

Well Name: CORRAL CANYON 17-5 FEDERAL	Well Location: T25S / R29E / SEC 17 / SESW / 32.123801 / -104.008118	County or Parish/State: EDDY / NM
Well Number: 802H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM96848	Unit or CA Name:	Unit or CA Number:
US Well Number:	Operator: XTO ENERGY INCORPORATED	

Notice of Intent

Sundry ID: 2808801

Type of Submission: Notice of Intent	Type of Action: APD Change
Date Sundry Submitted: 08/27/2024	Time Sundry Submitted: 07:06
Date proposed operation will begin: 08/28/2024	

**Procedure Description:** XTO Energy Incorporated respectfully requests approval to make the following changes to the approved APD. Changes to include Well name change, SHL, FTP, LTP, BHL, Casing sizes, Cement, Proposed total Depth, and Formation (Pool). FROM: TO: SHL: 344' FSL & 2175' FWL OF SECTION 17-T25S-R29E 314' FSL & 2175' FWL OF SECTION 17-T25S-R29E FTP: 100' FSL & 2590' FEL OF SECTION 17-T25S-R29E 100' FSL & 2345' FWL OF SECTION 17-T25S-R29E LTP: 100' FNL & 2590' FEL OF SECTION 5-T25S-R29E 100' FNL & 2345' FWL OF SECTION 5-T25S-R29E BHL: 50' FNL & 2590' FEL OF SECTION 5-T25S-R29E 50' FNL & 2345' FWL OF SECTION 5-T25S-R29E The proposed total depth is changing from 25156' MD; 9024' TVD (Bone Spring 3 Upper Shale) to 25303' MD; 9053' TVD (Bone Spring 3 Shale). The well name will change from Corral Canyon 17-5 Federal 802H to CORRAL 17-5 FED COM 802H. The API number for this well is 30-015-55345. A saturated salt brine will be utilized while drilling through the salt formations. See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, Freedom HTQ semi premium, Talon HTQ semi flush, and Flex hose.

NOI Attachments

Procedure Description

Corral\_17\_5\_Fed\_Com\_802H\_\_\_BLM\_APD\_Change\_Sundry\_Attachments.\_20240828135119.pdf

Received by OCD: 9/5/2024 5:57:39 AM

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Conditions of Approval

Additional  
Corral\_17\_5\_Fed\_Com\_802H\_COA\_20240904121236.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: JENA AUSTIN  
Signed on: AUG 28, 2024 01:53 PM  
Name: XTO ENERGY INCORPORATED  
Title: Regulatory Analyst  
Street Address: 22777 SPRINGWOODS VILLAGE PARKWAY  
City: SPRING State: TX  
Phone: (346) 335-5295  
Email address: JENA.N.AUSTIN@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: 09/04/2024  
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.

5. Lease Serial No.

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well

☐ Oil Well    ☐ Gas Well    ☐ Other

2. Name of Operator

3a. Address    3b. Phone No. (include area code)

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

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

8. Well Name and No.

9. API Well No.

10. Field and Pool or Exploratory Area

11. Country or Parish, State

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or 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 OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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



## Additional Information

### Additional Remarks

The well name will change from Corral Canyon 17-5 Federal 802H to CORRAL 17-5 FED COM 802H.

The API number for this well is 30-015-55345.

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

See attached Drilling Plan for updated cement and casing program.

Attachments: C-102, Drilling Plan, Directional Plan, MBS, Freedom HTQ semi premium, Talon HTQ semi flush, and Flex hose.

### Location of Well

0. SHL: SESW / 344 FSL / 2175 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.123801 / LONG: -104.008118 ( TVD: 0 feet, MD: 0 feet )

PPP: SWNE / 2647 FNL / 2596 FEL / TWSP: 25S / RANGE: 29E / SECTION: 8 / LAT: 32.144697 / LONG: -104.006417 ( TVD: 9024 feet, MD: 17500 feet )

PPP: SWSE / 100 FSL / 2590 FEL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.12311 / LONG: -104.00639 ( TVD: 9024 feet, MD: 9500 feet )

BHL: NWNE / 50 FNL / 2590 FEL / TWSP: 25S / RANGE: 29E / SECTION: 5 / LAT: 32.166353 / LONG: -104.006445 ( TVD: 9024 feet, MD: 25156 feet )

PECOS DISTRICT  
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	NMNM96848
LOCATION:	Sec.17 , T.25 S, R 29 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Corral Canyon 17-5 Fed 802H
SURFACE HOLE FOOTAGE:	314'/S & 2175'/W
BOTTOM HOLE FOOTAGE:	50'/N & 2345'/W

Previously known as Corral Canyon 17-5 Fed 8025H\_\_\_\_. Changes approved through engineering via Sundry 2808801\_ on 9-4-2025\_\_\_\_. Any previous COAs not addressed within the updated COAs still apply.

COA

H2S	<input checked="" type="radio"/> No <input type="radio"/> Yes			
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-Q	<input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
Cave / Karst	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
Additional Language	<input checked="" type="checkbox"/> Flex Hose <input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Casing Clearance <input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Pilot Hole <input type="checkbox"/> Fluid-Filled	<input checked="" type="checkbox"/> Break Testing

A. HYDROGEN SULFIDE

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

B. CASING

- 1. The 9-5/8 inch surface casing shall be set at approximately 450 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 **7-5/8** inch intermediate casing is:  
Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.
- a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon at 5396'**
  - b. **Second stage:** Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.

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

- ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down **Surface X Intermediate 1** 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 Choose an item. casing to tieback requirements listed above after the second stage BH to verify TOC.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

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

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

## C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

## D. SPECIAL REQUIREMENT (S)

### Unit Wells

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

### Commercial Well Determination

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

### BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

### **Offline Cementing**

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

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 1st Intermediate 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](mailto:BLM_NM_CFO_DrillingNotifications@BLM.GOV); (575) 361-2822

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

### A. CASING

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



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

## **B. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP 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 9/4/2024**  
575-234-5998 / [zstevens@blm.gov](mailto: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:	<input type="checkbox"/> Initial Submittal
			<input checked="" type="checkbox"/> Amended Report
		<input type="checkbox"/> As Drilled	

WELL LOCATION INFORMATION			
API Number 30-015-55345	Pool Code 96217	Pool Name WILLOW LAKE; BONE SPRING, SOUTHEAST	
Property Code	Property Name CORRAL 17-5 FED COM	Well Number 802H	
OGRID No. 005380	Operator Name XTO ENERGY, INC.	Ground Level Elevation 2,969'	
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input type="checkbox"/> Federal	

Surface Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	17	25S	29E		314 FSL	2,175 FWL	32.123719	-104.008119	EDDY

Bottom Hole Location									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	5	25S	29E	3	50 FNL	2,345 FWL	32.166355	-104.007479	EDDY


Dedicated Acres 958.97	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.			Well Setbacks are under Common Ownership: <input type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	17	25S	29E		314 FSL	2,175 FWL	32.123719	-104.008119	EDDY

First Take Point (FTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
N	17	25S	29E		100 FSL	2,345 FEL	32.123125	-104.007552	EDDY

Last Take Point (LTP)									
UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
	5	25S	29E	3	100 FNL	2,345 FWL	32.166218	-104.007481	EDDY

Unitized Area of Area of Interest	Spacing Unit Type : <input type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Elevation
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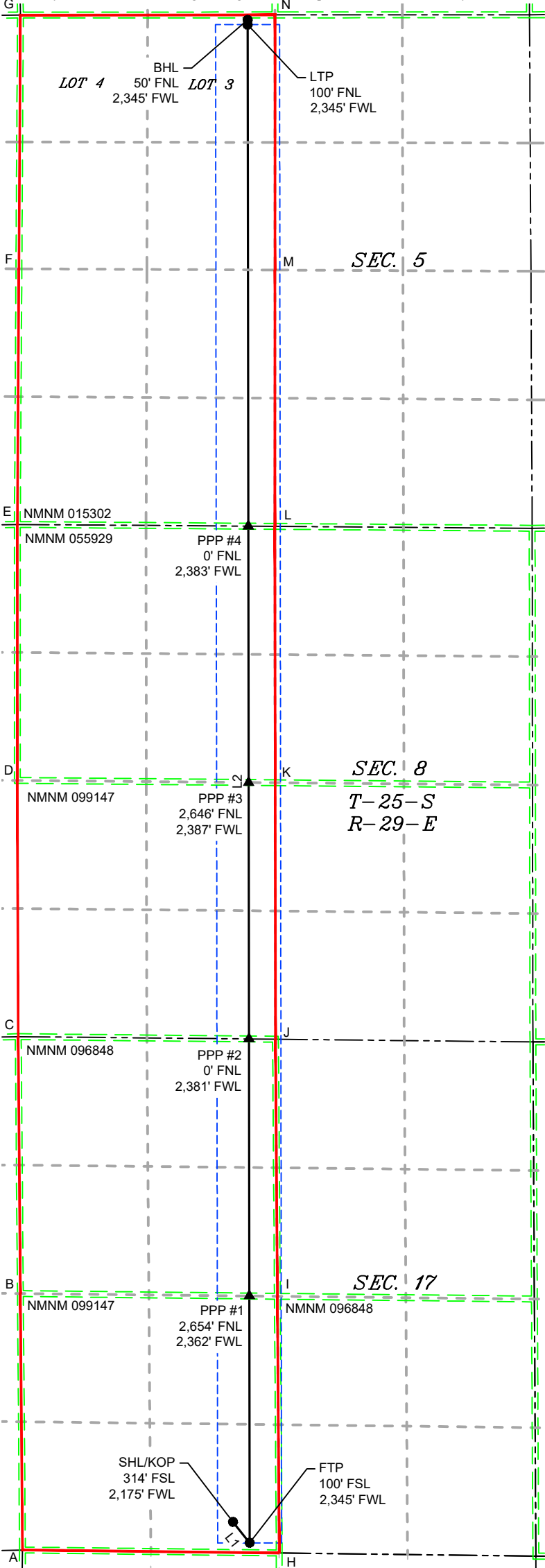
<div>OPERATOR CERTIFICATIONS</div> <div><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land 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.</p><p>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.</p></div> <div><div>Signature</div><div>8/28/24</div><div>Date</div></div> <div>Jena Austin</div> <div>Printed Name</div> <div>Jena.N.Austin@ExxonMobil.com</div> <div>Email Address</div>	<div>SURVEYOR CERTIFICATIONS</div> <div><p>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</p></div> <div><div></div><div>Signature and Seal of Professional Surveyor</div></div> <div><div>MARK DILLON HARP 23786</div><div>8/27/2024</div><div>Certificate Number</div><div>Date of Survey</div></div> <div><div>DB</div><div>618.013013.03-19</div></div>
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Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

ACREAGE DEDICATION PLATS

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



LEGEND

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

LOT ACREAGE TABLE
SECTION 5
T-25-S, R-31-E
LOT 3 = 39.53 ACRES
LOT 4 = 39.44 ACRES

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	141°24'54"	275.88'
L2	359°55'28"	15,726.49'

COORDINATE TABLE					
SHL/KOP (NAD 83 NME)			SHL/KOP (NAD 27 NME)		
Y =	408,896.9	N	Y =	408,838.4	N
X =	642,014.5	E	X =	600,830.6	E
LAT. =	32.123719	°N	LAT. =	32.123594	°N
LONG. =	104.008119	°W	LONG. =	104.007631	°W
FTP (NAD 83 NME)			FTP (NAD 27 NME)		
Y =	408,681.2	N	Y =	408,622.8	N
X =	642,186.6	E	X =	601,002.6	E
LAT. =	32.123125	°N	LAT. =	32.123000	°N
LONG. =	104.007566	°W	LONG. =	104.007077	°W
PPP #1(NAD 83 NME)			PPP #1(NAD 27 NME)		
Y =	411,230.9	N	Y =	411,172.4	N
X =	642,183.2	E	X =	600,999.1	E
LAT. =	32.130133	°N	LAT. =	32.130009	°N
LONG. =	104.007552	°W	LONG. =	104.007064	°W
PPP #2(NAD 83 NME)			PPP #2(NAD 27 NME)		
Y =	413,885.0	N	Y =	413,826.5	N
X =	642,179.6	E	X =	600,995.6	E
LAT. =	32.137429	°N	LAT. =	32.137305	°N
LONG. =	104.007538	°W	LONG. =	104.007049	°W
PPP #3(NAD 83 NME)			PPP #3(NAD 27 NME)		
Y =	416,532.8	N	Y =	416,474.2	N
X =	642,176.1	E	X =	600,992.1	E
LAT. =	32.144708	°N	LAT. =	32.144584	°N
LONG. =	104.007523	°W	LONG. =	104.007034	°W
PPP #4(NAD 83 NME)			PPP #4(NAD 27 NME)		
Y =	419,179.2	N	Y =	419,120.5	N
X =	642,172.5	E	X =	600,988.6	E
LAT. =	32.151983	°N	LAT. =	32.151858	°N
LONG. =	104.007509	°W	LONG. =	104.007020	°W
LTP (NAD 83 NME)			LTP (NAD 27 NME)		
Y =	424,357.7	N	Y =	424,298.9	N
X =	642,165.5	E	X =	600,981.8	E
LAT. =	32.166218	°N	LAT. =	32.166094	°N
LONG. =	104.007481	°W	LONG. =	104.006991	°W
BHL (NAD 83 NME)			BHL (NAD 27 NME)		
Y =	424,407.7	N	Y =	424,348.9	N
X =	642,165.8	E	X =	600,982.1	E
LAT. =	32.166355	°N	LAT. =	32.166231	°N
LONG. =	104.007479	°W	LONG. =	104.006990	°W
CORNER COORDINATES (NAD 83 NME)					
A - Y =	408,608.8	N	A - X =	639,842.1	E
B - Y =	411,256.6	N	B - X =	639,820.6	E
C - Y =	413,908.7	N	C - X =	639,798.7	E
D - Y =	416,554.2	N	D - X =	639,788.8	E
E - Y =	419,196.8	N	E - X =	639,789.3	E
F - Y =	421,836.3	N	F - X =	639,805.3	E
G - Y =	424,456.0	N	G - X =	639,821.1	E
H - Y =	408,577.6	N	H - X =	642,492.6	E
I - Y =	411,227.8	N	I - X =	642,473.3	E
J - Y =	413,882.3	N	J - X =	642,454.0	E
K - Y =	416,530.4	N	K - X =	642,450.5	E
L - Y =	419,177.2	N	L - X =	642,447.0	E
M - Y =	421,823.8	N	M - X =	642,448.1	E
N - Y =	424,457.9	N	N - X =	642,449.2	E
CORNER COORDINATES (NAD 27 NME)					
A - Y =	408,550.3	N	A - X =	598,658.2	E
B - Y =	411,198.1	N	B - X =	598,636.6	E
C - Y =	413,850.1	N	C - X =	598,614.7	E
D - Y =	416,495.6	N	D - X =	598,604.9	E
E - Y =	419,138.1	N	E - X =	598,605.5	E
F - Y =	421,777.6	N	F - X =	598,621.5	E
G - Y =	424,397.2	N	G - X =	598,637.4	E
H - Y =	408,519.2	N	H - X =	601,308.6	E
I - Y =	411,169.3	N	I - X =	601,289.3	E
J - Y =	413,823.7	N	J - X =	601,270.0	E
K - Y =	416,471.7	N	K - X =	601,266.6	E
L - Y =	419,118.5	N	L - X =	601,263.1	E
M - Y =	421,765.0	N	M - X =	601,264.3	E
N - Y =	424,399.1	N	N - X =	601,265.5	E

DB

618.013013.03-19

\\618.013 XTO Energy - NM\013 Corral Canyon Unit - Eddy\03 - Corral Canyon 17 - Eddy\Wells\19 - 17-5 FEDERAL 802H\DWG\802H C-102.dwg



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

XTO Energy Inc.

CORRAL 17 - 5 FED COM 802H

Projected TD: 25303' MD / 9053' TVD

SHL: 314' FSL & 2175' FWL , Section 17, T25S, R29E

BHL: 50' FNL & 2345' FWL , Section 5, T25S, R29E

Eddy County, NM

**1. Geologic Name of Surface Formation**

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Top of Salt	602'	Water
Base of Salt	2702'	Water
Delaware	2902'	Water
Brushy Canyon	5396'	Water/Oil/Gas
Bone Spring	6624'	Water
1st Bone Spring	7398'	Water/Oil/Gas
2nd Bone Spring	7845'	Water/Oil/Gas
3rd Bone Spring	9028'	Water/Oil/Gas
Target/Land Curve	9053'	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 9.625 inch casing @ 567' (35' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 8252.65' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 25303 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 7952.65 feet).

**3. Casing Design**

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 567'	9.625	40	J-55	BTC	New	1.93	11.10	27.78
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.21	2.86	2.28
8.75	4000' – 8252.65'	7.625	29.7	HC L-80	Flush Joint	New	2.33	2.78	3.21
6.75	0' – 8152.65'	5.5	20	RY P-110	Semi-Premium	New	1.26	2.49	2.13
6.75	8152.65' - 25303'	5.5	20	RY P-110	Semi-Flush	New	1.26	2.25	2.13

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

**Wellhead:**

*Permanent Wellhead – Multibowl System*

#### 4. Cement Program

##### **Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 567'**

Lead: 80 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft3/sx, 10.13 gal/sx water)

Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

##### **2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 8252.65'**

###### 1st Stage

Optional Lead: 290 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 260 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 5396

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

###### 2nd Stage

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

Tail: 610 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Top of Cement: 0

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

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (5396') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

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

##### **Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 25303'**

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 7952.65 feet

Tail: 1210 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 8452.65 feet

Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

## 5. Pressure Control Equipment

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

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the rated working pressure. When nipping up on the 9.625, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week.

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

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

hole on each of the wells.

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

## 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)	Additional Comments
0' - 567'	12.25	FW/Native	8.4-8.9	35-40	NC	Fresh water or native water
567' - 8252.65'	8.75	Saturated brine for salt interval / direct Emulsion	10-10.5	30-32	NC	Fully saturated salt across salado / salt
8252.65' - 25303'	6.75	OBM	10.5-11	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 solution. Saturated Salt mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

## 7. Auxiliary Well Control and Monitoring Equipment

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 9.625 casing.

## 8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

## 9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 155 to 175 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 4943 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 - Corral 17-5 Fed Com 802H\_Updated

Measured Depth: 25303.26 ft

TVD RKB: 9053.00 ft

### Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 408838.40 ft

Easting: 600830.60 ft

RKB: 3002.00 ft

Ground Level: 2969.00 ft

North Reference: Grid

Convergence Angle: 0.17 Deg

### Plan Sections

Corral 17-5 Fed Com 802H\_Updated

Measured		TVD				Build	Turn	Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate	Target
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1847.77	14.96	169.48	1839.31	-95.41	17.71	2.00	0.00	2.00	
4768.07	14.96	169.48	4660.69	-836.39	155.25	0.00	0.00	0.00	
5515.84	0.00	0.00	5400.00	-931.80	172.96	-2.00	0.00	2.00	
8452.65	0.00	0.00	8336.80	-931.80	172.96	0.00	0.00	0.00	
9577.65	90.00	359.92	9053.00	-215.60	172.00	8.00	0.00	8.00	802H FTP
25253.26	90.00	359.92	9053.00	15460.00	150.93	0.00	0.00	0.00	802H LTP
25303.26	90.00	359.92	9053.00	15510.01	150.87	0.00	0.00	0.00	802H BHL

### Position Uncertainty

Corral 17-5 Fed Com 802H\_Updated

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	XOM_R2OWSG MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.000	0.358	0.179	90.000	XOM_R2OWSG MWD+IFR1+MS
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.309	0.000	0.000	0.717	0.538	90.000	XOM_R2OWSG MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.324	0.000	0.000	1.075	0.896	90.000	XOM_R2OWSG MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.345	0.000	0.000	1.434	1.255	90.000	XOM_R2OWSG MWD+IFR1+MS
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.372	0.000	0.000	1.792	1.613	90.000	XOM_R2OWSG MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.403	0.000	0.000	2.151	1.972	90.000	XOM_R2OWSG MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.439	0.000	0.000	2.509	2.330	90.000	XOM_R2OWSG MWD+IFR1+MS
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.480	0.000	0.000	2.868	2.689	90.000	XOM_R2OWSG MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.525	0.000	0.000	3.226	3.047	90.000	XOM_R2OWSG MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.573	0.000	0.000	3.585	3.405	90.000	XOM_R2OWSG MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.626	0.000	0.000	3.943	3.764	90.000	XOM_R2OWSG MWD+IFR1+MS
1200.000	2.000	169.484	1199.980	4.276	0.000	4.110	-0.000	2.681	0.000	0.000	4.284	4.104	89.995	XOM_R2OWSG MWD+IFR1+MS
1300.000	4.000	169.484	1299.838	4.597	0.000	4.436	-0.000	2.737	0.000	0.000	4.613	4.429	89.941	XOM_R2OWSG MWD+IFR1+MS
1400.000	6.000	169.484	1399.452	4.917	0.000	4.766	-0.000	2.795	0.000	0.000	4.946	4.759	89.912	XOM_R2OWSG MWD+IFR1+MS
1500.000	8.000	169.484	1498.702	5.235	0.000	5.101	-0.000	2.853	0.000	0.000	5.283	5.094	89.961	XOM_R2OWSG MWD+IFR1+MS
1600.000	10.000	169.484	1597.465	5.552	0.000	5.441	-0.000	2.913	0.000	0.000	5.623	5.434	90.136	XOM_R2OWSG MWD+IFR1+MS
1700.000	12.000	169.484	1695.623	5.868	0.000	5.788	-0.000	2.976	0.000	0.000	5.966	5.781	90.497	XOM_R2OWSG MWD+IFR1+MS
1800.000	14.000	169.484	1793.055	6.182	0.000	6.141	-0.000	3.042	0.000	0.000	6.312	6.134	91.128	XOM_R2OWSG MWD+IFR1+MS

1847.771	14.955	169.484	1839.309	6.331	0.000	6.312	-0.000	3.071	0.000	0.000	6.480	6.305	91.400	XOM_R2OWSG MWD+IFR1+MS
1900.000	14.955	169.484	1889.769	6.517	0.000	6.502	-0.000	3.112	0.000	0.000	6.661	6.494	92.063	XOM_R2OWSG MWD+IFR1+MS
2000.000	14.955	169.484	1986.382	6.876	0.000	6.870	-0.000	3.201	0.000	0.000	7.008	6.861	94.005	XOM_R2OWSG MWD+IFR1+MS
2100.000	14.955	169.484	2082.994	7.240	0.000	7.245	-0.000	3.294	0.000	0.000	7.360	7.234	96.659	XOM_R2OWSG MWD+IFR1+MS
2200.000	14.955	169.484	2179.607	7.608	0.000	7.624	-0.000	3.390	0.000	0.000	7.717	7.610	100.438	XOM_R2OWSG MWD+IFR1+MS
2300.000	14.955	169.484	2276.220	7.979	0.000	8.008	-0.000	3.491	0.000	0.000	8.078	7.990	106.004	XOM_R2OWSG MWD+IFR1+MS
2400.000	14.955	169.484	2372.832	8.353	0.000	8.395	-0.000	3.595	0.000	0.000	8.445	8.370	114.169	XOM_R2OWSG MWD+IFR1+MS
2500.000	14.955	169.484	2469.445	8.729	0.000	8.785	-0.000	3.702	0.000	0.000	8.819	8.750	124.920	XOM_R2OWSG MWD+IFR1+MS
2600.000	14.955	169.484	2566.058	9.108	0.000	9.178	-0.000	3.811	0.000	0.000	9.201	9.127	-44.023	XOM_R2OWSG MWD+IFR1+MS
2700.000	14.955	169.484	2662.670	9.489	0.000	9.574	-0.000	3.924	0.000	0.000	9.590	9.501	-35.301	XOM_R2OWSG MWD+IFR1+MS
2800.000	14.955	169.484	2759.283	9.871	0.000	9.972	-0.000	4.039	0.000	0.000	9.983	9.874	-29.296	XOM_R2OWSG MWD+IFR1+MS
2900.000	14.955	169.484	2855.896	10.255	0.000	10.371	-0.000	4.157	0.000	0.000	10.380	10.247	-25.239	XOM_R2OWSG MWD+IFR1+MS
3000.000	14.955	169.484	2952.509	10.641	0.000	10.773	-0.000	4.277	0.000	0.000	10.780	10.621	-22.419	XOM_R2OWSG MWD+IFR1+MS
3100.000	14.955	169.484	3049.121	11.027	0.000	11.176	-0.000	4.400	0.000	0.000	11.181	10.995	-20.379	XOM_R2OWSG MWD+IFR1+MS
3200.000	14.955	169.484	3145.734	11.415	0.000	11.580	-0.000	4.524	0.000	0.000	11.584	11.371	-18.850	XOM_R2OWSG MWD+IFR1+MS
3300.000	14.955	169.484	3242.347	11.804	0.000	11.985	-0.000	4.650	0.000	0.000	11.989	11.747	-17.666	XOM_R2OWSG MWD+IFR1+MS
3400.000	14.955	169.484	3338.959	12.194	0.000	12.392	-0.000	4.779	0.000	0.000	12.395	12.124	-16.725	XOM_R2OWSG MWD+IFR1+MS
3500.000	14.955	169.484	3435.572	12.584	0.000	12.799	-0.000	4.909	0.000	0.000	12.802	12.501	-15.961	XOM_R2OWSG MWD+IFR1+MS
3600.000	14.955	169.484	3532.185	12.975	0.000	13.208	-0.000	5.041	0.000	0.000	13.210	12.880	-15.329	XOM_R2OWSG MWD+IFR1+MS
3700.000	14.955	169.484	3628.797	13.367	0.000	13.617	-0.000	5.175	0.000	0.000	13.619	13.259	-14.797	XOM_R2OWSG MWD+IFR1+MS

3800.000	14.955	169.484	3725.410	13.759	0.000	14.027	-0.000	5.311	0.000	0.000	14.028	13.638	-14.344	XOM_R2OWSG MWD+IFR1+MS
3900.000	14.955	169.484	3822.023	14.152	0.000	14.437	-0.000	5.448	0.000	0.000	14.439	14.018	-13.954	XOM_R2OWSG MWD+IFR1+MS
4000.000	14.955	169.484	3918.636	14.546	0.000	14.849	-0.000	5.587	0.000	0.000	14.850	14.399	-13.614	XOM_R2OWSG MWD+IFR1+MS
4100.000	14.955	169.484	4015.248	14.940	0.000	15.260	-0.000	5.728	0.000	0.000	15.261	14.780	-13.316	XOM_R2OWSG MWD+IFR1+MS
4200.000	14.955	169.484	4111.861	15.335	0.000	15.673	-0.000	5.871	0.000	0.000	15.674	15.162	-13.052	XOM_R2OWSG MWD+IFR1+MS
4300.000	14.955	169.484	4208.474	15.729	0.000	16.086	-0.000	6.015	0.000	0.000	16.086	15.544	-12.816	XOM_R2OWSG MWD+IFR1+MS
4400.000	14.955	169.484	4305.086	16.125	0.000	16.499	-0.000	6.161	0.000	0.000	16.500	15.927	-12.605	XOM_R2OWSG MWD+IFR1+MS
4500.000	14.955	169.484	4401.699	16.520	0.000	16.912	-0.000	6.308	0.000	0.000	16.913	16.310	-12.414	XOM_R2OWSG MWD+IFR1+MS
4600.000	14.955	169.484	4498.312	16.916	0.000	17.327	-0.000	6.457	0.000	0.000	17.327	16.693	-12.241	XOM_R2OWSG MWD+IFR1+MS
4700.000	14.955	169.484	4594.924	17.312	0.000	17.741	-0.000	6.608	0.000	0.000	17.741	17.077	-12.084	XOM_R2OWSG MWD+IFR1+MS
4768.073	14.955	169.484	4660.691	17.582	0.000	18.023	-0.000	6.711	0.000	0.000	18.024	17.338	-11.985	XOM_R2OWSG MWD+IFR1+MS
4800.000	14.317	169.484	4691.582	17.720	0.000	18.155	-0.000	6.761	0.000	0.000	18.155	17.460	-11.941	XOM_R2OWSG MWD+IFR1+MS
4900.000	12.317	169.484	4788.888	18.133	0.000	18.562	-0.000	6.913	0.000	0.000	18.562	17.839	-11.820	XOM_R2OWSG MWD+IFR1+MS
5000.000	10.317	169.484	4886.939	18.518	0.000	18.958	-0.000	7.061	0.000	0.000	18.958	18.213	-11.721	XOM_R2OWSG MWD+IFR1+MS
5100.000	8.317	169.484	4985.615	18.874	0.000	19.343	-0.000	7.202	0.000	0.000	19.343	18.581	-11.642	XOM_R2OWSG MWD+IFR1+MS
5200.000	6.317	169.484	5084.795	19.201	0.000	19.717	-0.000	7.338	0.000	0.000	19.717	18.943	-11.579	XOM_R2OWSG MWD+IFR1+MS
5300.000	4.317	169.484	5184.360	19.498	0.000	20.079	-0.000	7.469	0.000	0.000	20.079	19.297	-11.529	XOM_R2OWSG MWD+IFR1+MS
5400.000	2.317	169.484	5284.187	19.764	0.000	20.430	-0.000	7.594	0.000	0.000	20.430	19.643	-11.490	XOM_R2OWSG MWD+IFR1+MS
5500.000	0.317	169.484	5384.156	19.999	0.000	20.769	-0.000	7.715	0.000	0.000	20.769	19.981	-11.461	XOM_R2OWSG MWD+IFR1+MS
5515.844	0.000	0.000	5400.000	20.063	0.000	20.788	0.000	7.734	0.000	0.000	20.819	20.032	-11.471	XOM_R2OWSG MWD+IFR1+MS

5600.000	0.000	0.000	5484.156	20.327	0.000	21.038	0.000	7.834	0.000	0.000	21.069	20.295	-11.597	XOM_R2OWSG MWD+IFR1+MS
5700.000	0.000	0.000	5584.156	20.641	0.000	21.336	0.000	7.956	0.000	0.000	21.367	20.609	-11.750	XOM_R2OWSG MWD+IFR1+MS
5800.000	0.000	0.000	5684.156	20.956	0.000	21.636	0.000	8.080	0.000	0.000	21.667	20.924	-11.904	XOM_R2OWSG MWD+IFR1+MS
5900.000	0.000	0.000	5784.156	21.273	0.000	21.937	0.000	8.206	0.000	0.000	21.969	21.240	-12.059	XOM_R2OWSG MWD+IFR1+MS
6000.000	0.000	0.000	5884.156	21.591	0.000	22.241	0.000	8.335	0.000	0.000	22.272	21.558	-12.217	XOM_R2OWSG MWD+IFR1+MS
6100.000	0.000	0.000	5984.156	21.910	0.000	22.546	0.000	8.467	0.000	0.000	22.577	21.877	-12.376	XOM_R2OWSG MWD+IFR1+MS
6200.000	0.000	0.000	6084.156	22.231	0.000	22.852	0.000	8.601	0.000	0.000	22.884	22.198	-12.537	XOM_R2OWSG MWD+IFR1+MS
6300.000	0.000	0.000	6184.156	22.552	0.000	23.160	0.000	8.738	0.000	0.000	23.192	22.519	-12.700	XOM_R2OWSG MWD+IFR1+MS
6400.000	0.000	0.000	6284.156	22.875	0.000	23.469	0.000	8.878	0.000	0.000	23.502	22.842	-12.865	XOM_R2OWSG MWD+IFR1+MS
6500.000	0.000	0.000	6384.156	23.199	0.000	23.780	0.000	9.020	0.000	0.000	23.813	23.165	-13.032	XOM_R2OWSG MWD+IFR1+MS
6600.000	0.000	0.000	6484.156	23.524	0.000	24.092	0.000	9.165	0.000	0.000	24.125	23.490	-13.201	XOM_R2OWSG MWD+IFR1+MS
6700.000	0.000	0.000	6584.156	23.849	0.000	24.406	0.000	9.313	0.000	0.000	24.439	23.816	-13.371	XOM_R2OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6684.156	24.176	0.000	24.720	0.000	9.464	0.000	0.000	24.753	24.142	-13.544	XOM_R2OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6784.156	24.504	0.000	25.036	0.000	9.617	0.000	0.000	25.069	24.469	-13.718	XOM_R2OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6884.156	24.832	0.000	25.353	0.000	9.773	0.000	0.000	25.387	24.798	-13.895	XOM_R2OWSG MWD+IFR1+MS
7100.000	0.000	0.000	6984.156	25.161	0.000	25.671	0.000	9.932	0.000	0.000	25.705	25.127	-14.073	XOM_R2OWSG MWD+IFR1+MS
7200.000	0.000	0.000	7084.156	25.491	0.000	25.990	0.000	10.094	0.000	0.000	26.024	25.457	-14.254	XOM_R2OWSG MWD+IFR1+MS
7300.000	0.000	0.000	7184.156	25.822	0.000	26.310	0.000	10.259	0.000	0.000	26.345	25.787	-14.437	XOM_R2OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7284.156	26.154	0.000	26.631	0.000	10.426	0.000	0.000	26.666	26.118	-14.621	XOM_R2OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7384.156	26.486	0.000	26.953	0.000	10.597	0.000	0.000	26.988	26.450	-14.808	XOM_R2OWSG MWD+IFR1+MS

7600.000	0.000	0.000	7484.156	26.819	0.000	27.276	0.000	10.770	0.000	0.000	27.311	26.783	-14.997	XOM_R2OWSG MWD+IFR1+MS
7700.000	0.000	0.000	7584.156	27.152	0.000	27.600	0.000	10.947	0.000	0.000	27.635	27.116	-15.188	XOM_R2OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7684.156	27.487	0.000	27.925	0.000	11.126	0.000	0.000	27.960	27.450	-15.381	XOM_R2OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7784.156	27.821	0.000	28.250	0.000	11.308	0.000	0.000	28.286	27.785	-15.577	XOM_R2OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7884.156	28.157	0.000	28.576	0.000	11.493	0.000	0.000	28.612	28.120	-15.774	XOM_R2OWSG MWD+IFR1+MS
8100.000	0.000	0.000	7984.156	28.493	0.000	28.903	0.000	11.682	0.000	0.000	28.940	28.456	-15.974	XOM_R2OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8084.156	28.829	0.000	29.231	0.000	11.873	0.000	0.000	29.268	28.792	-16.176	XOM_R2OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8184.156	29.166	0.000	29.560	0.000	12.067	0.000	0.000	29.597	29.129	-16.380	XOM_R2OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8284.156	29.504	0.000	29.889	0.000	12.264	0.000	0.000	29.926	29.466	-16.587	XOM_R2OWSG MWD+IFR1+MS
8452.647	0.000	0.000	8336.803	29.682	0.000	30.062	0.000	12.369	0.000	0.000	30.100	29.644	-16.697	XOM_R2OWSG MWD+IFR1+MS
8500.000	3.788	359.923	8384.122	29.582	0.000	30.217	0.000	12.462	0.000	0.000	30.255	29.800	-16.758	XOM_R2OWSG MWD+IFR1+MS
8600.000	11.788	359.923	8483.119	29.001	0.000	30.533	0.000	12.650	0.000	0.000	30.570	30.108	-16.591	XOM_R2OWSG MWD+IFR1+MS
8700.000	19.788	359.923	8579.268	27.932	0.000	30.830	0.000	12.823	0.000	0.000	30.866	30.378	-15.988	XOM_R2OWSG MWD+IFR1+MS
8800.000	27.788	359.923	8670.698	26.416	0.000	31.106	0.000	12.984	0.000	0.000	31.141	30.607	-14.944	XOM_R2OWSG MWD+IFR1+MS
8900.000	35.788	359.923	8755.629	24.517	0.000	31.361	0.000	13.137	0.000	0.000	31.393	30.790	-13.615	XOM_R2OWSG MWD+IFR1+MS
9000.000	43.788	359.923	8832.408	22.326	0.000	31.592	0.000	13.291	0.000	0.000	31.623	30.929	-12.194	XOM_R2OWSG MWD+IFR1+MS
9100.000	51.788	359.923	8899.541	19.978	0.000	31.802	0.000	13.454	0.000	0.000	31.830	31.027	-10.822	XOM_R2OWSG MWD+IFR1+MS
9200.000	59.788	359.923	8955.720	17.665	0.000	31.990	0.000	13.638	0.000	0.000	32.015	31.088	-9.579	XOM_R2OWSG MWD+IFR1+MS
9300.000	67.788	359.923	8999.853	15.667	0.000	32.158	0.000	13.851	0.000	0.000	32.180	31.120	-8.492	XOM_R2OWSG MWD+IFR1+MS
9400.000	75.788	359.923	9031.081	14.347	0.000	32.306	0.000	14.100	0.000	0.000	32.326	31.131	-7.565	XOM_R2OWSG MWD+IFR1+MS

9500.000	83.788	359.923	9048.795	14.059	0.000	32.434	0.000	14.388	0.000	0.000	32.451	31.133	-6.792	XOM_R2OWSG MWD+IFR1+MS
9577.647	90.000	359.923	9053.000	14.637	0.000	32.517	0.000	14.637	0.000	0.000	32.533	31.135	-6.299	XOM_R2OWSG MWD+IFR1+MS
9600.000	90.000	359.923	9053.000	14.712	0.000	32.539	0.000	14.712	0.000	0.000	32.555	31.136	-6.172	XOM_R2OWSG MWD+IFR1+MS
9700.000	90.000	359.923	9053.000	15.069	0.000	32.658	0.000	15.069	0.000	0.000	32.671	31.139	-5.566	XOM_R2OWSG MWD+IFR1+MS
9800.000	90.000	359.923	9053.000	15.457	0.000	32.799	0.000	15.457	0.000	0.000	32.811	31.144	-4.975	XOM_R2OWSG MWD+IFR1+MS
9900.000	90.000	359.923	9053.000	15.875	0.000	32.964	0.000	15.875	0.000	0.000	32.974	31.148	-4.418	XOM_R2OWSG MWD+IFR1+MS
10000.000	90.000	359.923	9053.000	16.320	0.000	33.151	0.000	16.320	0.000	0.000	33.160	31.153	-3.908	XOM_R2OWSG MWD+IFR1+MS
10100.000	90.000	359.923	9053.000	16.790	0.000	33.361	0.000	16.790	0.000	0.000	33.368	31.159	-3.449	XOM_R2OWSG MWD+IFR1+MS
10200.000	90.000	359.923	9053.000	17.283	0.000	33.592	0.000	17.283	0.000	0.000	33.598	31.165	-3.040	XOM_R2OWSG MWD+IFR1+MS
10300.000	90.000	359.923	9053.000	17.797	0.000	33.844	0.000	17.797	0.000	0.000	33.850	31.171	-2.680	XOM_R2OWSG MWD+IFR1+MS
10400.000	90.000	359.923	9053.000	18.330	0.000	34.118	0.000	18.330	0.000	0.000	34.122	31.178	-2.364	XOM_R2OWSG MWD+IFR1+MS
10500.000	90.000	359.923	9053.000	18.880	0.000	34.412	0.000	18.880	0.000	0.000	34.415	31.186	-2.089	XOM_R2OWSG MWD+IFR1+MS
10600.000	90.000	359.923	9053.000	19.447	0.000	34.725	0.000	19.447	0.000	0.000	34.729	31.194	-1.848	XOM_R2OWSG MWD+IFR1+MS
10700.000	90.000	359.923	9053.000	20.028	0.000	35.058	0.000	20.028	0.000	0.000	35.061	31.203	-1.638	XOM_R2OWSG MWD+IFR1+MS
10800.000	90.000	359.923	9053.000	20.623	0.000	35.410	0.000	20.623	0.000	0.000	35.412	31.213	-1.455	XOM_R2OWSG MWD+IFR1+MS
10900.000	90.000	359.923	9053.000	21.230	0.000	35.780	0.000	21.230	0.000	0.000	35.782	31.223	-1.295	XOM_R2OWSG MWD+IFR1+MS
11000.000	90.000	359.923	9053.000	21.849	0.000	36.168	0.000	21.849	0.000	0.000	36.169	31.233	-1.155	XOM_R2OWSG MWD+IFR1+MS
11100.000	90.000	359.923	9053.000	22.478	0.000	36.573	0.000	22.478	0.000	0.000	36.574	31.244	-1.032	XOM_R2OWSG MWD+IFR1+MS
11200.000	90.000	359.923	9053.000	23.116	0.000	36.994	0.000	23.116	0.000	0.000	36.995	31.256	-0.924	XOM_R2OWSG MWD+IFR1+MS
11300.000	90.000	359.923	9053.000	23.763	0.000	37.431	0.000	23.763	0.000	0.000	37.432	31.269	-0.829	XOM_R2OWSG MWD+IFR1+MS



11400.000	90.000	359.923	9053.000	24.419	0.000	37.884	0.000	24.419	0.000	0.000	37.885	31.282	-0.745	XOM_R2OWSG MWD+IFR1+MS
11500.000	90.000	359.923	9053.000	25.081	0.000	38.352	0.000	25.081	0.000	0.000	38.352	31.296	-0.670	XOM_R2OWSG MWD+IFR1+MS
11600.000	90.000	359.923	9053.000	25.751	0.000	38.834	0.000	25.751	0.000	0.000	38.834	31.310	-0.604	XOM_R2OWSG MWD+IFR1+MS
11700.000	90.000	359.923	9053.000	26.427	0.000	39.329	0.000	26.427	0.000	0.000	39.330	31.325	-0.545	XOM_R2OWSG MWD+IFR1+MS
11800.000	90.000	359.923	9053.000	27.109	0.000	39.838	0.000	27.109	0.000	0.000	39.839	31.341	-0.492	XOM_R2OWSG MWD+IFR1+MS
11900.000	90.000	359.923	9053.000	27.796	0.000	40.360	0.000	27.796	0.000	0.000	40.361	31.357	-0.445	XOM_R2OWSG MWD+IFR1+MS
12000.000	90.000	359.923	9053.000	28.488	0.000	40.895	0.000	28.488	0.000	0.000	40.895	31.374	-0.403	XOM_R2OWSG MWD+IFR1+MS
12100.000	90.000	359.923	9053.000	29.185	0.000	41.441	0.000	29.185	0.000	0.000	41.441	31.392	-0.365	XOM_R2OWSG MWD+IFR1+MS
12200.000	90.000	359.923	9053.000	29.886	0.000	41.998	0.000	29.886	0.000	0.000	41.998	31.410	-0.331	XOM_R2OWSG MWD+IFR1+MS
12300.000	90.000	359.923	9053.000	30.592	0.000	42.566	0.000	30.592	0.000	0.000	42.566	31.429	-0.300	XOM_R2OWSG MWD+IFR1+MS
12400.000	90.000	359.923	9053.000	31.301	0.000	43.145	0.000	31.301	0.000	0.000	43.145	31.449	-0.273	XOM_R2OWSG MWD+IFR1+MS
12500.000	90.000	359.923	9053.000	32.013	0.000	43.734	0.000	32.013	0.000	0.000	43.734	31.469	-0.247	XOM_R2OWSG MWD+IFR1+MS
12600.000	90.000	359.923	9053.000	32.729	0.000	44.333	0.000	32.729	0.000	0.000	44.333	31.490	-0.225	XOM_R2OWSG MWD+IFR1+MS
12700.000	90.000	359.923	9053.000	33.448	0.000	44.941	0.000	33.448	0.000	0.000	44.941	31.512	-0.204	XOM_R2OWSG MWD+IFR1+MS
12800.000	90.000	359.923	9053.000	34.170	0.000	45.557	0.000	34.170	0.000	0.000	45.557	31.534	-0.185	XOM_R2OWSG MWD+IFR1+MS
12900.000	90.000	359.923	9053.000	34.895	0.000	46.183	0.000	34.895	0.000	0.000	46.183	31.557	-0.168	XOM_R2OWSG MWD+IFR1+MS
13000.000	90.000	359.923	9053.000	35.622	0.000	46.816	0.000	35.622	0.000	0.000	46.816	31.580	-0.152	XOM_R2OWSG MWD+IFR1+MS
13100.000	90.000	359.923	9053.000	36.352	0.000	47.458	0.000	36.352	0.000	0.000	47.458	31.604	-0.138	XOM_R2OWSG MWD+IFR1+MS
13200.000	90.000	359.923	9053.000	37.084	0.000	48.107	0.000	37.084	0.000	0.000	48.107	31.629	-0.125	XOM_R2OWSG MWD+IFR1+MS
13300.000	90.000	359.923	9053.000	37.818	0.000	48.763	0.000	37.818	0.000	0.000	48.763	31.655	-0.113	XOM_R2OWSG MWD+IFR1+MS

13400.000	90.000	359.923	9053.000	38.554	0.000	49.426	0.000	38.554	0.000	0.000	49.426	31.681	-0.102	XOM_R2OWSG MWD+IFR1+MS
13500.000	90.000	359.923	9053.000	39.291	0.000	50.096	0.000	39.291	0.000	0.000	50.096	31.707	-0.092	XOM_R2OWSG MWD+IFR1+MS
13600.000	90.000	359.923	9053.000	40.031	0.000	50.773	0.000	40.031	0.000	0.000	50.773	31.735	-0.083	XOM_R2OWSG MWD+IFR1+MS
13700.000	90.000	359.923	9053.000	40.772	0.000	51.456	0.000	40.772	0.000	0.000	51.456	31.763	-0.075	XOM_R2OWSG MWD+IFR1+MS
13800.000	90.000	359.923	9053.000	41.515	0.000	52.144	0.000	41.515	0.000	0.000	52.144	31.791	-0.067	XOM_R2OWSG MWD+IFR1+MS
13900.000	90.000	359.923	9053.000	42.260	0.000	52.838	0.000	42.260	0.000	0.000	52.838	31.821	-0.060	XOM_R2OWSG MWD+IFR1+MS
14000.000	90.000	359.923	9053.000	43.006	0.000	53.538	0.000	43.006	0.000	0.000	53.538	31.851	-0.053	XOM_R2OWSG MWD+IFR1+MS
14100.000	90.000	359.923	9053.000	43.753	0.000	54.243	0.000	43.753	0.000	0.000	54.243	31.881	-0.047	XOM_R2OWSG MWD+IFR1+MS
14200.000	90.000	359.923	9053.000	44.501	0.000	54.953	0.000	44.501	0.000	0.000	54.953	31.912	-0.042	XOM_R2OWSG MWD+IFR1+MS
14300.000	90.000	359.923	9053.000	45.251	0.000	55.668	0.000	45.251	0.000	0.000	55.668	31.944	-0.036	XOM_R2OWSG MWD+IFR1+MS
14400.000	90.000	359.923	9053.000	46.002	0.000	56.388	0.000	46.002	0.000	0.000	56.388	31.977	-0.032	XOM_R2OWSG MWD+IFR1+MS
14500.000	90.000	359.923	9053.000	46.754	0.000	57.112	0.000	46.754	0.000	0.000	57.112	32.010	-0.027	XOM_R2OWSG MWD+IFR1+MS
14600.000	90.000	359.923	9053.000	47.507	0.000	57.841	0.000	47.507	0.000	0.000	57.841	32.043	-0.023	XOM_R2OWSG MWD+IFR1+MS
14700.000	90.000	359.923	9053.000	48.261	0.000	58.573	0.000	48.261	0.000	0.000	58.573	32.078	-0.019	XOM_R2OWSG MWD+IFR1+MS
14800.000	90.000	359.923	9053.000	49.016	0.000	59.310	0.000	49.016	0.000	0.000	59.310	32.112	-0.016	XOM_R2OWSG MWD+IFR1+MS
14900.000	90.000	359.923	9053.000	49.772	0.000	60.051	0.000	49.772	0.000	0.000	60.051	32.148	-0.013	XOM_R2OWSG MWD+IFR1+MS
15000.000	90.000	359.923	9053.000	50.529	0.000	60.795	0.000	50.529	0.000	0.000	60.795	32.184	-0.010	XOM_R2OWSG MWD+IFR1+MS
15100.000	90.000	359.923	9053.000	51.287	0.000	61.543	0.000	51.287	0.000	0.000	61.543	32.221	-0.007	XOM_R2OWSG MWD+IFR1+MS
15200.000	90.000	359.923	9053.000	52.046	0.000	62.294	0.000	52.046	0.000	0.000	62.295	32.258	-0.005	XOM_R2OWSG MWD+IFR1+MS
15300.000	90.000	359.923	9053.000	52.805	0.000	63.049	0.000	52.805	0.000	0.000	63.049	32.296	-0.002	XOM_R2OWSG MWD+IFR1+MS

15400.000	90.000	359.923	9053.000	53.565	0.000	63.807	0.000	53.565	0.000	0.000	63.807	32.335	-0.000	XOM_R2OWSG MWD+IFR1+MS
15500.000	90.000	359.923	9053.000	54.326	0.000	64.568	0.000	54.326	0.000	0.000	64.568	32.374	0.002	XOM_R2OWSG MWD+IFR1+MS
15600.000	90.000	359.923	9053.000	55.087	0.000	65.333	0.000	55.087	0.000	0.000	65.333	32.414	0.004	XOM_R2OWSG MWD+IFR1+MS
15700.000	90.000	359.923	9053.000	55.849	0.000	66.100	0.000	55.849	0.000	0.000	66.100	32.454	0.005	XOM_R2OWSG MWD+IFR1+MS
15800.000	90.000	359.923	9053.000	56.612	0.000	66.869	0.000	56.612	0.000	0.000	66.869	32.495	0.007	XOM_R2OWSG MWD+IFR1+MS
15900.000	90.000	359.923	9053.000	57.375	0.000	67.642	0.000	57.375	0.000	0.000	67.642	32.537	0.008	XOM_R2OWSG MWD+IFR1+MS
16000.000	90.000	359.923	9053.000	58.139	0.000	68.417	0.000	58.139	0.000	0.000	68.417	32.579	0.009	XOM_R2OWSG MWD+IFR1+MS
16100.000	90.000	359.923	9053.000	58.903	0.000	69.195	0.000	58.903	0.000	0.000	69.195	32.622	0.011	XOM_R2OWSG MWD+IFR1+MS
16200.000	90.000	359.923	9053.000	59.668	0.000	69.975	0.000	59.668	0.000	0.000	69.975	32.665	0.012	XOM_R2OWSG MWD+IFR1+MS
16300.000	90.000	359.923	9053.000	60.434	0.000	70.757	0.000	60.434	0.000	0.000	70.758	32.709	0.013	XOM_R2OWSG MWD+IFR1+MS
16400.000	90.000	359.923	9053.000	61.199	0.000	71.542	0.000	61.199	0.000	0.000	71.542	32.754	0.014	XOM_R2OWSG MWD+IFR1+MS
16500.000	90.000	359.923	9053.000	61.966	0.000	72.329	0.000	61.966	0.000	0.000	72.329	32.799	0.014	XOM_R2OWSG MWD+IFR1+MS
16600.000	90.000	359.923	9053.000	62.733	0.000	73.118	0.000	62.733	0.000	0.000	73.118	32.844	0.015	XOM_R2OWSG MWD+IFR1+MS
16700.000	90.000	359.923	9053.000	63.500	0.000	73.910	0.000	63.500	0.000	0.000	73.910	32.891	0.016	XOM_R2OWSG MWD+IFR1+MS
16800.000	90.000	359.923	9053.000	64.268	0.000	74.703	0.000	64.268	0.000	0.000	74.703	32.937	0.016	XOM_R2OWSG MWD+IFR1+MS
16900.000	90.000	359.923	9053.000	65.036	0.000	75.498	0.000	65.036	0.000	0.000	75.498	32.985	0.017	XOM_R2OWSG MWD+IFR1+MS
17000.000	90.000	359.923	9053.000	65.804	0.000	76.295	0.000	65.804	0.000	0.000	76.295	33.033	0.018	XOM_R2OWSG MWD+IFR1+MS
17100.000	90.000	359.923	9053.000	66.573	0.000	77.094	0.000	66.573	0.000	0.000	77.094	33.081	0.018	XOM_R2OWSG MWD+IFR1+MS
17200.000	90.000	359.923	9053.000	67.342	0.000	77.894	0.000	67.342	0.000	0.000	77.895	33.130	0.018	XOM_R2OWSG MWD+IFR1+MS
17300.000	90.000	359.923	9053.000	68.112	0.000	78.697	0.000	68.112	0.000	0.000	78.697	33.180	0.019	XOM_R2OWSG MWD+IFR1+MS

17400.000	90.000	359.923	9053.000	68.882	0.000	79.501	0.000	68.882	0.000	0.000	79.501	33.230	0.019	XOM_R2OWSG MWD+IFR1+MS
17500.000	90.000	359.923	9053.000	69.652	0.000	80.306	0.000	69.652	0.000	0.000	80.306	33.281	0.019	XOM_R2OWSG MWD+IFR1+MS
17600.000	90.000	359.923	9053.000	70.423	0.000	81.114	0.000	70.423	0.000	0.000	81.114	33.333	0.019	XOM_R2OWSG MWD+IFR1+MS
17700.000	90.000	359.923	9053.000	71.194	0.000	81.922	0.000	71.194	0.000	0.000	81.922	33.384	0.020	XOM_R2OWSG MWD+IFR1+MS
17800.000	90.000	359.923	9053.000	71.965	0.000	82.732	0.000	71.965	0.000	0.000	82.732	33.437	0.020	XOM_R2OWSG MWD+IFR1+MS
17900.000	90.000	359.923	9053.000	72.737	0.000	83.544	0.000	72.737	0.000	0.000	83.544	33.490	0.020	XOM_R2OWSG MWD+IFR1+MS
18000.000	90.000	359.923	9053.000	73.508	0.000	84.357	0.000	73.508	0.000	0.000	84.357	33.543	0.020	XOM_R2OWSG MWD+IFR1+MS
18100.000	90.000	359.923	9053.000	74.280	0.000	85.171	0.000	74.280	0.000	0.000	85.171	33.597	0.020	XOM_R2OWSG MWD+IFR1+MS
18200.000	90.000	359.923	9053.000	75.053	0.000	85.987	0.000	75.053	0.000	0.000	85.987	33.652	0.020	XOM_R2OWSG MWD+IFR1+MS
18300.000	90.000	359.923	9053.000	75.825	0.000	86.804	0.000	75.825	0.000	0.000	86.804	33.707	0.020	XOM_R2OWSG MWD+IFR1+MS
18400.000	90.000	359.923	9053.000	76.598	0.000	87.622	0.000	76.598	0.000	0.000	87.622	33.763	0.020	XOM_R2OWSG MWD+IFR1+MS
18500.000	90.000	359.923	9053.000	77.371	0.000	88.441	0.000	77.371	0.000	0.000	88.441	33.819	0.020	XOM_R2OWSG MWD+IFR1+MS
18600.000	90.000	359.923	9053.000	78.144	0.000	89.262	0.000	78.144	0.000	0.000	89.262	33.876	0.020	XOM_R2OWSG MWD+IFR1+MS
18700.000	90.000	359.923	9053.000	78.918	0.000	90.083	0.000	78.918	0.000	0.000	90.084	33.933	0.020	XOM_R2OWSG MWD+IFR1+MS
18800.000	90.000	359.923	9053.000	79.692	0.000	90.906	0.000	79.692	0.000	0.000	90.906	33.991	0.020	XOM_R2OWSG MWD+IFR1+MS
18900.000	90.000	359.923	9053.000	80.466	0.000	91.730	0.000	80.466	0.000	0.000	91.730	34.049	0.020	XOM_R2OWSG MWD+IFR1+MS
19000.000	90.000	359.923	9053.000	81.240	0.000	92.555	0.000	81.240	0.000	0.000	92.555	34.108	0.020	XOM_R2OWSG MWD+IFR1+MS
19100.000	90.000	359.923	9053.000	82.014	0.000	93.381	0.000	82.014	0.000	0.000	93.381	34.167	0.020	XOM_R2OWSG MWD+IFR1+MS
19200.000	90.000	359.923	9053.000	82.789	0.000	94.208	0.000	82.789	0.000	0.000	94.208	34.227	0.019	XOM_R2OWSG MWD+IFR1+MS
19300.000	90.000	359.923	9053.000	83.564	0.000	95.036	0.000	83.564	0.000	0.000	95.036	34.288	0.019	XOM_R2OWSG MWD+IFR1+MS

19400.000	90.000	359.923	9053.000	84.338	0.000	95.864	0.000	84.338	0.000	0.000	95.865	34.348	0.019	XOM_R2OWSG MWD+IFR1+MS
19500.000	90.000	359.923	9053.000	85.114	0.000	96.694	0.000	85.114	0.000	0.000	96.694	34.410	0.019	XOM_R2OWSG MWD+IFR1+MS
19600.000	90.000	359.923	9053.000	85.889	0.000	97.525	0.000	85.889	0.000	0.000	97.525	34.472	0.019	XOM_R2OWSG MWD+IFR1+MS
19700.000	90.000	359.923	9053.000	86.664	0.000	98.356	0.000	86.664	0.000	0.000	98.356	34.534	0.018	XOM_R2OWSG MWD+IFR1+MS
19800.000	90.000	359.923	9053.000	87.440	0.000	99.189	0.000	87.440	0.000	0.000	99.189	34.597	0.018	XOM_R2OWSG MWD+IFR1+MS
19900.000	90.000	359.923	9053.000	88.216	0.000	100.022	0.000	88.216	0.000	0.000	100.022	34.660	0.018	XOM_R2OWSG MWD+IFR1+MS
20000.000	90.000	359.923	9053.000	88.992	0.000	100.856	0.000	88.992	0.000	0.000	100.856	34.724	0.018	XOM_R2OWSG MWD+IFR1+MS
20100.000	90.000	359.923	9053.000	89.768	0.000	101.691	0.000	89.768	0.000	0.000	101.691	34.788	0.018	XOM_R2OWSG MWD+IFR1+MS
20200.000	90.000	359.923	9053.000	90.544	0.000	102.526	0.000	90.544	0.000	0.000	102.526	34.853	0.017	XOM_R2OWSG MWD+IFR1+MS
20300.000	90.000	359.923	9053.000	91.320	0.000	103.362	0.000	91.320	0.000	0.000	103.363	34.919	0.017	XOM_R2OWSG MWD+IFR1+MS
20400.000	90.000	359.923	9053.000	92.097	0.000	104.199	0.000	92.097	0.000	0.000	104.200	34.984	0.017	XOM_R2OWSG MWD+IFR1+MS
20500.000	90.000	359.923	9053.000	92.874	0.000	105.037	0.000	92.874	0.000	0.000	105.037	35.051	0.017	XOM_R2OWSG MWD+IFR1+MS
20600.000	90.000	359.923	9053.000	93.651	0.000	105.876	0.000	93.651	0.000	0.000	105.876	35.117	0.016	XOM_R2OWSG MWD+IFR1+MS
20700.000	90.000	359.923	9053.000	94.427	0.000	106.715	0.000	94.427	0.000	0.000	106.715	35.185	0.016	XOM_R2OWSG MWD+IFR1+MS
20800.000	90.000	359.923	9053.000	95.205	0.000	107.555	0.000	95.205	0.000	0.000	107.555	35.252	0.016	XOM_R2OWSG MWD+IFR1+MS
20900.000	90.000	359.923	9053.000	95.982	0.000	108.395	0.000	95.982	0.000	0.000	108.395	35.320	0.015	XOM_R2OWSG MWD+IFR1+MS
21000.000	90.000	359.923	9053.000	96.759	0.000	109.236	0.000	96.759	0.000	0.000	109.236	35.389	0.015	XOM_R2OWSG MWD+IFR1+MS
21100.000	90.000	359.923	9053.000	97.537	0.000	110.078	0.000	97.537	0.000	0.000	110.078	35.458	0.015	XOM_R2OWSG MWD+IFR1+MS
21200.000	90.000	359.923	9053.000	98.314	0.000	110.920	0.000	98.314	0.000	0.000	110.920	35.528	0.015	XOM_R2OWSG MWD+IFR1+MS
21300.000	90.000	359.923	9053.000	99.092	0.000	111.763	0.000	99.092	0.000	0.000	111.763	35.598	0.014	XOM_R2OWSG MWD+IFR1+MS

21400.000	90.000	359.923	9053.000	99.870	0.000	112.606	0.000	99.870	0.000	0.000	112.607	35.668	0.014	XOM_R2OWSG MWD+IFR1+MS
21500.000	90.000	359.923	9053.000	100.647	0.000	113.451	0.000	100.647	0.000	0.000	113.451	35.739	0.014	XOM_R2OWSG MWD+IFR1+MS
21600.000	90.000	359.923	9053.000	101.425	0.000	114.295	0.000	101.425	0.000	0.000	114.295	35.810	0.013	XOM_R2OWSG MWD+IFR1+MS
21700.000	90.000	359.923	9053.000	102.204	0.000	115.140	0.000	102.204	0.000	0.000	115.140	35.882	0.013	XOM_R2OWSG MWD+IFR1+MS
21800.000	90.000	359.923	9053.000	102.982	0.000	115.986	0.000	102.982	0.000	0.000	115.986	35.954	0.013	XOM_R2OWSG MWD+IFR1+MS
21900.000	90.000	359.923	9053.000	103.760	0.000	116.832	0.000	103.760	0.000	0.000	116.832	36.027	0.012	XOM_R2OWSG MWD+IFR1+MS
22000.000	90.000	359.923	9053.000	104.538	0.000	117.679	0.000	104.538	0.000	0.000	117.679	36.100	0.012	XOM_R2OWSG MWD+IFR1+MS
22100.000	90.000	359.923	9053.000	105.317	0.000	118.526	0.000	105.317	0.000	0.000	118.526	36.174	0.012	XOM_R2OWSG MWD+IFR1+MS
22200.000	90.000	359.923	9053.000	106.096	0.000	119.374	0.000	106.096	0.000	0.000	119.374	36.248	0.012	XOM_R2OWSG MWD+IFR1+MS
22300.000	90.000	359.923	9053.000	106.874	0.000	120.222	0.000	106.874	0.000	0.000	120.222	36.322	0.011	XOM_R2OWSG MWD+IFR1+MS
22400.000	90.000	359.923	9053.000	107.653	0.000	121.070	0.000	107.653	0.000	0.000	121.071	36.397	0.011	XOM_R2OWSG MWD+IFR1+MS
22500.000	90.000	359.923	9053.000	108.432	0.000	121.920	0.000	108.432	0.000	0.000	121.920	36.472	0.011	XOM_R2OWSG MWD+IFR1+MS
22600.000	90.000	359.923	9053.000	109.211	0.000	122.769	0.000	109.211	0.000	0.000	122.769	36.548	0.010	XOM_R2OWSG MWD+IFR1+MS
22700.000	90.000	359.923	9053.000	109.990	0.000	123.619	0.000	109.990	0.000	0.000	123.619	36.624	0.010	XOM_R2OWSG MWD+IFR1+MS
22800.000	90.000	359.923	9053.000	110.769	0.000	124.469	0.000	110.769	0.000	0.000	124.470	36.700	0.010	XOM_R2OWSG MWD+IFR1+MS
22900.000	90.000	359.923	9053.000	111.548	0.000	125.320	0.000	111.548	0.000	0.000	125.320	36.777	0.009	XOM_R2OWSG MWD+IFR1+MS
23000.000	90.000	359.923	9053.000	112.327	0.000	126.171	0.000	112.327	0.000	0.000	126.172	36.854	0.009	XOM_R2OWSG MWD+IFR1+MS
23100.000	90.000	359.923	9053.000	113.107	0.000	127.023	0.000	113.107	0.000	0.000	127.023	36.932	0.009	XOM_R2OWSG MWD+IFR1+MS
23200.000	90.000	359.923	9053.000	113.886	0.000	127.875	0.000	113.886	0.000	0.000	127.875	37.010	0.008	XOM_R2OWSG MWD+IFR1+MS
23300.000	90.000	359.923	9053.000	114.666	0.000	128.728	0.000	114.666	0.000	0.000	128.728	37.089	0.008	XOM_R2OWSG MWD+IFR1+MS



23400.000	90.000	359.923	9053.000	115.445	0.000	129.580	0.000	115.445	0.000	0.000	129.580	37.168	0.008	XOM_R2OWSG MWD+IFR1+MS
23500.000	90.000	359.923	9053.000	116.225	0.000	130.433	0.000	116.225	0.000	0.000	130.434	37.247	0.007	XOM_R2OWSG MWD+IFR1+MS
23600.000	90.000	359.923	9053.000	117.005	0.000	131.287	0.000	117.005	0.000	0.000	131.287	37.327	0.007	XOM_R2OWSG MWD+IFR1+MS
23700.000	90.000	359.923	9053.000	117.784	0.000	132.141	0.000	117.784	0.000	0.000	132.141	37.407	0.007	XOM_R2OWSG MWD+IFR1+MS
23800.000	90.000	359.923	9053.000	118.564	0.000	132.995	0.000	118.564	0.000	0.000	132.995	37.487	0.007	XOM_R2OWSG MWD+IFR1+MS
23900.000	90.000	359.923	9053.000	119.344	0.000	133.850	0.000	119.344	0.000	0.000	133.850	37.568	0.006	XOM_R2OWSG MWD+IFR1+MS
24000.000	90.000	359.923	9053.000	120.124	0.000	134.705	0.000	120.124	0.000	0.000	134.705	37.650	0.006	XOM_R2OWSG MWD+IFR1+MS
24100.000	90.000	359.923	9053.000	120.904	0.000	135.560	0.000	120.904	0.000	0.000	135.560	37.731	0.006	XOM_R2OWSG MWD+IFR1+MS
24200.000	90.000	359.923	9053.000	121.684	0.000	136.415	0.000	121.684	0.000	0.000	136.416	37.813	0.005	XOM_R2OWSG MWD+IFR1+MS
24300.000	90.000	359.923	9053.000	122.464	0.000	137.271	0.000	122.464	0.000	0.000	137.271	37.896	0.005	XOM_R2OWSG MWD+IFR1+MS
24400.000	90.000	359.923	9053.000	123.244	0.000	138.127	0.000	123.244	0.000	0.000	138.128	37.979	0.005	XOM_R2OWSG MWD+IFR1+MS
24500.000	90.000	359.923	9053.000	124.025	0.000	138.984	0.000	124.025	0.000	0.000	138.984	38.062	0.004	XOM_R2OWSG MWD+IFR1+MS
24600.000	90.000	359.923	9053.000	124.805	0.000	139.841	0.000	124.805	0.000	0.000	139.841	38.145	0.004	XOM_R2OWSG MWD+IFR1+MS
24700.000	90.000	359.923	9053.000	125.585	0.000	140.698	0.000	125.585	0.000	0.000	140.698	38.229	0.004	XOM_R2OWSG MWD+IFR1+MS
24800.000	90.000	359.923	9053.000	126.366	0.000	141.555	0.000	126.366	0.000	0.000	141.555	38.314	0.003	XOM_R2OWSG MWD+IFR1+MS
24900.000	90.000	359.923	9053.000	127.146	0.000	142.413	0.000	127.146	0.000	0.000	142.413	38.398	0.003	XOM_R2OWSG MWD+IFR1+MS
25000.000	90.000	359.923	9053.000	127.927	0.000	143.271	0.000	127.927	0.000	0.000	143.271	38.483	0.003	XOM_R2OWSG MWD+IFR1+MS
25100.000	90.000	359.923	9053.000	128.707	0.000	144.129	0.000	128.707	0.000	0.000	144.129	38.569	0.003	XOM_R2OWSG MWD+IFR1+MS
25200.000	90.000	359.923	9053.000	129.488	0.000	144.988	0.000	129.488	0.000	0.000	144.988	38.654	0.002	XOM_R2OWSG MWD+IFR1+MS
25253.260	90.000	359.923	9053.000	129.904	0.000	145.445	0.000	129.904	0.000	0.000	145.445	38.700	0.002	XOM_R2OWSG MWD+IFR1+MS

25303.260	90.000	359.923	9053.000	130.294	0.000	145.874	0.000	130.294	0.000	0.000	145.874	38.743	0.002	XOM_R2OWSG MWD+IFR1+MS
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Plan Targets

Corral 17-5 Fed Com 802H\_Updated

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
802H LTP	25253.53	424298.40	600981.80	6051.00	CIRCLE
802H BHL	25303.89	424348.40	600982.10	6051.00	CIRCLE
802H FTP	9577.61	408622.80	601002.60	6051.00	CIRCLE



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ALL DIMENSIONS APPROXIMATE			
CACTUS WELLHEAD LLC		XTO ENERGY INC DELAWARE BASIN	
20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers		DRAWN	VJK
		APPRV	31MAR22
		DRAWING NO.	HBE0000479



U. S. Steel Tubular Products

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

11/8/2023 1:08:50 PM



MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ <sup>®</sup>		--
Minimum Yield Strength	110,000	--	psi	--
Maximum Yield Strength	125,000	--	psi	--
Minimum Tensile Strength	125,000	--	psi	--
DIMENSIONS	Pipe	USS-FREEDOM HTQ <sup>®</sup>		--
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 <sup>®</sup>		--
Critical Area	5.828	5.828	sq. in.	--
Joint Efficiency	--	100.0	%	--
PERFORMANCE	Pipe	USS-FREEDOM HTQ <sup>®</sup>		--
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 <sup>®</sup>		--
Make-Up Loss	--	4.13	in.	--
Minimum Make-Up Torque [3]	--	15,000	ft-lb	--
Maximum Make-Up Torque [3]	--	21,000	ft-lb	--
Maximum Operating Torque[3]	--	29,500	ft-lb	--

UNCONTROLLED

Notes

1.

Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2.

Uniaxial bending rating shown is structural only, and equal to compression efficiency.
3.

Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).
4.

Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

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U. S. Steel Tubular Products

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

11/29/2021 4:16:04 PM

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]

UNCONTROLLED

Notes

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
2. 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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**BLACK GOLD®**

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

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

*NEW CHOKE HOSE  
INSTALLED 02-10-2024*

## CERTIFICATE OF CONFORMANCE

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

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

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

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

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



H3-15/16

1/25/2024 11:48:06 AM

# TEST REPORT

**CUSTOMER**

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

**TEST OBJECT**

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

**TEST INFORMATION**

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

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

Part number:

Description:

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

Part number:

Description:

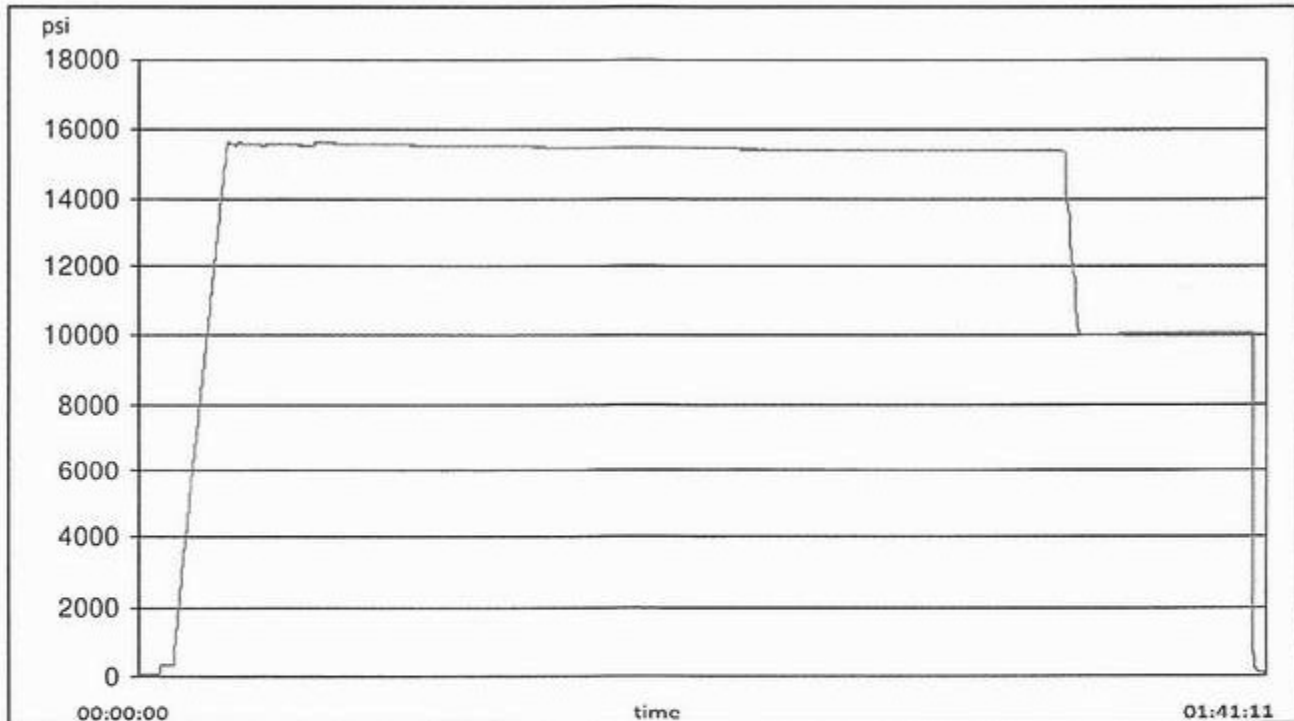
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis







H3-15/16

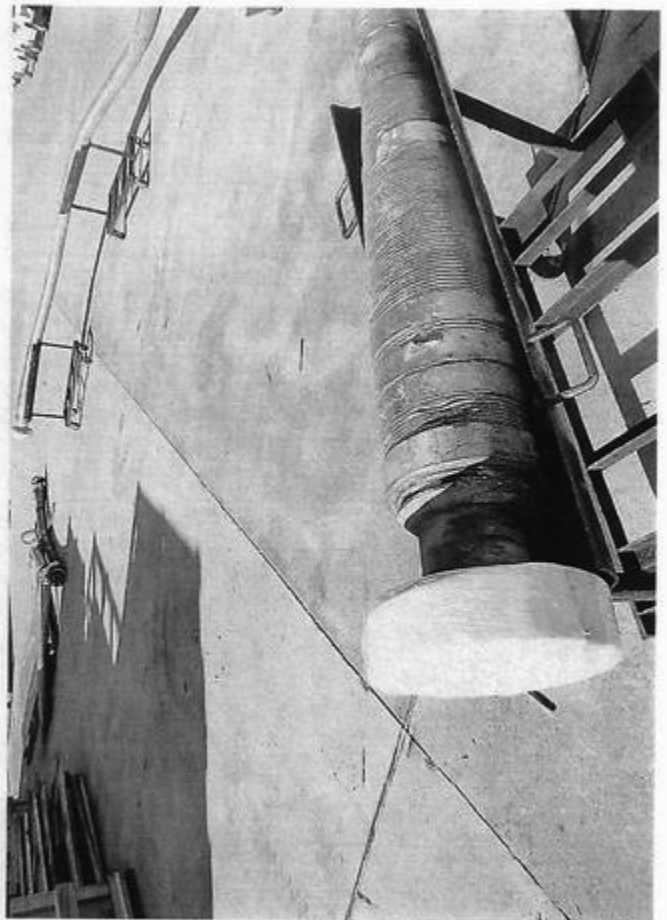
1/25/2024 11:48:06 AM

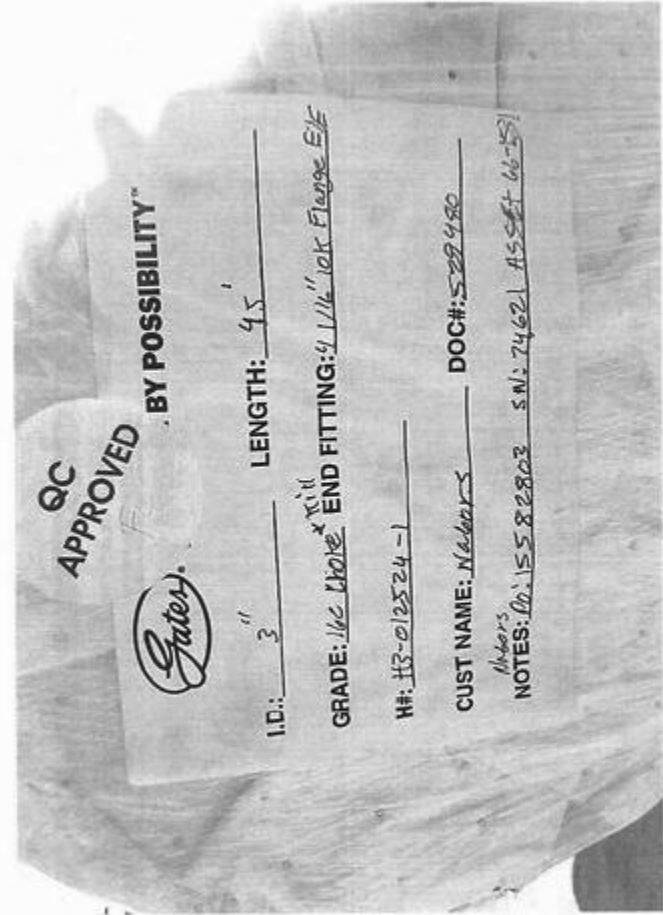
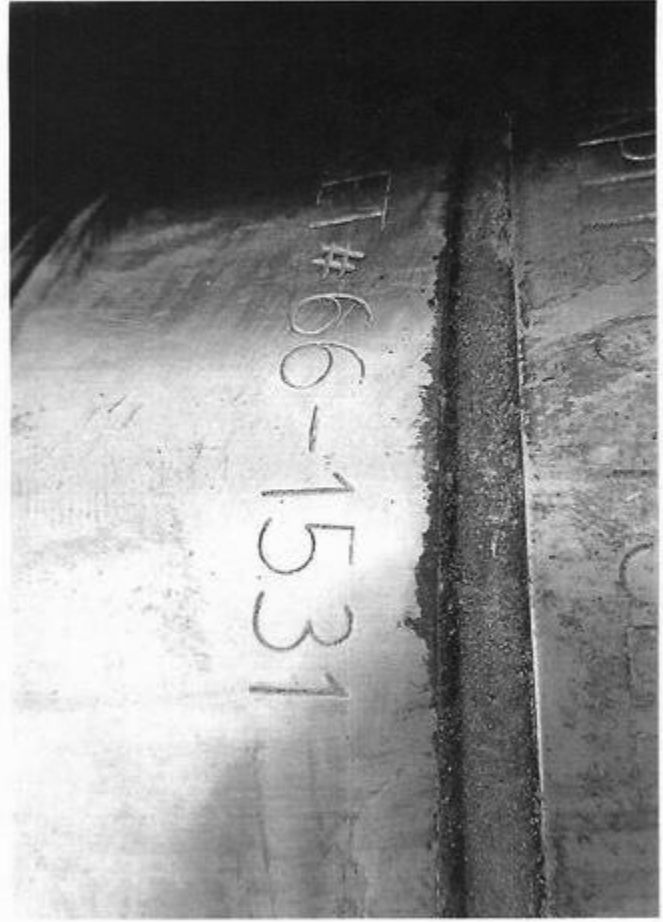
TEST REPORT

GAUGE TRACEABILITY

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

Comment







**District I**  
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**District II**  
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Phone:(575) 748-1283 Fax:(575) 748-9720  
**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170  
**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS  
  
Action 380766

CONDITIONS

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  380766
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally if cement is not circulated to surface during cementing operations, then a CBL is required.	9/6/2024