

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

Sundry Print Report

Well Name: CORRAL 17-8 FED COM Well Location: T25S / R29E / SEC 17 / County or Parish/State: EDDY /

SWSW / 32.12411 / -104.012918

Well Number: 161H Type of Well: CONVENTIONAL GAS Allottee or Tribe Name:

WELL

Lease Number: NMNM99147 Unit or CA Name: Unit or CA Number:

INCORPORATED

Notice of Intent

Sundry ID: 2797644

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 06/27/2024 Time Sundry Submitted: 02:21

Date proposed operation will begin: 07/11/2024

Procedure Description: This request is for the well formally known as CORRAL CANYON 17-8 FEDERAL 161H and currently CORRAL 17-8 FED COM 161H. The API number for this well is 30-015-55133. XTO Energy Incorporated respectfully requests approval to make the following changes to the approved APD. Changes to include LTP, BHL, & Proposed total Depth. FROM: TO: LTP: 2446' FSL & 540' FWL OF SECTION 8-T25S-R29E 2546' FSL & 540' FWL OF SECTION 8-T25S-R29E 2546' FSL & 540' FWL OF SECTION 8-T25S-R29E BHL: 2596' FSL & 540' FWL OF SECTION 8-T25S-R29E The proposed total depth is changing from 18578' MD; 10654' TVD (Wolfcamp) to 18791' MD; 10726' TVD (Wolfcamp D/E). 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, Well Control Plan, Freedom HTQ semi premium, Talon HTQ semi flush, and Flex hose.

NOI Attachments

Procedure Description

Corral_17_8_Fed_161H_Sundry_Documents_20240813100424.pdf

Page 1 of 2

eived by OCD: 8/14/2024 12:46:16 PM Well Name: CORRAL 17-8 FED COM

Well Location: T25S / R29E / SEC 17 /

SWSW / 32.12411 / -104.012918

County or Parish/State: Page 2 of

Well Number: 161H

Type of Well: CONVENTIONAL GAS

Allottee or Tribe Name:

Lease Number: NMNM99147

Unit or CA Name:

Unit or CA Number:

US Well Number: 3001555133

Operator: XTO ENERGY INCORPORATED

Conditions of Approval

Additional

Corral__17_8_Fed_Com_161H_COA_20240814110718.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 13, 2024 10:05 AM

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: 08/14/2024

Signature: Chris Walls

Page 2 of 2

Form 3160-5 (June 2019)

UNITED STATES DEPARTMENT OF THE INTERIOR

FORM APPROVEI)
OMB No. 1004-013	7
Expires: October 31, 2	02

5. Lease Serial No

BURE	EAU OF LAND MANAGEMENT		5. Lease Serial No.					
Do not use this fo	OTICES AND REPORTS ON Worm for proposals to drill or to Use Form 3160-3 (APD) for suc	re-enter an	6. If Indian, Allottee or	Tribe Name				
SUBMIT IN 1	TRIPLICATE - Other instructions on page	e 2	7. If Unit of CA/Agreement, Name and/or No.					
1. Type of Well	_		8. Well Name and No.					
Oil Well Gas W	Yell Other							
2. Name of Operator			9. API Well No.					
3a. Address	3b. Phone No.	(include area code)	10. Field and Pool or E	Exploratory Area				
4. Location of Well (Footage, Sec., T.,R	.,M., or Survey Description)		11. Country or Parish,	State				
12. CHE	CK THE APPROPRIATE BOX(ES) TO INI	DICATE NATURE OF NOT	ICE, REPORT OR OTH	ER DATA				
TYPE OF SUBMISSION		TYPE OF AC	TION					
Notice of Intent	Acidize Deep Alter Casing Hydra		luction (Start/Resume) amation	Water Shut-Off Well Integrity				
Subsequent Report		=	omplete	Other				
Final Abandonment Notice	Change Plans Plug Convert to Injection Plug		porarily Abandon er Disposal					
is ready for final inspection.)	ices must be filed only after all requirements							
4. I hereby certify that the foregoing is	true and correct. Name (Printed/Typed)	Tide						
		Title						
Signature		Date						
	THE SPACE FOR FEDI	ERAL OR STATE OF	FICE USE					
Approved by								
		Title	I	Date				
	ned. Approval of this notice does not warrant quitable title to those rights in the subject leaduct operations thereon.							
	U.S.C Section 1212, make it a crime for an		Ifully to make to any de	partment or agency of the United States				

(Instructions on page 2)

GENERAL INSTRUCTIONS

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

SPECIFIC INSTRUCTIONS

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

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

NOTICES

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

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

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

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

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

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

(Form 3160-5, page 2)

Additional Information

Additional Remarks

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, Well Control Plan, Freedom HTQ semi premium, Talon HTQ semi flush, and Flex hose.

Location of Well

0. SHL: SWSW / 434 FSL / 690 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.12411 / LONG: -104.012918 (TVD: 0 feet, MD: 0 feet) PPP: SWSW / 330 FSL / 540 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.12383 / LONG: -104.013401 (TVD: 10654 feet, MD: 11100 feet) PPP: SWNW / 330 FSL / 540 FWL / TWSP: 25S / RANGE: 29E / SECTION: 17 / LAT: 32.13562 / LONG: -104.00878 (TVD: 10654 feet, MD: 13800 feet) BHL: NWSW / 2596 FSL / 540 FWL / TWSP: 25S / RANGE: 29E / SECTION: 8 / LAT: 32.144631 / LONG: -104.013491 (TVD: 10654 feet, MD: 18578 feet)

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO Energy Incorporated
WELL NAME & NO.: Corral 17-8 Federal Com 161H
LOCATION: Sec 17-25S-29E-NMP
COUNTY: Eddy County, New Mexico

Previously known as Corral Canyon 17-8 Federal 161H ____. Changes approved through engineering via Sundry 2797644__ on 8-14-2024. Any previous COAs not addressed within the updated COAs still apply.

COA

H_2S	• No	C Yes		
Potash / WIPP	None	Secretary	C R-111-P	□ WIPP
Cave / Karst	C Low	• Medium	C High	Critical
Wellhead	Conventional	Multibowl	O Both	O Diverter
Cementing	☐ Primary Squeeze		EchoMeter	□ DV Tool
Special Req	Break Testing	☐ Water Disposal	□ СОМ	✓ Unit
Variance	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
		Batch APD / Sundry		

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. *Set depth adjusted per BLM geologist*.
 - 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**
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified.
 Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.
- ❖ 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 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC.

Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

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

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

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.

C. PRESSURE CONTROL

Operator shall have 3 a Double Ram and a Pipe Ram with pressure rating of 10M

- 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.

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or

cradle.

- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

GENERAL REQUIREMENTS

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

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

Eddy County (API No. / US Well No. contains 30-015-#####)

Email **or** call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, BLM_NM_CFO_DrillingNotifications@blm.gov; (575) 361-2822

Lea County (API No. / US Well No. contains 30-025-#####)

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240; (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.

- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

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, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity 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-P 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 part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 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:
 - 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. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR part 3170 Subpart 3172 must be followed.
 - e. 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.

- a. 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).
- b. 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.)
- c. 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 part 3170 Subpart 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 water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. 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.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. 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.
- g. 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.
- h. 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 part 3170

Subpart 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.

161H\DWG\161H.dwg 17-8 FEDERAL Eddy/Wells/-12 17 yon Can Corral Eddy\.03 Unit Canyon NM\013 Corral Energy mcl-18-nas\Projects-DA\618.013 XTO

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate

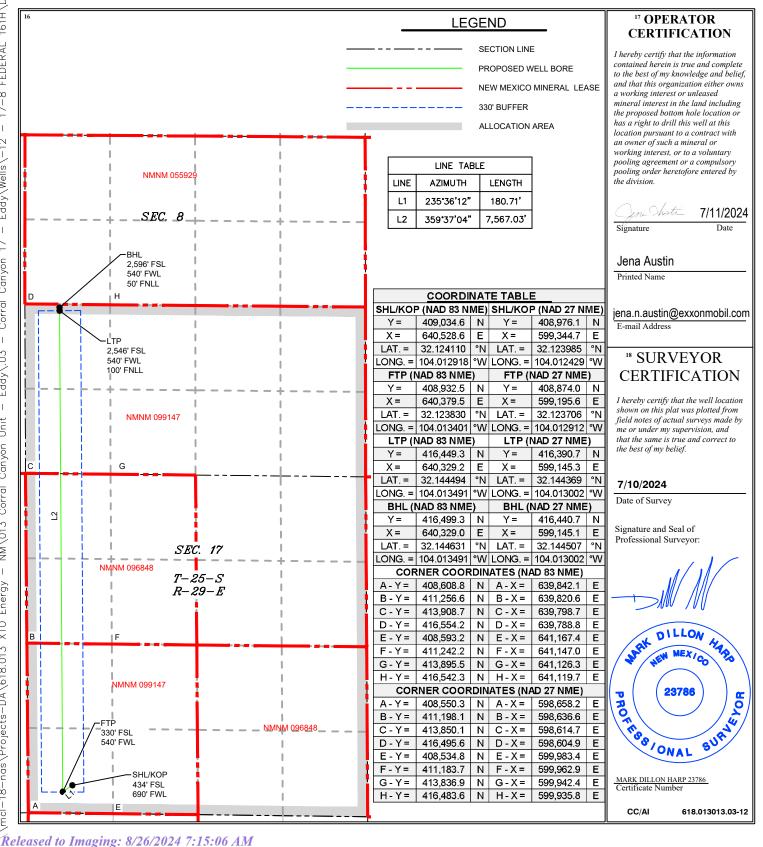


WELL LOCATION AND ACREAGE DEDICATION PLAT

1 A	API Number			² Pool Code			³ Pool Nar					
30-	015-55133	FCAMP (GAS)	(GAS)									
⁴ Property C	ode			⁶ Well Number								
	CORRAL 17-8 FED COM											
⁷ OGRID N	lo.				⁸ Operator	Name			⁹ Elevation			
00538	0	XTO ENERGY, INC										
"Surface Location												
				~ .								

25 S 29 E 434 **SOUTH WEST EDDY** 690 "Bottom Hole Location If Different From Surface UL or lot no. East/West line Section Feet from the Township Lot Idn Feet from the North/South line County 8 25 S 29 E 2,596 **SOUTH** 540 WEST **EDDY** Dedicated Acres Joint or Infill Consolidation Code Order No. 960.00

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the



Inten	t X	As Dril	led											
API #														
Ope	rator Nai	^{me:} GY, INC				Prope Coral	erty N 17-	lame 8 Fe	d Co	om				Well Number 161H
V: al. (Off Daint	(KOD)												
UL	Off Point Section	Township	Range	Lot	Feet	F	rom N	N/S	Feet		From	n E/W	County	
Latitu	ıde				Longitu	ıde							NAD	
	Take Poir													
UL M	Section 17	Township 25S	Range 29E	Lot	Feet 330	S	rom Nouth		Feet 540		From	n E/W St	County Eddy	
132.	^{ude} 123830)			Longitu 104.0	ode 01340	01						NAD 83	
Last T	āke Poin	t (LTP)												
UL L	Section 8	Township 25S	Range 29E	Lot	Feet 2,596	From Sout		Feet 540		From I		Count		
Latitu	ude 144494	4			Longitu	ode 01349	91	ı		I		NAD 83		
		defining v	vell for th	e Hori:	zontal Sp	oacing (Unit?) []				
If infi			ide API if	availat	∟ ole, Oper	rator Na	ame	and v	vell n	umber	for [Definiı	ng well fo	r Horizontal
API #	: 													
Operator Name:						Prope	erty N	lame	:					Well Number
														V7.0C/20/201

KZ 06/29/2018

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

XTO Energy Inc.
CORRAL 17 - 8 FED COM 161H
Projected TD: 18791.33' MD / 10726' TVD
SHL: 434' FSL & 690' FWL , Section 17, T25S, R29E
BHL: 2596' FSL & 540' FWL , Section 8, 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
Rustler	0'	Water
Top of Salt	581'	Water
Base of Salt	2658'	Water
Delaware	2858'	Water
Brushy Canyon	5350'	Water/Oil/Gas
Bone Spring	6557'	Water
1st Bone Spring	7338'	Water/Oil/Gas
2nd Bone Spring	7787'	Water/Oil/Gas
3rd Bone Spring	8618'	Water/Oil/Gas
Wolfcamp	9774'	Water/Oil/Gas
Wolfcamp X	9797'	Water/Oil/Gas
Wolfcamp Y	9873'	Water/Oil/Gas
Wolfcamp A	9913'	Water/Oil/Gas
Wolfcamp B	10240'	Water/Oil/Gas
Wolfcamp D	10626'	Water/Oil/Gas
Target/Land Curve	10726'	Water/Oil/Gas

^{***} Hydrocarbons @ Brushy Canyon

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 @ 546' (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 9900.22' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 18791.33 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9600.22 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 546'	9.625	40	J-55	BTC	New	1.61	11.40	28.85
8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	1.93	2.86	1.90
8.75	4000' – 9900.22'	7.625	29.7	HC L-80	Flush Joint	New	1.41	2.31	2.32
6.75	0' - 9800.22'	5.5	20	RY P-110	Semi-Premium	New	1.26	1.68	2.31
6.75	9800.22' - 18791.33'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.53	2.31

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

^{***} Groundwater depth 40' (per NM State Engineers Office).

Wellhead:

Permanent Wellhead - Multibowl System

4. Cement Program

Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 546'

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 +/- 9900.22'

st Stage

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

TOC: Surface

Tail: 420 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 5350

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: 600 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 (5350') 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 +/- 18791.33'

Lead: 20 sxs NeoCem (mixed at 13.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9600.22 feet
Tail: 620 sxs VersaCem (mixed at 14.8 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10100.22 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 13-5/8" minimum 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 nippling up on the 9.625, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nippling 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	Viscosity	Fluid Loss	Additional Comments
	11010 0.20		(ppg)	(sec/qt)	(cc)	
0' - 546'	12.25	FW/Native	8.5-9	35-40	NC	Fresh water or Native water
546' - 9900.22'	8.75	Saturated brine for salt interval / direct Emulsion	10-10.5	30-32	NC	Fully saturated salt across salado / salt
9900.22' - 18791.33'	6.75	OBM	13-13.5	50-60	NC - 20	N/A

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

Spud with fresh water/native mud. Drill out from under surface casing with Saturated Salt 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 170 to 190 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 7251 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 17-8 Fed Com 161H

 Measured Depth:
 18791.83 ft

 TVD RKB:
 10726.00 ft

Location

New Mexico East -Cartographic Reference System: **NAD 27** Northing: 408976.10 ft Easting: 599344.70 ft RKB: 2981.00 ft **Ground Level:** 2948.00 ft North Reference: Grid Convergence Angle: 0.17 Deg

Plan Sections Corral 17-8 Fed Com 161H

	Dogleg	Turn	Build			TVD			Measured
	Rate	Rate	Rate	X Offset	Y Offset	RKB	Azimuth	Inclination	Depth
Target	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	(ft)	(ft)	(ft)	(Deg)	(Deg)	(ft)
	0.00	0.00	0.00	0.00	0.00	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
	2.00	0.00	2.00	-13.19	- 74.81	1755.36	190.00	13.22	1761.22
	0.00	0.00	0.00	- 131.11	- 743.47	4644.64	190.00	13.22	4729.20
	2.00	0.00	- 2.00	-144.31	- 818.28	5300.00	0.00	0.00	5390.42
	0.00	0.00	0.00	-144.31	- 818.28	10009.80	0.00	0.00	10100.22
161H FTP	8.00	0.00	8.00	-149.10	- 102.10	10726.00	359.62	90.00	11225.22
161H LTP	0.00	0.00	0.00	-199.40	7414.60	10726.00	359.62	90.00	18742.09
161H BHL	0.00	0.00	0.00	-199.73	7464.35	10726.00	359,62	90.00	18791.83

Position Uncertainty Corral 17-8 Fed Com 161H

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

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	2.371	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	2.479	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	2.524	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	2.625	0.000	0.000	3.943	3.764	90.000	XOM_R2OWSG MWD+IFR1+MS
1200.000	2.000	190.002	1199.980	4.277	-0.000	4.109	0.000	2.680	0.000	0.000	4.284	4.104	89.997	XOM_R2OWSG MWD+IFR1+MS
1300.000	4.000	190.002	1299.838	4.597	-0.000	4.435	0.000	2.737	0.000	0.000	4.613	4.429	90.031	XOM_R2OWSG MWD+IFR1+MS
1400.000	6.000	190.002	1399.452	4.917	-0.000	4.765	0.000	2.794	0.000	0.000	4.946	4.759	90.037	XOM_R2OWSG MWD+IFR1+MS
1500.000	8.000	190.002	1498.702	5.236	-0.000	5.100	0.000	2.853	0.000	0.000	5.283	5.094	89.970	XOM_R2OWSG MWD+IFR1+MS
1600.000	10.000	190.002	1597.465	5.553	-0.000	5.440	0.000	2.913	0.000	0.000	5.623	5.434	89.784	XOM_R2OWSG MWD+IFR1+MS
1700.000	12.000	190.002	1695.623	5.868	-0.000	5.787	0.000	2.975	0.000	0.000	5.966	5.781	89.426	XOM_R2OWSG MWD+IFR1+MS
1761.219	13.224	190.002	1755.363	6.060	-0.000	6.002	0.000	3.013	0.000	0.000	6.178	5.996	89.189	XOM_R2OWSG MWD+IFR1+MS

1800.000	13.224	190.002	1793.116	6.196	-0.000	6.140	0.000	3.040	0.000	0.000	6.312	6.133	88.929	XOM_R2OWSG MWD+IFR1+MS
1900.000	13.224	190.002	1890.465	6.550	-0.000	6.500	0.000	3.122	0.000	0.000	6.657	6.493	87.719	XOM_R2OWSG MWD+IFR1+MS
2000.000	13.224	190.002	1987.813	6.908	-0.000	6.866	0.000	3.209	0.000	0.000	7.005	6.858	86.201	XOM_R2OWSG MWD+IFR1+MS
2100.000	13.224	190.002	2085.161	7.269	-0.000	7.237	0.000	3.299	0.000	0.000	7.357	7.227	84.237	XOM_R2OWSG MWD+IFR1+MS
2200.000	13.224	190.002	2182.509	7.634	-0.000	7.612	0.000	3.392	0.000	0.000	7.713	7.600	81.608	XOM_R2OWSG MWD+IFR1+MS
2300.000	13.224	190.002	2279.857	8.001	-0.000	7.990	0.000	3.488	0.000	0.000	8.073	7.976	77.967	XOM_R2OWSG MWD+IFR1+MS
2400.000	13.224	190.002	2377.205	8.371	-0.000	8.371	0.000	3.588	0.000	0.000	8.435	8.354	72.788	XOM_R2OWSG MWD+IFR1+MS
2500.000	13.224	190.002	2474.554	8.743	-0.000	8.755	0.000	3.690	0.000	0.000	8.802	8.733	65.457	XOM_R2OWSG MWD+IFR1+MS
2600.000	13.224	190.002	2571.902	9.117	-0.000	9.141	0.000	3.795	0.000	0.000	9.174	9.110	55.909	XOM_R2OWSG MWD+IFR1+MS
2700.000	13.224	190.002	2669.250	9.492	-0.000	9.529	0.000	3.902	0.000	0.000	9.552	9.486	45.662	XOM_R2OWSG MWD+IFR1+MS
2800.000	13.224	190.002	2766.598	9.869	-0.000	9.919	0.000	4.011	0.000	0.000	9.935	9.859	36.948	XOM_R2OWSG MWD+IFR1+MS
2900.000	13.224	190.002	2863.946	10.247	-0.000	10.311	0.000	4.123	0.000	0.000	10.322	10.231	30.571	XOM_R2OWSG MWD+IFR1+MS
3000.000	13.224	190.002	2961.294	10.626	-0.000	10.703	0.000	4.237	0.000	0.000	10.712	10.603	26.110	XOM_R2OWSG MWD+IFR1+MS
3100.000	13.224	190.002	3058.643	11.006	-0.000	11.097	0.000	4.353	0.000	0.000	11.104	10.974	22.954	XOM_R2OWSG MWD+IFR1+MS
3200.000	13.224	190.002	3155.991	11.387	-0.000	11.493	0.000	4.471	0.000	0.000	11.498	11.347	20.653	XOM_R2OWSG MWD+IFR1+MS
3300.000	13.224	190.002	3253.339	11.769	-0.000	11.889	0.000	4.590	0.000	0.000	11.893	11.719	18.921	XOM_R2OWSG MWD+IFR1+MS
3400.000	13.224	190.002	3350.687	12.152	-0.000	12.286	0.000	4.712	0.000	0.000	12.289	12.092	17.578	XOM_R2OWSG MWD+IFR1+MS
3500.000	13.224	190.002	3448.035	12.535	-0.000	12.684	0.000	4.835	0.000	0.000	12.687	12.466	16.511	XOM_R2OWSG MWD+IFR1+MS
3600.000	13.224	190.002	3545.383	12.919	-0.000	13.082	0.000	4.960	0.000	0.000	13.085	12.841	15.644	XOM_R2OWSG MWD+IFR1+MS
3700.000	13.224	190.002	3642.732	13.303	-0.000	13.482	0.000	5.087	0.000	0.000	13.484	13.215	14.927	XOM_R2OWSG MWD+IFR1+MS

3800.000	13.224	190.002	3740.080	13.688	-0.000	13.882	0.000	5.216	0.000	0.000	13.883	13.591	14.324	XOM_R2OWSG MWD+IFR1+MS
3900.000	13.224	190.002	3837.428	14.074	-0.000	14.282	0.000	5.346	0.000	0.000	14.284	13.967	13.811	XOM_R2OWSG MWD+IFR1+MS
4000.000	13.224	190.002	3934.776	14.460	-0.000	14.683	0.000	5.478	0.000	0.000	14.685	14.343	13.369	XOM_R2OWSG MWD+IFR1+MS
4100.000	13.224	190.002	4032.124	14.846	-0.000	15.085	0.000	5.612	0.000	0.000	15.086	14.719	12.984	XOM_R2OWSG MWD+IFR1+MS
4200.000	13.224	190.002	4129.472	15.233	-0.000	15.487	0.000	5.747	0.000	0.000	15.488	15.096	12.646	XOM_R2OWSG MWD+IFR1+MS
4300.000	13.224	190.002	4226.821	15.620	-0.000	15.889	0.000	5.884	0.000	0.000	15.890	15.474	12.347	XOM_R2OWSG MWD+IFR1+MS
4400.000	13.224	190.002	4324.169	16.007	-0.000	16.292	0.000	6.022	0.000	0.000	16.293	15.852	12.080	XOM_R2OWSG MWD+IFR1+MS
4500.000	13.224	190.002	4421.517	16.395	-0.000	16.695	0.000	6.163	0.000	0.000	16.696	16.230	11.841	XOM_R2OWSG MWD+IFR1+MS
4600.000	13.224	190.002	4518.865	16.783	-0.000	17.099	0.000	6.305	0.000	0.000	17.099	16.608	11.626	XOM_R2OWSG MWD+IFR1+MS
4700.000	13.224	190.002	4616.213	17.171	-0.000	17.503	0.000	6.448	0.000	0.000	17.503	16.987	11.430	XOM_R2OWSG MWD+IFR1+MS
4729.198	13.224	190.002	4644.637	17.284	-0.000	17.620	0.000	6.490	0.000	0.000	17.621	17.097	11.377	XOM_R2OWSG MWD+IFR1+MS
4800.000	11.808	190.002	4713.754	17.576	-0.000	17.904	0.000	6.594	0.000	0.000	17.904	17.364	11.257	XOM_R2OWSG MWD+IFR1+MS
4900.000	9.808	190.002	4811.975	17.966	-0.000	18.297	0.000	6.738	0.000	0.000	18.297	17.736	11.115	XOM_R2OWSG MWD+IFR1+MS
5000.000	7.808	190.002	4910.791	18.329	-0.000	18.679	0.000	6.878	0.000	0.000	18.680	18.103	11.002	XOM_R2OWSG MWD+IFR1+MS
5100.000	5.808	190.002	5010.081	18.664	-0.000	19.052	0.000	7.012	0.000	0.000	19.052	18.464	10.911	XOM_R2OWSG MWD+IFR1+MS
5200.000	3.808	190.002	5109.724	18.971	-0.000	19.414	0.000	7.142	0.000	0.000	19.414	18.819	10.840	XOM_R2OWSG MWD+IFR1+MS
5300.000	1.808	190.002	5209.599	19.248	-0.000	19.765	0.000	7.268	0.000	0.000	19.765	19.166	10.784	XOM_R2OWSG MWD+IFR1+MS
5390.416	0.000	0.000	5300.000	19.486	0.000	20.037	0.000	7.378	0.000	0.000	20.058	19.464	10.851	XOM_R2OWSG MWD+IFR1+MS
5400.000	0.000	0.000	5309.584	19.516	0.000	20.066	0.000	7.389	0.000	0.000	20.087	19.495	10.870	XOM_R2OWSG MWD+IFR1+MS
5500.000	0.000	0.000	5409.584	19.834	0.000	20.370	0.000	7.511	0.000	0.000	20.391	19.812	11.071	XOM_R2OWSG MWD+IFR1+MS

5600.000	0.000	0.000	5509.584	20.153	0.000	20.675	0.000	7.634	0.000	0.000	20.696	20.131	11.275	XOM_R2OWSG MWD+IFR1+MS
5700.000	0.000	0.000	5609.584	20.473	0.000	20.981	0.000	7.760	0.000	0.000	21.003	20.451	11.482	XOM_R2OWSG MWD+IFR1+MS
5800.000	0.000	0.000	5709.584	20.795	0.000	21.290	0.000	7.889	0.000	0.000	21.312	20.772	11.693	XOM_R2OWSG MWD+IFR1+MS
5900.000	0.000	0.000	5809.584	21.118	0.000	21.600	0.000	8.020	0.000	0.000	21.622	21.095	11.907	XOM_R2OWSG MWD+IFR1+MS
6000.000	0.000	0.000	5909.584	21.442	0.000	21.911	0.000	8.153	0.000	0.000	21.933	21.419	12.125	XOM_R2OWSG MWD+IFR1+MS
6100.000	0.000	0.000	6009.584	21.767	0.000	22.224	0.000	8.289	0.000	0.000	22.246	21.744	12.346	XOM_R2OWSG MWD+IFR1+MS
6200.000	0.000	0.000	6109.584	22.093	0.000	22.538	0.000	8.428	0.000	0.000	22.561	22.069	12.572	XOM_R2OWSG MWD+IFR1+MS
6300.000	0.000	0.000	6209.584	22.420	0.000	22.853	0.000	8.569	0.000	0.000	22.877	22.396	12.801	XOM_R2OWSG MWD+IFR1+MS
6400.000	0.000	0.000	6309.584	22.748	0.000	23.170	0.000	8.713	0.000	0.000	23.194	22.724	13.034	XOM_R2OWSG MWD+IFR1+MS
6500.000	0.000	0.000	6409.584	23.077	0.000	23.488	0.000	8.860	0.000	0.000	23.512	23.052	13.271	XOM_R2OWSG MWD+IFR1+MS
6600.000	0.000	0.000	6509.584	23.407	0.000	23.807	0.000	9.009	0.000	0.000	23.831	23.382	13.512	XOM_R2OWSG MWD+IFR1+MS
6700.000	0.000	0.000	6609.584	23.737	0.000	24.127	0.000	9.161	0.000	0.000	24.152	23.712	13.758	XOM_R2OWSG MWD+IFR1+MS
6800.000	0.000	0.000	6709.584	24.069	0.000	24.448	0.000	9.316	0.000	0.000	24.473	24.043	14.007	XOM_R2OWSG MWD+IFR1+MS
6900.000	0.000	0.000	6809.584	24.401	0.000	24.770	0.000	9.473	0.000	0.000	24.796	24.375	14.261	XOM_R2OWSG MWD+IFR1+MS
7000.000	0.000	0.000	6909.584	24.734	0.000	25.094	0.000	9.634	0.000	0.000	25.119	24.708	14.519	XOM_R2OWSG MWD+IFR1+MS
7100.000	0.000	0.000	7009.584	25.067	0.000	25.418	0.000	9.797	0.000	0.000	25.444	25.041	14.781	XOM_R2OWSG MWD+IFR1+MS
7200.000	0.000	0.000	7109.584	25.402	0.000	25.743	0.000	9.962	0.000	0.000	25.769	25.375	15.048	XOM_R2OWSG MWD+IFR1+MS
7300.000	0.000	0.000	7209.584	25.737	0.000	26.069	0.000	10.131	0.000	0.000	26.096	25.710	15.319	XOM_R2OWSG MWD+IFR1+MS
7400.000	0.000	0.000	7309.584	26.072	0.000	26.396	0.000	10.303	0.000	0.000	26.423	26.045	15.595	XOM_R2OWSG MWD+IFR1+MS
7500.000	0.000	0.000	7409.584	26.408	0.000	26.723	0.000	10.477	0.000	0.000	26.751	26.381	15.876	XOM_R2OWSG MWD+IFR1+MS

7600.000	0.000	0.000	7509.584	26.745	0.000	27.052	0.000	10.654	0.000	0.000	27.079	26.717	16.161	XOM_R2OWSG MWD+IFR1+MS
7700.000	0.000	0.000	7609.584	27.083	0.000	27.381	0.000	10.834	0.000	0.000	27.409	27.054	16.451	XOM_R2OWSG MWD+IFR1+MS
7800.000	0.000	0.000	7709.584	27.420	0.000	27.711	0.000	11.017	0.000	0.000	27.739	27.391	16.746	XOM_R2OWSG MWD+IFR1+MS
7900.000	0.000	0.000	7809.584	27.759	0.000	28.041	0.000	11.203	0.000	0.000	28.070	27.729	17.046	XOM_R2OWSG MWD+IFR1+MS
8000.000	0.000	0.000	7909.584	28.098	0.000	28.372	0.000	11.392	0.000	0.000	28.402	28.068	17.351	XOM_R2OWSG MWD+IFR1+MS
8100.000	0.000	0.000	8009.584	28.437	0.000	28.704	0.000	11.583	0.000	0.000	28.734	28.407	17.660	XOM_R2OWSG MWD+IFR1+MS
8200.000	0.000	0.000	8109.584	28.777	0.000	29.037	0.000	11.778	0.000	0.000	29.067	28.746	17.975	XOM_R2OWSG MWD+IFR1+MS
8300.000	0.000	0.000	8209.584	29.117	0.000	29.370	0.000	11.976	0.000	0.000	29.401	29.086	18.295	XOM_R2OWSG MWD+IFR1+MS
8400.000	0.000	0.000	8309.584	29.458	0.000	29.704	0.000	12.176	0.000	0.000	29.735	29.426	18.620	XOM_R2OWSG MWD+IFR1+MS
8500.000	0.000	0.000	8409.584	29.799	0.000	30.038	0.000	12.380	0.000	0.000	30.070	29.767	18.950	XOM_R2OWSG MWD+IFR1+MS
8600.000	0.000	0.000	8509.584	30.140	0.000	30.373	0.000	12.586	0.000	0.000	30.405	30.108	19.286	XOM_R2OWSG MWD+IFR1+MS
8700.000	0.000	0.000	8609.584	30.482	0.000	30.708	0.000	12.796	0.000	0.000	30.741	30.449	19.626	XOM_R2OWSG MWD+IFR1+MS
8800.000	0.000	0.000	8709.584	30.825	0.000	31.044	0.000	13.008	0.000	0.000	31.077	30.791	19.972	XOM_R2OWSG MWD+IFR1+MS
8900.000	0.000	0.000	8809.584	31.167	0.000	31.381	0.000	13.223	0.000	0.000	31.414	31.133	20.323	XOM_R2OWSG MWD+IFR1+MS
9000.000	0.000	0.000	8909.584	31.510	0.000	31.717	0.000	13.442	0.000	0.000	31.752	31.476	20.680	XOM_R2OWSG MWD+IFR1+MS
9100.000	0.000	0.000	9009.584	31.854	0.000	32.055	0.000	13.663	0.000	0.000	32.090	31.819	21.042	XOM_R2OWSG MWD+IFR1+MS
9200.000	0.000	0.000	9109.584	32.197	0.000	32.393	0.000	13.888	0.000	0.000	32.428	32.162	21.409	XOM_R2OWSG MWD+IFR1+MS
9300.000	0.000	0.000	9209.584	32.541	0.000	32.731	0.000	14.115	0.000	0.000	32.767	32.505	21.781	XOM_R2OWSG MWD+IFR1+MS
9400.000	0.000	0.000	9309.584	32.886	0.000	33.069	0.000	14.346	0.000	0.000	33.106	32.849	22.159	XOM_R2OWSG MWD+IFR1+MS
9500.000	0.000	0.000	9409.584	33.230	0.000	33.409	0.000	14.580	0.000	0.000	33.446	33.193	22.542	XOM_R2OWSG MWD+IFR1+MS

9600.000	0.000	0.000	9509.584	33.575	0.000	33.748	0.000	14.816	0.000	0.000	33.786	33.537	22.930	XOM_R2OWSG MWD+IFR1+MS
9700.000	0.000	0.000	9609.584	33.920	0.000	34.088	0.000	15.056	0.000	0.000	34.126	33.882	23.324	XOM_R2OWSG MWD+IFR1+MS
9800.000	0.000	0.000	9709.584	34.266	0.000	34.428	0.000	15.299	0.000	0.000	34.467	34.227	23.723	XOM_R2OWSG MWD+IFR1+MS
9900.000	0.000	0.000	9809.584	34.611	0.000	34.769	0.000	15.545	0.000	0.000	34.808	34.572	24.126	XOM_R2OWSG MWD+IFR1+MS
10000.000	0.000	0.000	9909.584	34.957	0.000	35.110	0.000	15.794	0.000	0.000	35.150	34.917	24.535	XOM_R2OWSG MWD+IFR1+MS
10100.219	0.000	0.000	10009.803	35.304	0.000	35.452	0.000	16.046	0.000	0.000	35.492	35.263	24.950	XOM_R2OWSG MWD+IFR1+MS
10200.000	7.982	359.617	10109.261	35.014	0.000	35.785	0.000	16.294	0.000	0.000	35.827	35.596	24.894	XOM_R2OWSG MWD+IFR1+MS
10300.000	15.982	359.617	10207.003	34.165	0.000	36.104	0.000	16.530	0.000	0.000	36.145	35.903	23.881	XOM_R2OWSG MWD+IFR1+MS
10400.000	23.982	359.617	10300.906	32.792	0.000	36.405	0.000	16.750	0.000	0.000	36.442	36.175	21.732	XOM_R2OWSG MWD+IFR1+MS
10500.000	31.982	359.617	10389.144	30.951	0.000	36.683	0.000	16.954	0.000	0.000	36.716	36.405	18.858	XOM_R2OWSG MWD+IFR1+MS
10600.000	39.982	359.617	10469.998	28.728	0.000	36.937	0.000	17.143	0.000	0.000	36.966	36.591	15.863	XOM_R2OWSG MWD+IFR1+MS
10700.000	47.982	359.617	10541.894	26.245	0.000	37.166	0.000	17.323	0.000	0.000	37.191	36.732	13.179	XOM_R2OWSG MWD+IFR1+MS
10800.000	55.982	359.617	10603.435	23.673	0.000	37.370	0.000	17.500	0.000	0.000	37.392	36.831	10.963	XOM_R2OWSG MWD+IFR1+MS
10900.000	63.982	359.617	10653.421	21.253	0.000	37.549	0.000	17.682	0.000	0.000	37.568	36.894	9.205	XOM_R2OWSG MWD+IFR1+MS
11000.000	71.982	359.617	10690.879	19.302	0.000	37.704	0.000	17.877	0.000	0.000	37.720	36.928	7.834	XOM_R2OWSG MWD+IFR1+MS
11100.000	79.982	359.617	10715.081	18.187	0.000	37.833	0.000	18.090	0.000	0.000	37.847	36.942	6.776	XOM_R2OWSG MWD+IFR1+MS
11200.000	87.982	359.617	10725.556	18.195	0.000	37.938	0.000	18.323	0.000	0.000	37.950	36.948	5.975	XOM_R2OWSG MWD+IFR1+MS
11225.219	90.000	359.617	10726.000	18.385	0.000	37.958	0.000	18.385	0.000	0.000	37.970	36.950	5.819	XOM_R2OWSG MWD+IFR1+MS
11300.000	90.000	359.617	10726.000	18.579	0.000	38.026	0.000	18.579	0.000	0.000	38.037	36.954	5.338	XOM_R2OWSG MWD+IFR1+MS
11400.000	90.000	359.617	10726.000	18.864	0.000	38.136	0.000	18.864	0.000	0.000	38.145	36.959	4.694	XOM_R2OWSG MWD+IFR1+MS

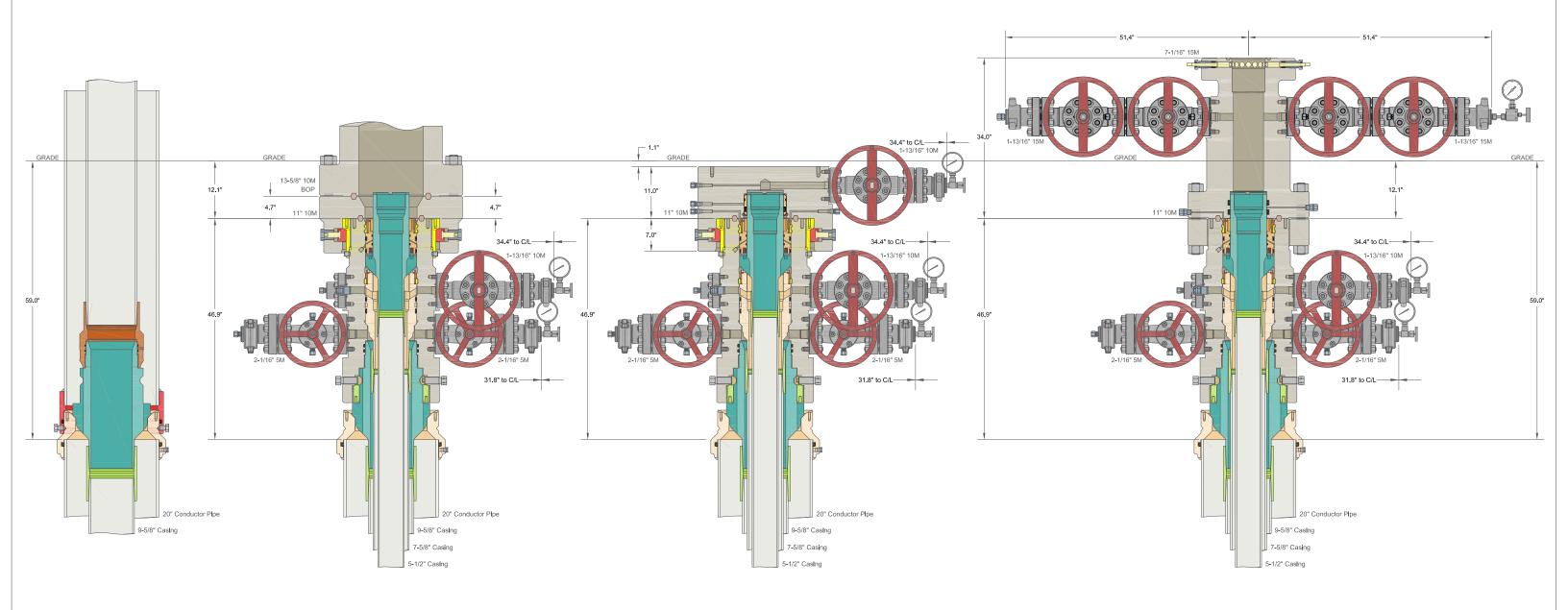
11500.000	90.000	359.617	10726.000	19.177	0.000	38.266	0.000	19.177	0.000	0.000	38.273	36.964	4.086	XOM_R2OWSG MWD+IFR1+MS
11600.000	90.000	359.617	10726.000	19.516	0.000	38.415	0.000	19.516	0.000	0.000	38.422	36.971	3.530	XOM_R2OWSG MWD+IFR1+MS
11700.000	90.000	359.617	10726.000	19.881	0.000	38.584	0.000	19.881	0.000	0.000	38.589	36.978	3.032	XOM_R2OWSG MWD+IFR1+MS
11800.000	90.000	359.617	10726.000	20.269	0.000	38.772	0.000	20.269	0.000	0.000	38.777	36.985	2.594	XOM_R2OWSG MWD+IFR1+MS
11900.000	90.000	359.617	10726.000	20.680	0.000	38.979	0.000	20.680	0.000	0.000	38.983	36.993	2.211	XOM_R2OWSG MWD+IFR1+MS
12000.000	90.000	359.617	10726.000	21.112	0.000	39.205	0.000	21.112	0.000	0.000	39.208	37.002	1.879	XOM_R2OWSG MWD+IFR1+MS
12100.000	90.000	359.617	10726.000	21.564	0.000	39.449	0.000	21.564	0.000	0.000	39.452	37.011	1.592	XOM_R2OWSG MWD+IFR1+MS
12200.000	90.000	359.617	10726.000	22.035	0.000	39.712	0.000	22.035	0.000	0.000	39.714	37.021	1.344	XOM_R2OWSG MWD+IFR1+MS
12300.000	90.000	359.617	10726.000	22.523	0.000	39.992	0.000	22.523	0.000	0.000	39.994	37.031	1.130	XOM_R2OWSG MWD+IFR1+MS
12400.000	90.000	359.617	10726.000	23.028	0.000	40.289	0.000	23.028	0.000	0.000	40.291	37.043	0.945	XOM_R2OWSG MWD+IFR1+MS
12500.000	90.000	359.617	10726.000	23.548	0.000	40.603	0.000	23.548	0.000	0.000	40.604	37.054	0.784	XOM_R2OWSG MWD+IFR1+MS
12600.000	90.000	359.617	10726.000	24.082	0.000	40.934	0.000	24.082	0.000	0.000	40.935	37.067	0.645	XOM_R2OWSG MWD+IFR1+MS
12700.000	90.000	359.617	10726.000	24.630	0.000	41.281	0.000	24.630	0.000	0.000	41.282	37.080	0.523	XOM_R2OWSG MWD+IFR1+MS
12800.000	90.000	359.617	10726.000	25.190	0.000	41.643	0.000	25.190	0.000	0.000	41.644	37.094	0.417	XOM_R2OWSG MWD+IFR1+MS
12900.000	90.000	359.617	10726.000	25.762	0.000	42.021	0.000	25.762	0.000	0.000	42.022	37.108	0.324	XOM_R2OWSG MWD+IFR1+MS
13000.000	90.000	359.617	10726.000	26.345	0.000	42.414	0.000	26.345	0.000	0.000	42.414	37.124	0.243	XOM_R2OWSG MWD+IFR1+MS
13100.000	90.000	359.617	10726.000	26.938	0.000	42.821	0.000	26.938	0.000	0.000	42.822	37.140	0.171	XOM_R2OWSG MWD+IFR1+MS
13200.000	90.000	359.617	10726.000	27.541	0.000	43.243	0.000	27.541	0.000	0.000	43.243	37.156	0.107	XOM_R2OWSG MWD+IFR1+MS
13300.000	90.000	359.617	10726.000	28.153	0.000	43.678	0.000	28.153	0.000	0.000	43.678	37.174	0.051	XOM_R2OWSG MWD+IFR1+MS
13400.000	90.000	359.617	10726.000	28.773	0.000	44.126	0.000	28.773	0.000	0.000	44.126	37.191	0.001	XOM_R2OWSG MWD+IFR1+MS

13500.000	90.000	359.617	10726.000	29.401	0.000	44.587	0.000	29.401	0.000	0.000	44.588	37.210	-0.043	XOM_R2OWSG MWD+IFR1+MS
13600.000	90.000	359.617	10726.000	30.037	0.000	45.061	0.000	30.037	0.000	0.000	45.061	37.230	-0.083	XOM_R2OWSG MWD+IFR1+MS
13700.000	90.000	359.617	10726.000	30.679	0.000	45.547	0.000	30.679	0.000	0.000	45.547	37.250	-0.119	XOM_R2OWSG MWD+IFR1+MS
13800.000	90.000	359.617	10726.000	31.328	0.000	46.045	0.000	31.328	0.000	0.000	46.045	37.270	-0.150	XOM_R2OWSG MWD+IFR1+MS
13900.000	90.000	359.617	10726.000	31.983	0.000	46.554	0.000	31.983	0.000	0.000	46.554	37.292	-0.179	XOM_R2OWSG MWD+IFR1+MS
14000.000	90.000	359.617	10726.000	32.643	0.000	47.073	0.000	32.643	0.000	0.000	47.074	37.314	-0.205	XOM_R2OWSG MWD+IFR1+MS
14100.000	90.000	359.617	10726.000	33.309	0.000	47.604	0.000	33.309	0.000	0.000	47.604	37.337	-0.228	XOM_R2OWSG MWD+IFR1+MS
14200.000	90.000	359.617	10726.000	33.981	0.000	48.145	0.000	33.981	0.000	0.000	48.145	37.360	-0.249	XOM_R2OWSG MWD+IFR1+MS
14300.000	90.000	359.617	10726.000	34.656	0.000	48.695	0.000	34.656	0.000	0.000	48.695	37.385	-0.268	XOM_R2OWSG MWD+IFR1+MS
14400.000	90.000	359.617	10726.000	35.337	0.000	49.256	0.000	35.337	0.000	0.000	49.256	37.409	-0.286	XOM_R2OWSG MWD+IFR1+MS
14500.000	90.000	359.617	10726.000	36.021	0.000	49.825	0.000	36.021	0.000	0.000	49.825	37.435	-0.301	XOM_R2OWSG MWD+IFR1+MS
14600.000	90.000	359.617	10726.000	36.710	0.000	50.404	0.000	36.710	0.000	0.000	50.404	37.461	-0.316	XOM_R2OWSG MWD+IFR1+MS
14700.000	90.000	359.617	10726.000	37.403	0.000	50.991	0.000	37.403	0.000	0.000	50.991	37.488	-0.329	XOM_R2OWSG MWD+IFR1+MS
14800.000	90.000	359.617	10726.000	38.099	0.000	51.586	0.000	38.099	0.000	0.000	51.586	37.516	-0.341	XOM_R2OWSG MWD+IFR1+MS
14900.000	90.000	359.617	10726.000	38.798	0.000	52.190	0.000	38.798	0.000	0.000	52.190	37.544	-0.351	XOM_R2OWSG MWD+IFR1+MS
15000.000	90.000	359.617	10726.000	39.501	0.000	52.801	0.000	39.501	0.000	0.000	52.801	37.573	-0.361	XOM_R2OWSG MWD+IFR1+MS
15100.000	90.000	359.617	10726.000	40.206	0.000	53.420	0.000	40.206	0.000	0.000	53.420	37.603	-0.370	XOM_R2OWSG MWD+IFR1+MS
15200.000	90.000	359.617	10726.000	40.915	0.000	54.046	0.000	40.915	0.000	0.000	54.046	37.633	-0.379	XOM_R2OWSG MWD+IFR1+MS
15300.000	90.000	359.617	10726.000	41.626	0.000	54.679	0.000	41.626	0.000	0.000	54.679	37.664	-0.386	XOM_R2OWSG MWD+IFR1+MS
15400.000	90.000	359.617	10726.000	42.340	0.000	55.319	0.000	42.340	0.000	0.000	55.319	37.696	-0.393	XOM_R2OWSG MWD+IFR1+MS

15500.000	90.000	359.617	10726.000	43.056	0.000	55.966	0.000	43.056	0.000	0.000	55.966	37.729	-0.400	XOM_R2OWSG MWD+IFR1+MS
15600.000	90.000	359.617	10726.000	43.775	0.000	56.618	0.000	43.775	0.000	0.000	56.618	37.762	-0.406	XOM_R2OWSG MWD+IFR1+MS
15700.000	90.000	359.617	10726.000	44.496	0.000	57.277	0.000	44.496	0.000	0.000	57.277	37.795	-0.411	XOM_R2OWSG MWD+IFR1+MS
15800.000	90.000	359.617	10726.000	45.219	0.000	57.942	0.000	45.219	0.000	0.000	57.942	37.830	-0.416	XOM_R2OWSG MWD+IFR1+MS
15900.000	90.000	359.617	10726.000	45.944	0.000	58.612	0.000	45.944	0.000	0.000	58.612	37.865	-0.421	XOM_R2OWSG MWD+IFR1+MS
16000.000	90.000	359.617	10726.000	46.671	0.000	59.288	0.000	46.671	0.000	0.000	59.288	37.901	-0.425	XOM_R2OWSG MWD+IFR1+MS
16100.000	90.000	359.617	10726.000	47.400	0.000	59.970	0.000	47.400	0.000	0.000	59.970	37.937	-0.429	XOM_R2OWSG MWD+IFR1+MS
16200.000	90.000	359.617	10726.000	48.130	0.000	60.656	0.000	48.130	0.000	0.000	60.656	37.974	-0.432	XOM_R2OWSG MWD+IFR1+MS
16300.000	90.000	359.617	10726.000	48.863	0.000	61.347	0.000	48.863	0.000	0.000	61.347	38.012	-0.436	XOM_R2OWSG MWD+IFR1+MS
16400.000	90.000	359.617	10726.000	49.597	0.000	62.043	0.000	49.597	0.000	0.000	62.043	38.050	-0.439	XOM_R2OWSG MWD+IFR1+MS
16500.000	90.000	359.617	10726.000	50.332	0.000	62.744	0.000	50.332	0.000	0.000	62.744	38.089	-0.441	XOM_R2OWSG MWD+IFR1+MS
16600.000	90.000	359.617	10726.000	51.069	0.000	63.449	0.000	51.069	0.000	0.000	63.449	38.129	-0.444	XOM_R2OWSG MWD+IFR1+MS
16700.000	90.000	359.617	10726.000	51.807	0.000	64.159	0.000	51.807	0.000	0.000	64.159	38.169	-0.446	XOM_R2OWSG MWD+IFR1+MS
16800.000	90.000	359.617	10726.000	52.547	0.000	64.873	0.000	52.547	0.000	0.000	64.873	38.210	-0.449	XOM_R2OWSG MWD+IFR1+MS
16900.000	90.000	359.617	10726.000	53.288	0.000	65.591	0.000	53.288	0.000	0.000	65.591	38.252	-0.451	XOM_R2OWSG MWD+IFR1+MS
17000.000	90.000	359.617	10726.000	54.030	0.000	66.312	0.000	54.030	0.000	0.000	66.312	38.294	-0.453	XOM_R2OWSG MWD+IFR1+MS
17100.000	90.000	359.617	10726.000	54.773	0.000	67.038	0.000	54.773	0.000	0.000	67.038	38.337	-0.454	XOM_R2OWSG MWD+IFR1+MS
17200.000	90.000	359.617	10726.000	55.518	0.000	67.767	0.000	55.518	0.000	0.000	67.767	38.381	-0.456	XOM_R2OWSG MWD+IFR1+MS
17300.000	90.000	359.617	10726.000	56.263	0.000	68.500	0.000	56.263	0.000	0.000	68.500	38.425	-0.457	XOM_R2OWSG MWD+IFR1+MS
17400.000	90.000	359.617	10726.000	57.010	0.000	69.236	0.000	57.010	0.000	0.000	69.236	38.470	-0.459	XOM_R2OWSG MWD+IFR1+MS

175	600.000	90.000	359.617	10726.000	57.758	0.000	69.976	0.000	57.758	0.000	0.000	69.976	38.516	-0.460	XOM_R2OWSG MWD+IFR1+MS
176	600.000	90.000	359.617	10726.000	58.506	0.000	70.718	0.000	58.506	0.000	0.000	70.718	38.562	-0.461	XOM_R2OWSG MWD+IFR1+MS
177	00.000	90.000	359.617	10726.000	59.256	0.000	71.464	0.000	59.256	0.000	0.000	71.464	38.609	-0.462	XOM_R2OWSG MWD+IFR1+MS
178	800.000	90.000	359.617	10726.000	60.006	0.000	72.213	0.000	60.006	0.000	0.000	72.213	38.656	-0.463	XOM_R2OWSG MWD+IFR1+MS
179	000.000	90.000	359.617	10726.000	60.758	0.000	72.965	0.000	60.758	0.000	0.000	72.965	38.704	-0.464	XOM_R2OWSG MWD+IFR1+MS
180	000.000	90.000	359.617	10726.000	61.510	0.000	73.720	0.000	61.510	0.000	0.000	73.720	38.753	-0.465	XOM_R2OWSG MWD+IFR1+MS
181	00.000	90.000	359.617	10726.000	62.263	0.000	74.477	0.000	62.263	0.000	0.000	74.477	38.802	-0.465	XOM_R2OWSG MWD+IFR1+MS
182	200.000	90.000	359.617	10726.000	63.017	0.000	75.238	0.000	63.017	0.000	0.000	75.238	38.852	-0.466	XOM_R2OWSG MWD+IFR1+MS
183	300.000	90.000	359.617	10726.000	63.771	0.000	76.000	0.000	63.771	0.000	0.000	76.000	38.902	-0.467	XOM_R2OWSG MWD+IFR1+MS
184	00.000	90.000	359.617	10726.000	64.526	0.000	76.766	0.000	64.526	0.000	0.000	76.766	38.953	-0.467	XOM_R2OWSG MWD+IFR1+MS
185	500.000	90.000	359.617	10726.000	65.282	0.000	77.533	0.000	65.282	0.000	0.000	77.533	39.005	-0.467	XOM_R2OWSG MWD+IFR1+MS
186	00.000	90.000	359.617	10726.000	66.039	0.000	78.303	0.000	66.039	0.000	0.000	78.304	39.057	-0.468	XOM_R2OWSG MWD+IFR1+MS
187	00.000	90.000	359.617	10726.000	66.796	0.000	79.076	0.000	66.796	0.000	0.000	79.076	39.110	-0.468	XOM_R2OWSG MWD+IFR1+MS
187	'42.087	90.000	359.617	10726.000	67.115	0.000	79.401	0.000	67.115	0.000	0.000	79.401	39.133	-0.468	XOM_R2OWSG MWD+IFR1+MS
187	91.834	90.000	359.617	10726.000	67.492	0.000	79.786	0.000	67.492	0.000	0.000	79.786	39.160	-0.469	XOM_R2OWSG MWD+IFR1+MS

Plan Targets	Corral 17-8 Fed Com 161H				
	Measured Depth	Grid Northing	Grid Easting	TVD MSL Target Shape	
Target Name	(ft)	(ft)	(ft)	(ft)	
161H FTP	11225.22	408874.00	599195.60	7745.00 CIRCLE	
161H LTP	18742.09	416390.70	599145.30	7745.00 CIRCLE	
161H BHL	18792.12	416440.70	599145.10	7745.00 CIRCLE	



ALL DIMENSIONS APPROXIMA

CACTUS WELLHEAD LLC

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

	XTO ENERGY INC DELAWARE BASIN								
DRAWN	VJK	31MAR							
APPRV									

DRAWING NO. HBE0000479

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U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall)

P110 RY USS-FREEDOM HTQ®

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

Notes

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 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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1-877-893-9461 connections@uss.com www.usstubular.com

U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall)

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/all) P110 RY USS-TALON HTQ™ RD

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

Notes

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

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NEW CHOKE HOSE

INSTAUED 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:	TOMER:
-----------	--------

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 #:

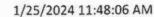
74621 H3-012524-1

SIGNATURE: 7. CUSTUS G

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

H3-15/16





TEST REPORT

CUSTOMER

Company:

Nabors Industries Inc.

TEST OBJECT

Serial number:

H3-012524-1

Production description:

74621/66-1531

Lot number: Description:

74621/66-1531

Sales order #:

529480

Hose ID:

Customer reference:

FG1213

Part number:

3" 16C CK

TEST INFORMATION

Test procedure:

GTS-04-053

psi

Fitting 1:

3.0 x 4-1/16 10K

Test pressure: Test pressure hold: 15000.00 3600.00

sec

Part number: Description:

Work pressure:

10000.00

psi

Fitting 2:

3.0 x 4-1/16 10K

Work pressure hold: Length difference:

900.00 0.00

sec % inch

Part number:

Length difference:

0.00

Description:

feet

n /n

Visual check:

Pressure test result:

PASS

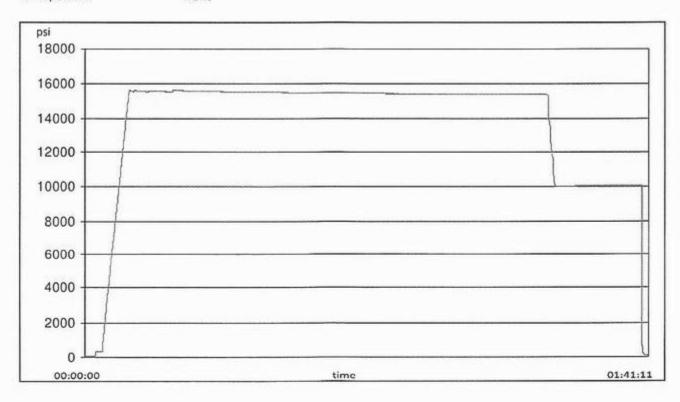
Length measurement result:

Length:

45

Test operator:

Travis





H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

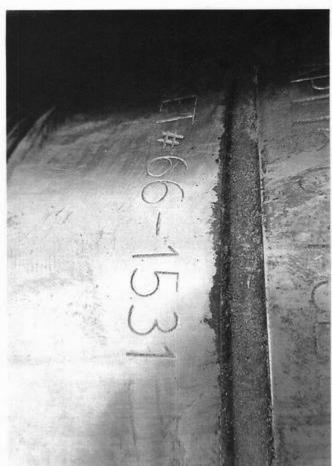
GAUGE TRACEABILITY

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			
Comment			

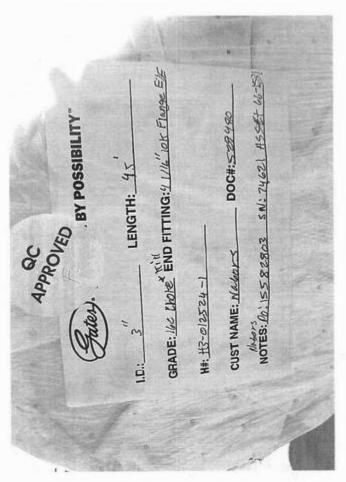


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District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 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

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 373856

CONDITIONS

Operator:	OGRID:	
XTO ENERGY, INC	5380	
6401 Holiday Hill Road	Action Number:	
Midland, TX 79707	373856	
	Action Type:	
	[C-103] NOI Change of Plans (C-103A)	

CONDITIONS

Created By		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.	8/26/2024