882	328.213	5551.029	20.301	0.000	21.086	0.000	8.054	0.000	0.000	22.371	20.562	90.220	MWD+IFR1+MS
5800.000	33.882	328.213	5634.047	20.676	0.000	21.476	0.000	8.268	0.000	0.000	22.705	20.926	91.453	MWD+IFR1+MS
5900.000	33.882	328.213	5717.066	21.058	0.000	21.872	0.000	8.488	0.000	0.000	23.046	21.294	92.742	MWD+IFR1+MS
6000.000	33.882	328.213	5800.084	21.446	0.000	22.274	0.000	8.716	0.000	0.000	23.394	21.666	94.085	MWD+IFR1+MS
6100.000	33.882	328.213	5883.103	21.841	0.000	22.682	0.000	8.950	0.000	0.000	23.748	22.041	95.478	MWD+IFR1+MS
6200.000	33.882	328.213	5966.121	22.241	0.000	23.094	0.000	9.190	0.000	0.000	24.109	22.418	96.914	MWD+IFR1+MS

6300.000	33.882	328.213	6049.140	22.647	0.000	23.512	0.000	9.436	0.000	0.000	24.477	22.798	98.386	MWD+IFR1+MS
6400.000	33.882	328.213	6132.158	23.058	0.000	23.934	0.000	9.687	0.000	0.000	24.852	23.180	99.886	MWD+IFR1+MS
6500.000	33.882	328.213	6215.177	23.474	0.000	24.360	0.000	9.943	0.000	0.000	25.232	23.564	101.404	MWD+IFR1+MS
6600.000	33.882	328.213	6298.195	23.894	0.000	24.791	0.000	10.204	0.000	0.000	25.619	23.950	102.932	MWD+IFR1+MS
6700.000	33.882	328.213	6381.214	24.319	0.000	25.225	0.000	10.469	0.000	0.000	26.013	24.337	104.459	MWD+IFR1+MS
6726.141	33.882	328.213	6402.915	24.429	0.000	25.337	0.000	10.538	0.000	0.000	26.113	24.438	104.845	MWD+IFR1+MS
6800.000	32.405	328.213	6464.756	24.946	0.000	25.655	0.000	10.739	0.000	0.000	26.405	24.726	105.815	MWD+IFR1+MS
6900.000	30.405	328.213	6550.102	25.689	0.000	26.090	0.000	11.050	0.000	0.000	26.841	25.133	106.200	MWD+IFR1+MS
7000.000	28.405	328.213	6637.215	26.423	0.000	26.523	0.000	11.360	0.000	0.000	27.293	25.550	106.103	MWD+IFR1+MS
7100.000	26.405	328.213	6725.988	27.120	0.000	26.953	0.000	11.651	0.000	0.000	27.746	25.968	105.845	MWD+IFR1+MS
7200.000	24.405	328.213	6816.313	27.780	0.000	27.378	0.000	11.925	0.000	0.000	28.197	26.387	105.446	MWD+IFR1+MS
7300.000	22.405	328.213	6908.080	28.400	0.000	27.797	0.000	12.182	0.000	0.000	28.647	26.805	104.923	MWD+IFR1+MS
7400.000	20.405	328.213	7001.178	28.981	0.000	28.209	0.000	12.423	0.000	0.000	29.094	27.221	104.296	MWD+IFR1+MS
7500.000	18.405	328.213	7095.493	29.521	0.000	28.614	0.000	12.649	0.000	0.000	29.538	27.633	103.584	MWD+IFR1+MS
7600.000	16.405	328.213	7190.909	30.020	0.000	29.011	0.000	12.861	0.000	0.000	29.977	28.040	102.805	MWD+IFR1+MS
7700.000	14.405	328.213	7287.311	30.477	0.000	29.400	0.000	13.061	0.000	0.000	30.410	28.441	101.979	MWD+IFR1+MS
7800.000	12.405	328.213	7384.582	30.891	0.000	29.780	0.000	13.250	0.000	0.000	30.838	28.835	101.121	MWD+IFR1+MS
7900.000	10.405	328.213	7482.602	31.262	0.000	30.152	0.000	13.429	0.000	0.000	31.259	29.221	100.250	MWD+IFR1+MS
8000.000	8.405	328.213	7581.253	31.590	0.000	30.515	0.000	13.600	0.000	0.000	31.673	29.599	99.379	MWD+IFR1+MS
8100.000	6.405	328.213	7680.414	31.875	0.000	30.868	0.000	13.763	0.000	0.000	32.078	29.967	98.523	MWD+IFR1+MS
8200.000	4.405	328.213	7779.964	32.116	0.000	31.213	0.000	13.920	0.000	0.000	32.476	30.326	97.693	MWD+IFR1+MS
8300.000	2.405	328.213	7879.783	32.314	0.000	31.548	0.000	14.072	0.000	0.000	32.864	30.675	96.900	MWD+IFR1+MS
8400.000	0.405	328.213	7979.748	32.470	0.000	31.874	0.000	14.221	0.000	0.000	33.243	31.013	96.151	MWD+IFR1+MS
8420.252	0.000	0.000	8000.000	33.280	0.000	31.105	0.000	14.251	0.000	0.000	33.304	31.078	96.169	MWD+IFR1+MS
8500.000	0.000	0.000	8079.748	33.521	0.000	31.360	0.000	14.370	0.000	0.000	33.547	31.332	96.328	MWD+IFR1+MS
8600.000	0.000	0.000	8179.748	33.826	0.000	31.685	0.000	14.521	0.000	0.000	33.854	31.655	96.600	MWD+IFR1+MS
8700.000	0.000	0.000	8279.748	34.132	0.000	32.011	0.000	14.676	0.000	0.000	34.163	31.979	96.897	MWD+IFR1+MS
8800.000	0.000	0.000	8379.748	34.440	0.000	32.338	0.000	14.834	0.000	0.000	34.473	32.303	97.192	MWD+IFR1+MS
8900.000	0.000	0.000	8479.748	34.749	0.000	32.666	0.000	14.996	0.000	0.000	34.785	32.628	97.485	MWD+IFR1+MS
9000.000	0.000	0.000	8579.748	35.059	0.000	32.994	0.000	15.161	0.000	0.000	35.097	32.954	97.777	MWD+IFR1+MS
9100.000	0.000	0.000	8679.748	35.370	0.000	33.323	0.000	15.329	0.000	0.000	35.411	33.280	98.066	MWD+IFR1+MS
9200.000	0.000	0.000	8779.748	35.682	0.000	33.653	0.000	15.501	0.000	0.000	35.725	33.607	98.354	MWD+IFR1+MS
9300.000	0.000	0.000	8879.748	35.994	0.000	33.983	0.000	15.676	0.000	0.000	36.040	33.934	98.639	MWD+IFR1+MS

9400.000	0.000	0.000	8979.748	36.308	0.000	34.314	0.000	15.855	0.000	0.000	36.357	34.262	98.923	MWD+IFR1+MS
9500.000	0.000	0.000	9079.748	36.622	0.000	34.645	0.000	16.038	0.000	0.000	36.674	34.590	99.204	MWD+IFR1+MS
9600.000	0.000	0.000	9179.748	36.937	0.000	34.977	0.000	16.223	0.000	0.000	36.992	34.919	99.484	MWD+IFR1+MS
9700.000	0.000	0.000	9279.748	37.253	0.000	35.309	0.000	16.413	0.000	0.000	37.310	35.248	99.761	MWD+IFR1+MS
9800.000	0.000	0.000	9379.748	37.569	0.000	35.642	0.000	16.606	0.000	0.000	37.630	35.578	100.036	MWD+IFR1+MS
9900.000	0.000	0.000	9479.748	37.887	0.000	35.975	0.000	16.802	0.000	0.000	37.950	35.908	100.309	MWD+IFR1+MS
10000.000	0.000	0.000	9579.748	38.205	0.000	36.309	0.000	17.002	0.000	0.000	38.271	36.239	100.579	MWD+IFR1+MS
10100.000	0.000	0.000	9679.748	38.523	0.000	36.643	0.000	17.206	0.000	0.000	38.593	36.570	100.848	MWD+IFR1+MS
10200.000	0.000	0.000	9779.748	38.843	0.000	36.978	0.000	17.413	0.000	0.000	38.916	36.901	101.114	MWD+IFR1+MS
10300.000	0.000	0.000	9879.748	39.163	0.000	37.313	0.000	17.624	0.000	0.000	39.239	37.233	101.378	MWD+IFR1+MS
10400.000	0.000	0.000	9979.748	39.484	0.000	37.649	0.000	17.838	0.000	0.000	39.563	37.566	101.639	MWD+IFR1+MS
10500.000	0.000	0.000	10079.748	39.805	0.000	37.985	0.000	18.056	0.000	0.000	39.888	37.898	101.898	MWD+IFR1+MS
10600.000	0.000	0.000	10179.748	40.127	0.000	38.321	0.000	18.278	0.000	0.000	40.213	38.231	102.155	MWD+IFR1+MS
10700.000	0.000	0.000	10279.748	40.450	0.000	38.658	0.000	18.503	0.000	0.000	40.539	38.565	102.410	MWD+IFR1+MS
10800.000	0.000	0.000	10379.748	40.773	0.000	38.996	0.000	18.731	0.000	0.000	40.865	38.899	102.662	MWD+IFR1+MS
10900.000	0.000	0.000	10479.748	41.097	0.000	39.333	0.000	18.964	0.000	0.000	41.193	39.233	102.913	MWD+IFR1+MS
11000.000	0.000	0.000	10579.748	41.421	0.000	39.671	0.000	19.199	0.000	0.000	41.520	39.568	103.160	MWD+IFR1+MS
11100.000	0.000	0.000	10679.748	41.746	0.000	40.009	0.000	19.439	0.000	0.000	41.849	39.902	103.406	MWD+IFR1+MS
11200.000	0.000	0.000	10779.748	42.072	0.000	40.348	0.000	19.682	0.000	0.000	42.178	40.238	103.648	MWD+IFR1+MS
11300.000	0.000	0.000	10879.748	42.398	0.000	40.687	0.000	19.928	0.000	0.000	42.507	40.573	103.889	MWD+IFR1+MS
11400.000	0.000	0.000	10979.748	42.724	0.000	41.026	0.000	20.178	0.000	0.000	42.837	40.909	104.127	MWD+IFR1+MS
11500.000	0.000	0.000	11079.748	43.052	0.000	41.366	0.000	20.432	0.000	0.000	43.167	41.245	104.363	MWD+IFR1+MS
11600.000	0.000	0.000	11179.748	43.379	0.000	41.706	0.000	20.689	0.000	0.000	43.498	41.582	104.597	MWD+IFR1+MS
11646.055	0.000	0.000	11225.803	43.529	0.000	41.861	0.000	20.809	0.000	0.000	43.649	41.736	104.665	MWD+IFR1+MS
11700.000	4.316	89.804	11279.697	41.745	0.000	43.694	0.000	20.949	0.000	0.000	43.820	41.932	104.934	MWD+IFR1+MS
11800.000	12.316	89.804	11378.565	41.614	0.000	43.993	0.000	21.240	0.000	0.000	44.153	42.781	109.953	MWD+IFR1+MS
11900.000	20.316	89.804	11474.460	41.331	0.000	44.282	0.000	21.651	0.000	0.000	44.602	43.801	129.131	MWD+IFR1+MS
12000.000	28.316	89.804	11565.515	40.538	0.000	44.558	0.000	22.235	0.000	0.000	45.314	44.393	-25.124	MWD+IFR1+MS
12100.000	36.316	89.804	11649.958	39.327	0.000	44.819	0.000	23.027	0.000	0.000	46.090	44.737	-14.324	MWD+IFR1+MS
12200.000	44.316	89.804	11726.145	37.821	0.000	45.064	0.000	24.041	0.000	0.000	46.743	45.012	-10.171	MWD+IFR1+MS
12300.000	52.316	89.804	11792.594	36.175	0.000	45.294	0.000	25.265	0.000	0.000	47.239	45.254	-8.260	MWD+IFR1+MS
12400.000	60.316	89.804	11848.011	34.581	0.000	45.508	0.000	26.666	0.000	0.000	47.579	45.475	-7.301	MWD+IFR1+MS
12500.000	68.316	89.804	11891.317	33.254	0.000	45.707	0.000	28.197	0.000	0.000	47.783	45.678	-6.804	MWD+IFR1+MS

12600.000	76.316	89.804	11921.670	32.411	0.000	45.888	0.000	29.805	0.000	0.000	47.880	45.863	-6.518	MWD+IFR1+MS
12700.000	84.316	89.804	11938.478	32.236	0.000	46.051	0.000	31.434	0.000	0.000	47.907	46.030	-6.249	MWD+IFR1+MS
12771.055	90.000	89.804	11942.000	32.118	-0.000	46.151	0.000	32.118	0.000	0.000	47.906	46.133	-5.978	MWD+IFR1+MS
12800.000	90.000	89.804	11942.000	32.209	-0.000	46.190	0.000	32.209	0.000	0.000	47.906	46.173	-5.824	MWD+IFR1+MS
12900.000	89.986	89.804	11942.016	32.484	0.000	46.344	0.000	32.482	0.000	0.000	47.903	46.331	-5.302	MWD+IFR1+MS
13000.000	89.975	89.804	11942.050	32.778	0.000	46.527	0.000	32.776	0.000	0.000	47.901	46.518	-4.756	MWD+IFR1+MS
13100.000	89.964	89.804	11942.103	33.088	0.000	46.737	0.000	33.085	0.000	0.000	47.901	46.731	-4.127	MWD+IFR1+MS
13200.000	89.953	89.804	11942.175	33.414	0.000	46.972	0.000	33.410	0.000	0.000	47.901	46.969	-3.308	MWD+IFR1+MS
13300.000	89.942	89.804	11942.267	33.755	0.000	47.233	0.000	33.750	0.000	0.000	47.903	47.232	-2.009	MWD+IFR1+MS
13400.000	89.931	89.804	11942.377	34.110	0.000	47.518	0.000	34.105	0.000	0.000	47.907	47.518	0.970	MWD+IFR1+MS
13500.000	89.920	89.804	11942.506	34.480	0.000	47.829	0.000	34.474	0.000	0.000	47.926	47.815	20.598	MWD+IFR1+MS
13600.000	89.909	89.804	11942.655	34.863	0.000	48.163	0.000	34.856	0.000	0.000	48.180	47.901	75.778	MWD+IFR1+MS
13700.000	89.899	89.804	11942.823	35.259	0.000	48.522	0.000	35.252	0.000	0.000	48.536	47.909	81.079	MWD+IFR1+MS
13800.000	89.888	89.804	11943.009	35.669	0.000	48.903	0.000	35.661	0.000	0.000	48.918	47.915	82.752	MWD+IFR1+MS
13900.000	89.877	89.804	11943.215	36.090	0.000	49.307	0.000	36.083	0.000	0.000	49.323	47.922	83.620	MWD+IFR1+MS
14000.000	89.866	89.804	11943.440	36.524	0.000	49.733	0.000	36.516	0.000	0.000	49.750	47.929	84.179	MWD+IFR1+MS
14100.000	89.855	89.804	11943.683	36.969	0.000	50.181	0.000	36.961	0.000	0.000	50.199	47.936	84.585	MWD+IFR1+MS
14200.000	89.844	89.804	11943.946	37.425	0.000	50.649	0.000	37.418	0.000	0.000	50.669	47.944	84.901	MWD+IFR1+MS
14300.000	89.833	89.804	11944.228	37.892	0.000	51.138	0.000	37.885	0.000	0.000	51.158	47.953	85.161	MWD+IFR1+MS
14400.000	89.822	89.804	11944.529	38.370	0.000	51.647	0.000	38.362	0.000	0.000	51.668	47.962	85.380	MWD+IFR1+MS
14500.000	89.811	89.804	11944.849	38.857	0.000	52.174	0.000	38.849	0.000	0.000	52.196	47.972	85.571	MWD+IFR1+MS
14600.000	89.800	89.804	11945.188	39.354	0.000	52.721	0.000	39.346	0.000	0.000	52.743	47.983	85.740	MWD+IFR1+MS
14700.000	89.789	89.804	11945.547	39.860	0.000	53.285	0.000	39.853	0.000	0.000	53.309	47.994	85.891	MWD+IFR1+MS
14800.000	89.778	89.804	11945.924	40.375	0.000	53.867	0.000	40.368	0.000	0.000	53.891	48.007	86.029	MWD+IFR1+MS
14900.000	89.767	89.804	11946.320	40.898	0.000	54.466	0.000	40.892	0.000	0.000	54.490	48.019	86.154	MWD+IFR1+MS
15000.000	89.757	89.804	11946.736	41.430	0.000	55.081	0.000	41.424	0.000	0.000	55.106	48.033	86.270	MWD+IFR1+MS
15100.000	89.746	89.804	11947.170	41.970	0.000	55.712	0.000	41.964	0.000	0.000	55.737	48.047	86.377	MWD+IFR1+MS
15200.000	89.735	89.804	11947.624	42.517	0.000	56.358	0.000	42.512	0.000	0.000	56.384	48.062	86.476	MWD+IFR1+MS
15300.000	89.724	89.804	11948.096	43.071	0.000	57.019	0.000	43.067	0.000	0.000	57.045	48.077	86.569	MWD+IFR1+MS
15400.000	89.713	89.804	11948.588	43.633	0.000	57.694	0.000	43.629	0.000	0.000	57.721	48.093	86.657	MWD+IFR1+MS
15500.000	89.702	89.804	11949.099	44.201	0.000	58.383	0.000	44.198	0.000	0.000	58.410	48.110	86.739	MWD+IFR1+MS
15600.000	89.691	89.804	11949.628	44.776	0.000	59.085	0.000	44.773	0.000	0.000	59.112	48.127	86.816	MWD+IFR1+MS
15700.000	89.680	89.804	11950.177	45.357	0.000	59.801	0.000	45.355	0.000	0.000	59.828	48.145	86.890	MWD+IFR1+MS

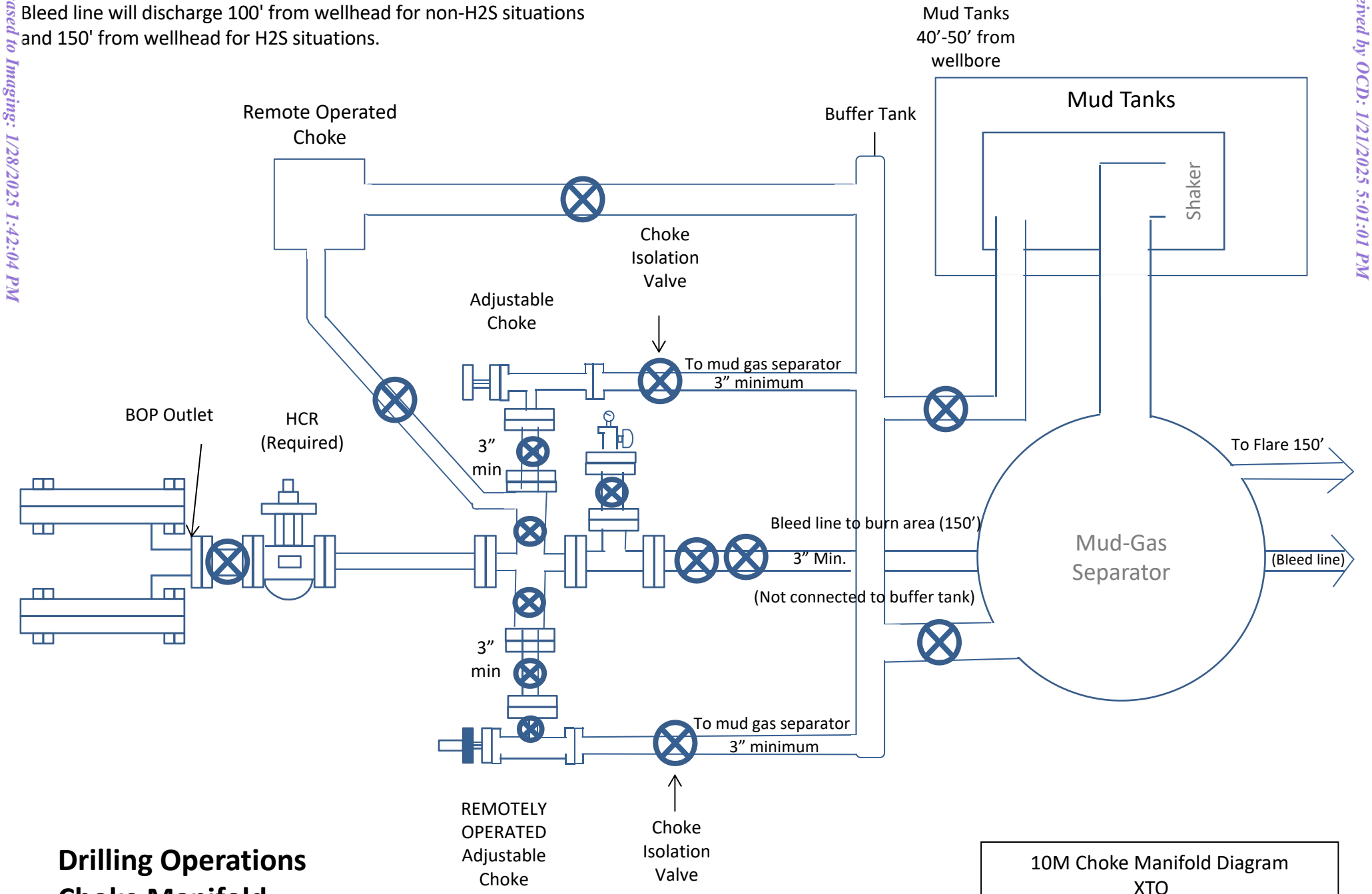
15800.000	89.669	89.804	11950.745	45.944	0.000	60.528	0.000	45.942	0.000	0.000	60.555	48.164	86.959	MWD+IFR1+MS
15900.000	89.658	89.804	11951.332	46.537	0.000	61.267	0.000	46.536	0.000	0.000	61.295	48.183	87.025	MWD+IFR1+MS
16000.000	89.647	89.804	11951.938	47.135	0.000	62.018	0.000	47.135	0.000	0.000	62.046	48.203	87.088	MWD+IFR1+MS
16100.000	89.636	89.804	11952.563	47.739	0.000	62.780	0.000	47.740	0.000	0.000	62.808	48.223	87.148	MWD+IFR1+MS
16200.000	89.625	89.804	11953.207	48.348	0.000	63.553	0.000	48.350	0.000	0.000	63.581	48.244	87.205	MWD+IFR1+MS
16300.000	89.615	89.804	11953.871	48.962	0.000	64.336	0.000	48.964	0.000	0.000	64.363	48.266	87.260	MWD+IFR1+MS
16400.000	89.604	89.804	11954.553	49.580	0.000	65.129	0.000	49.584	0.000	0.000	65.156	48.289	87.312	MWD+IFR1+MS
16500.000	89.593	89.804	11955.254	50.204	0.000	65.931	0.000	50.208	0.000	0.000	65.959	48.312	87.362	MWD+IFR1+MS
16600.000	89.582	89.804	11955.975	50.832	0.000	66.743	0.000	50.837	0.000	0.000	66.770	48.335	87.410	MWD+IFR1+MS
16700.000	89.571	89.804	11956.714	51.464	0.000	67.563	0.000	51.470	0.000	0.000	67.591	48.360	87.456	MWD+IFR1+MS
16800.000	89.560	89.804	11957.473	52.100	0.000	68.392	0.000	52.107	0.000	0.000	68.420	48.385	87.501	MWD+IFR1+MS
16900.000	89.549	89.804	11958.250	52.740	0.000	69.230	0.000	52.748	0.000	0.000	69.257	48.410	87.543	MWD+IFR1+MS
17000.000	89.538	89.804	11959.047	53.384	0.000	70.075	0.000	53.393	0.000	0.000	70.102	48.436	87.584	MWD+IFR1+MS
17100.000	89.527	89.804	11959.863	54.031	0.000	70.928	0.000	54.042	0.000	0.000	70.955	48.463	87.624	MWD+IFR1+MS
17200.000	89.516	89.804	11960.697	54.683	0.000	71.788	0.000	54.694	0.000	0.000	71.816	48.491	87.662	MWD+IFR1+MS
17300.000	89.505	89.804	11961.551	55.337	0.000	72.656	0.000	55.350	0.000	0.000	72.683	48.519	87.699	MWD+IFR1+MS
17400.000	89.494	89.804	11962.424	55.995	0.000	73.530	0.000	56.009	0.000	0.000	73.557	48.547	87.735	MWD+IFR1+MS
17500.000	89.483	89.804	11963.316	56.656	0.000	74.411	0.000	56.671	0.000	0.000	74.438	48.577	87.769	MWD+IFR1+MS
17600.000	89.473	89.804	11964.227	57.320	0.000	75.299	0.000	57.336	0.000	0.000	75.326	48.607	87.802	MWD+IFR1+MS
17700.000	89.462	89.804	11965.157	57.988	0.000	76.193	0.000	58.004	0.000	0.000	76.219	48.637	87.835	MWD+IFR1+MS
17800.000	89.451	89.804	11966.107	58.658	0.000	77.092	0.000	58.676	0.000	0.000	77.119	48.669	87.866	MWD+IFR1+MS
17900.000	89.440	89.804	11967.075	59.331	0.000	77.998	0.000	59.350	0.000	0.000	78.024	48.700	87.896	MWD+IFR1+MS
18000.000	89.429	89.804	11968.062	60.006	0.000	78.909	0.000	60.026	0.000	0.000	78.935	48.733	87.925	MWD+IFR1+MS
18100.000	89.418	89.804	11969.068	60.684	0.000	79.825	0.000	60.706	0.000	0.000	79.851	48.766	87.954	MWD+IFR1+MS
18200.000	89.407	89.804	11970.094	61.365	0.000	80.747	0.000	61.387	0.000	0.000	80.773	48.799	87.981	MWD+IFR1+MS
18300.000	89.396	89.804	11971.138	62.048	0.000	81.673	0.000	62.072	0.000	0.000	81.699	48.834	88.008	MWD+IFR1+MS
18400.000	89.385	89.804	11972.202	62.733	0.000	82.605	0.000	62.758	0.000	0.000	82.630	48.869	88.034	MWD+IFR1+MS
18500.000	89.374	89.804	11973.285	63.421	0.000	83.541	0.000	63.447	0.000	0.000	83.566	48.904	88.059	MWD+IFR1+MS
18600.000	89.363	89.804	11974.386	64.111	0.000	84.481	0.000	64.138	0.000	0.000	84.507	48.940	88.084	MWD+IFR1+MS
18700.000	89.352	89.804	11975.507	64.803	0.000	85.426	0.000	64.832	0.000	0.000	85.452	48.977	88.108	MWD+IFR1+MS
18800.000	89.341	89.804	11976.647	65.497	0.000	86.376	0.000	65.527	0.000	0.000	86.401	49.014	88.131	MWD+IFR1+MS
18900.000	89.331	89.804	11977.806	66.193	0.000	87.329	0.000	66.224	0.000	0.000	87.354	49.052	88.153	MWD+IFR1+MS
19000.000	89.320	89.804	11978.984	66.891	0.000	88.286	0.000	66.924	0.000	0.000	88.311	49.091	88.175	MWD+IFR1+MS

19100.000	89.309	89.804	11980.181	67.591	0.000	89.248	0.000	67.625	0.000	0.000	89.272	49.130	88.197	MWD+IFR1+MS
19200.000	89.298	89.804	11981.397	68.293	0.000	90.213	0.000	68.328	0.000	0.000	90.237	49.170	88.218	MWD+IFR1+MS
19300.000	89.287	89.804	11982.632	68.996	0.000	91.181	0.000	69.032	0.000	0.000	91.205	49.210	88.238	MWD+IFR1+MS
19400.000	89.276	89.804	11983.886	69.702	0.000	92.153	0.000	69.739	0.000	0.000	92.177	49.252	88.258	MWD+IFR1+MS
19500.000	89.265	89.804	11985.159	70.408	0.000	93.128	0.000	70.447	0.000	0.000	93.152	49.293	88.277	MWD+IFR1+MS
19600.000	89.254	89.804	11986.451	71.117	0.000	94.107	0.000	71.157	0.000	0.000	94.131	49.335	88.296	MWD+IFR1+MS
19700.000	89.243	89.804	11987.763	71.827	0.000	95.089	0.000	71.868	0.000	0.000	95.112	49.378	88.315	MWD+IFR1+MS
19800.000	89.232	89.804	11989.093	72.538	0.000	96.074	0.000	72.581	0.000	0.000	96.097	49.422	88.333	MWD+IFR1+MS
19900.000	89.221	89.804	11990.443	73.251	0.000	97.061	0.000	73.295	0.000	0.000	97.085	49.466	88.350	MWD+IFR1+MS
20000.000	89.210	89.804	11991.811	73.966	0.000	98.052	0.000	74.011	0.000	0.000	98.075	49.510	88.367	MWD+IFR1+MS
20100.000	89.199	89.804	11993.199	74.682	0.000	99.046	0.000	74.728	0.000	0.000	99.068	49.556	88.384	MWD+IFR1+MS
20200.000	89.189	89.804	11994.606	75.399	0.000	100.042	0.000	75.446	0.000	0.000	100.065	49.602	88.401	MWD+IFR1+MS
20300.000	89.178	89.804	11996.031	76.117	0.000	101.041	0.000	76.166	0.000	0.000	101.063	49.648	88.417	MWD+IFR1+MS
20400.000	89.167	89.804	11997.476	76.837	0.000	102.042	0.000	76.887	0.000	0.000	102.065	49.695	88.432	MWD+IFR1+MS
20500.000	89.156	89.804	11998.940	77.558	0.000	103.046	0.000	77.609	0.000	0.000	103.068	49.743	88.448	MWD+IFR1+MS
20600.000	89.145	89.804	12000.423	78.280	0.000	104.052	0.000	78.333	0.000	0.000	104.074	49.791	88.463	MWD+IFR1+MS
20700.000	89.134	89.804	12001.925	79.003	0.000	105.061	0.000	79.058	0.000	0.000	105.083	49.840	88.478	MWD+IFR1+MS
20800.000	89.123	89.804	12003.446	79.728	0.000	106.072	0.000	79.783	0.000	0.000	106.094	49.890	88.492	MWD+IFR1+MS
20900.000	89.112	89.804	12004.986	80.453	0.000	107.085	0.000	80.510	0.000	0.000	107.107	49.940	88.506	MWD+IFR1+MS
21000.000	89.101	89.804	12006.545	81.180	0.000	108.101	0.000	81.238	0.000	0.000	108.122	49.990	88.520	MWD+IFR1+MS
21100.000	89.090	89.804	12008.123	81.908	0.000	109.118	0.000	81.967	0.000	0.000	109.139	50.042	88.533	MWD+IFR1+MS
21200.000	89.079	89.804	12009.721	82.636	0.000	110.137	0.000	82.697	0.000	0.000	110.158	50.094	88.547	MWD+IFR1+MS
21300.000	89.068	89.804	12011.337	83.366	0.000	111.159	0.000	83.428	0.000	0.000	111.180	50.146	88.560	MWD+IFR1+MS
21400.000	89.057	89.804	12012.973	84.097	0.000	112.182	0.000	84.160	0.000	0.000	112.203	50.199	88.572	MWD+IFR1+MS
21500.000	89.047	89.804	12014.627	84.828	0.000	113.207	0.000	84.893	0.000	0.000	113.228	50.253	88.585	MWD+IFR1+MS
21600.000	89.036	89.804	12016.301	85.561	0.000	114.234	0.000	85.627	0.000	0.000	114.255	50.307	88.597	MWD+IFR1+MS
21700.000	89.025	89.804	12017.993	86.294	0.000	115.263	0.000	86.362	0.000	0.000	115.283	50.362	88.609	MWD+IFR1+MS
21800.000	89.014	89.804	12019.705	87.029	0.000	116.293	0.000	87.098	0.000	0.000	116.314	50.418	88.621	MWD+IFR1+MS
21900.000	89.003	89.804	12021.436	87.764	0.000	117.326	0.000	87.834	0.000	0.000	117.346	50.474	88.632	MWD+IFR1+MS
21932.375	88.999	89.804	12022.000	88.001	0.000	117.659	0.000	88.072	0.000	0.000	117.679	50.492	88.636	MWD+IFR1+MS
21982.387	88.999	89.804	12022.873	88.369	0.000	118.176	0.000	88.440	0.000	0.000	118.195	50.520	88.642	MWD+IFR1+MS

Plan Targets JAMES RANCH UNIT DI 8 EAST 804H

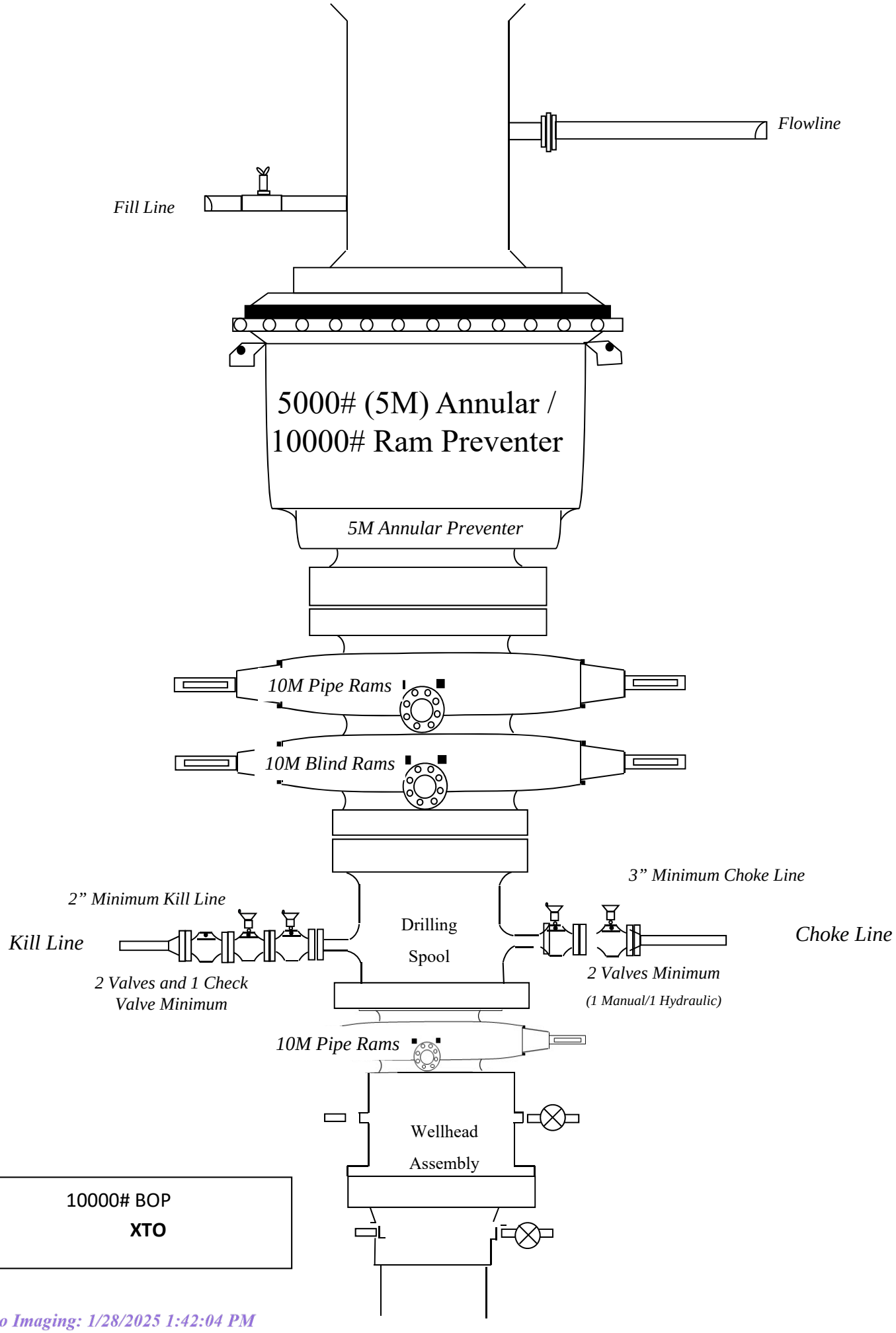
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 2	12771.03	492175.60	652974.20	8600.00	CIRCLE
LTP 2	21932.37	492207.00	662135.00	8680.00	CIRCLE
BHL 2	21982.38	492207.20	662185.00	8680.00	CIRCLE

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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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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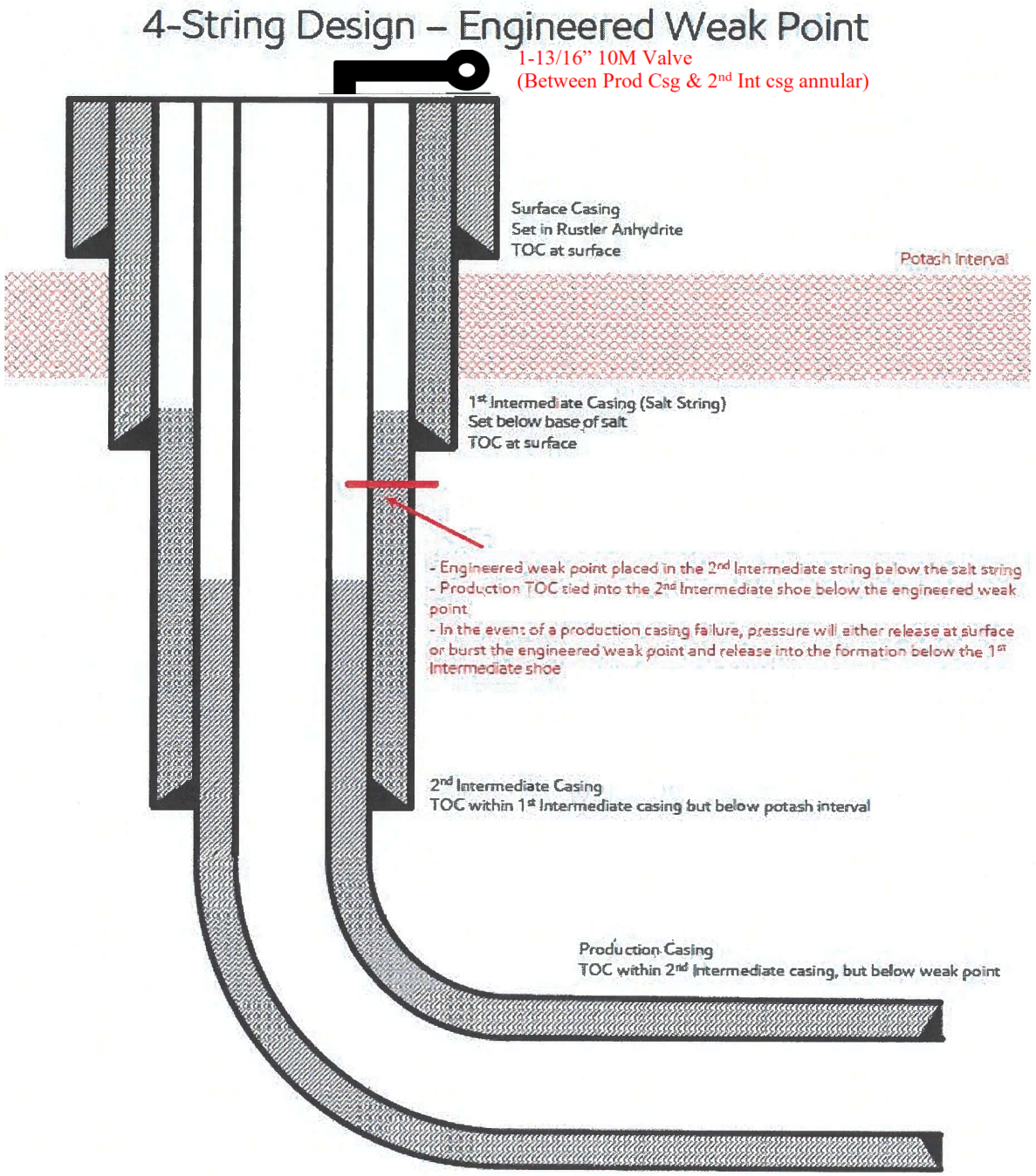

[Figure F] 4 String – 2nd Intermediate casing engineered weak point

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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WEB: www.gates.com/oilandgas

NEW CHOKE HOSE
INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

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

CUSTOMER:	NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#:	15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N:	IMR RETEST SN 74621 ASSET #66-1531
PART DESCRIPTION:	RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES
SALES ORDER #:	529480
QUANTITY:	1
SERIAL #:	74621 H3-012524-1

SIGNATURE: F. OSPINOS

TITLE: QUALITY ASSURANCE

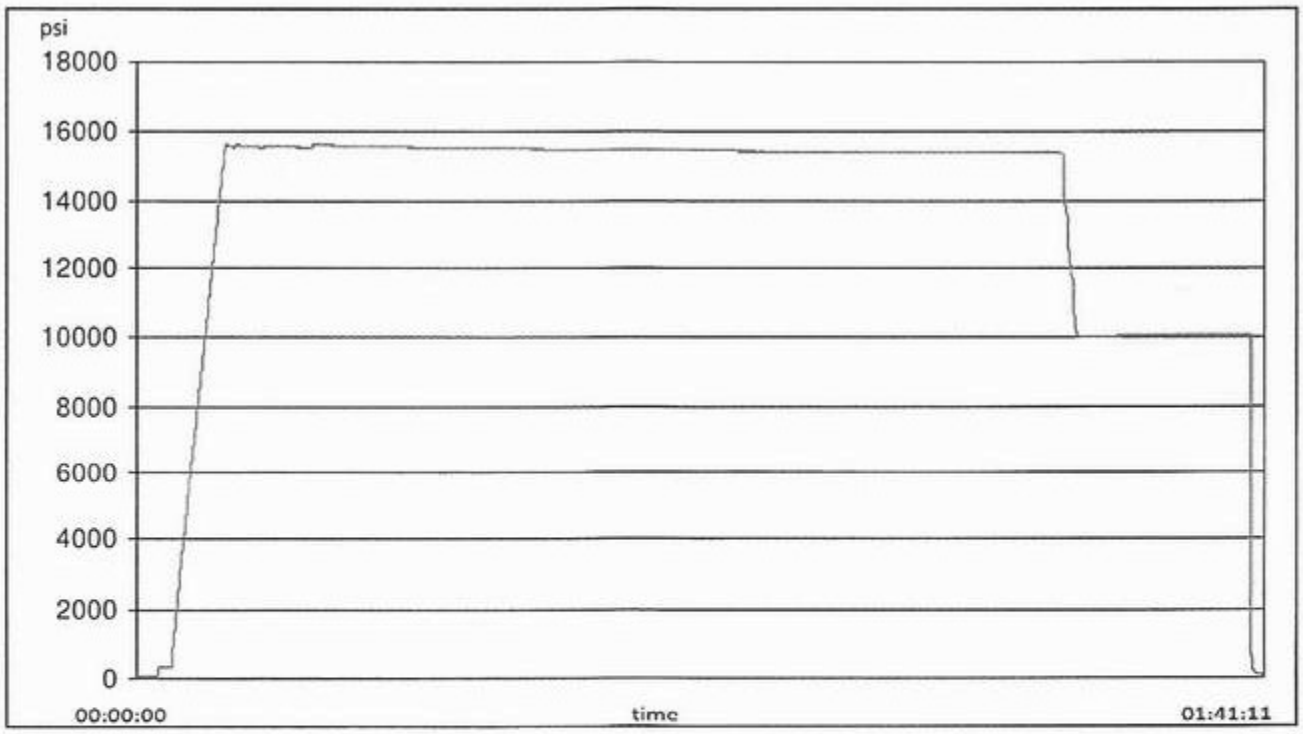
DATE: 1/25/2024

H3-15716

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER			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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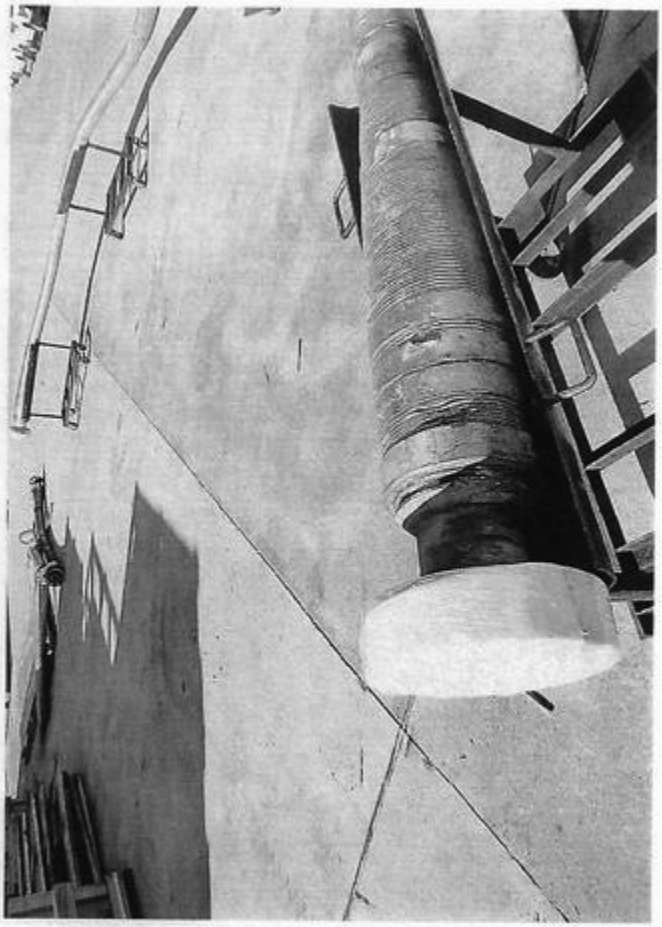
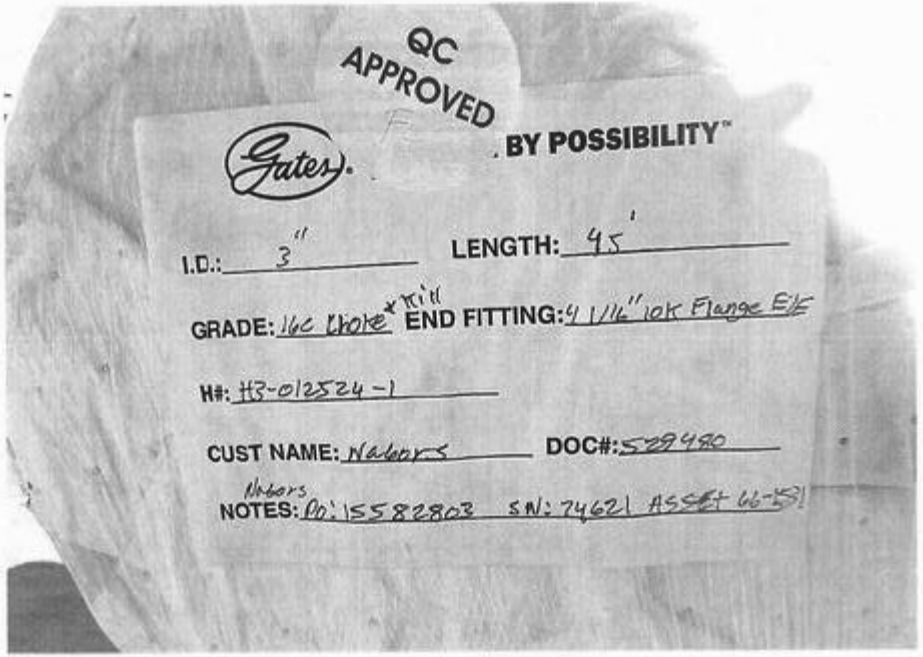
TEST REPORT

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
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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

Action 423165

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 423165
	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