

Application for Permit to Drill

U.S. Department of the Interior Bureau of Land Management

Date Printed: 04/08/2025 03:46 PM

APD Package Report

APD ID: 10400098914 Well Status: AAPD

APD Received Date: 06/08/2024 07:18 AM Well Name: CORRAL 23-26 FED COM

Operator: XTO ENERGY INCORPORATED Well Number: 308H

APD Package Report Contents

- Form 3160-3

- Operator Certification Report

- Application Report

- Application Attachments

-- Well Plat: 1 file(s)

- Drilling Plan Report

- Drilling Plan Attachments

-- Blowout Prevention Choke Diagram Attachment: 1 file(s)

-- Blowout Prevention BOP Diagram Attachment: 1 file(s)

-- Casing Spec Documents: 2 file(s)

-- Casing Taperd String Specs: 1 file(s)

-- Casing Design Assumptions and Worksheet(s): 1 file(s)

-- Hydrogen sulfide drilling operations plan: 1 file(s)

-- Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)

-- Other Facets: 4 file(s)

-- Other Variances: 4 file(s)

- SUPO Report

- SUPO Attachments

-- Existing Road Map: 1 file(s)

-- New Road Map: 1 file(s)

-- Attach Well map: 1 file(s)

-- Production Facilities map: 4 file(s)

-- Water source and transportation map: 1 file(s)

-- Well Site Layout Diagram: 2 file(s)

-- Recontouring attachment: 3 file(s)

-- Other SUPO Attachment: 1 file(s)

- PWD Report

- PWD Attachments

- -- None
- Bond Report
- Bond Attachments
 - -- None

Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM120895 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL 1a. Type of work: REENTER 1b. Type of Well: Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone ✓ Multiple Zone CORRAL 23-26 FED COM 308H 2. Name of Operator 9. API Well No. **XTO ENERGY INCORPORATED** 30-015-56902 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory WILLOW LAKE/BONE SPRING, SOUTHE 15948 US HWY 77, ARDMORE, OK 73401 (325) 338-8339 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 23/T25S/R29E/NMP At surface SWNE / 1902 FNL / 1860 FEL / LAT 32.117525 / LONG -103.952575 At proposed prod. zone SESE / 50 FSL / 540 FEL / LAT 32.093698 / LONG -103.948208 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **EDDY** NM 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 1860 feet location to nearest 320.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 9096 feet / 20767 feet FED: COB000050 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3132 feet 07/21/2025 30 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) RICHARD REDUS / Ph: (432) 620-6700 06/08/2024 Permitting Manager Approved by (Signature) Date Name (Printed/Typed) (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 04/03/2025 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office Application approval 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.

Conditions of approval, if any, are attached.

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



INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws 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, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the wen, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionany drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: 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 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., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service wen or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record win be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

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

The BLM conects this information to anow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Form 3160-3, page 2)

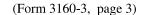
Additional Operator Remarks

Location of Well

0. SHL: SWNE / 1902 FNL / 1860 FEL / TWSP: 25S / RANGE: 29E / SECTION: 23 / LAT: 32.117525 / LONG: -103.952575 (TVD: 0 feet, MD: 0 feet) PPP: NENE / 100 FNL / 540 FEL / TWSP: 25S / RANGE: 29E / SECTION: 23 / LAT: 32.122472 / LONG: -103.948301 (TVD: 9096 feet, MD: 10400 feet) BHL: SESE / 50 FSL / 540 FEL / TWSP: 25S / RANGE: 29E / SECTION: 26 / LAT: 32.093698 / LONG: -103.948208 (TVD: 9096 feet, MD: 20767 feet)

BLM Point of Contact

Name: MARIAH HUGHES Title: Land Law Examiner Phone: (575) 234-5972 Email: mhughes@blm.gov



Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.



PECOS DISTRICT

SURFACE USE

CONDITIONS OF APPROVAL

OPERATOR'S NAME:

XTO Energy, Inc.

LEASE NO.:

NMNM14778 & NMNM120895

COUNTY:

Eddy County, New Mexico

Wells:

CORRAL 22-27 FED COM 405H: PAD D – A6

Surface Hole Location: 835' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 440' FWL & 50' FSL, Section 27, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 101H: PAD A – A2

Surface Hole Location: 526' FWL & 694' FNL, Section 22, T. 25 S. R. 29 E. Bottom Hole Location: 540' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 102H: PAD A – A3

Surface Hole Location: 555' FWL & 697' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 550' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 103H: PAD A – A4

Surface Hole Location: 585' FWL & 701' FNL, Section 22, T. 25 S. R. 29 E. Bottom Hole Location: 750' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 104H: PAD A – A5

Surface Hole Location: 615' FWL & 705' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 990' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 105H: PAD A – A6

Surface Hole Location: 645' FWL & 709' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,170' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 106H: PAD A – A7

Surface Hole Location: 674' FWL & 713' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,380' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 107H: PAD A – A1

Surface Hole Location: 496' FWL & 690' FNL, Section 22, T. 25 S. R. 29 E. Bottom Hole Location: 330' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 201H: PAD B – A2

Surface Hole Location: 1,931' FWL & 879' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,590' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 202H: PAD B – A3

Surface Hole Location: 1,960' FWL & 882' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,980' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 203H: PAD B – A4

Surface Hole Location: 1,990' FWL & 886' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,010' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 204H: PAD B – A5

Surface Hole Location: 2,020' FWL & 890' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,220' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 205H: PAD B – A6

Surface Hole Location: 2,050' FWL & 894' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,250' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 206H: PAD B – A7

Surface Hole Location: 2,079' FWL & 897' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,430' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 207H: PAD B – A1

Surface Hole Location: 1,901' FWL & 875' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,430' FWL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 301H: PAD C – A2

Surface Hole Location: 1,765' FEL & 596' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,430' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 302H: PAD C – A3

Surface Hole Location: 1,735' FEL & 600' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,220' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 303H: PAD C – A4

Surface Hole Location: 1,705' FEL & 603' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,140' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 304H: PAD C – A5

Surface Hole Location: 1,675' FEL & 607' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,010' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 305H: PAD C – A6

Surface Hole Location: 1,646' FEL & 611' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,590' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 306H: PAD C – A7

Surface Hole Location: 1,616' FEL & 592' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,380' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 307H: PAD C – A1

Surface Hole Location: 1,794' FEL & 592' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,520' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 401H: PAD D – A2

Surface Hole Location: 955' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,170' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 402H: PAD D – A3

Surface Hole Location: 925' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 820' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 403H: PAD D – A4

Surface Hole Location: 895' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 750' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 404H: PAD D – A5

Surface Hole Location: 865' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 540' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 405H: PAD D – A6

Surface Hole Location: 835' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 440' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 406H: PAD D – A7

Surface Hole Location: 805' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 330' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 22-34 FED COM 407H: PAD C – A1

Surface Hole Location: 985' FEL & 284' FNL, Section 22, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,210' FEL & 50' FSL, Section 34, T. 25 S. R. 29 E.

CORRAL 23-35 FED COM 101H: Pad A – A1

Surface Hole Location: 257' FWL & 86' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 345' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 102H: Pad A – A2

Surface Hole Location: 287' FWL & 91' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 660' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 103H: Pad A – A3

Surface Hole Location: 316' FWL & 96' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 750' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 104H: Pad A – B1

Surface Hole Location: 209' FWL & 382' FNL, Section 23, T. 25 S. R. 29 E. Bottom Hole Location: 540' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 105H: Pad A – B2

Surface Hole Location: 238' FWL & 387' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 540' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 106H: Pad A – B3

Surface Hole Location: 268' FWL & 392' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,070' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-26 FED COM 201H: Pad B – A1

Surface Hole Location: 1,771' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,380' FWL & 50' FSL, Section 26, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 202H: Pad B – A2

Surface Hole Location: 1,801' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,380' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 203H: Pad B – A3

Surface Hole Location: 1,831' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,980' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-26 FED COM 204H: Pad B – A4

Surface Hole Location: 1,861' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,010' FWL & 50' FSL, Section 26, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 205H: Pad B – A5

Surface Hole Location: 2,261' FWL & 1,675' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,220' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 206H: Pad B – A6

Surface Hole Location: 2,291' FWL & 1,675' FNL, Section 23, T. 25 S, R. 29 E. **Bottom Hole Location:** 2,340' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-26 FED COM 207H: Pad B – A7

Surface Hole Location: 2,321' FWL & 1,675' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,430' FWL & 50' FSL, Section 26, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 208H: Pad B – A8

Surface Hole Location: 2,351' FWL & 1,675' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,520' FEL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 209H: Pad B – B1

Surface Hole Location: 1,770' FWL & 1,798' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,170' FWL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-26 FED COM 210H: Pad B – B2

Surface Hole Location: 1,800' FWL & 1,798' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,590' FWL & 50' FSL, Section 26, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 301H: Pad C – A1

Surface Hole Location: 2,440' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,220' FEL & 50' FSL, Section 35, T. 25 S. R. 29 E.

CORRAL 23-35 FED COM 302H: Pad C – A2

Surface Hole Location: 2,410' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,220' FEL & 50' FSL, Section 35, T. 25 S. R. 29 E.

CORRAL 23-35 FED COM 303H: Pad C – A3

Surface Hole Location: 2,380' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,980' FEL & 50' FSL, Section 35, T. 25 S. R. 29 E.

CORRAL 23-26 FED COM 304H: Pad C – A4

Surface Hole Location: 2,350' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,590' FEL & 50' FSL, Section 26, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 305H: Pad C – A5

Surface Hole Location: 1,950' FEL & 1,902' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,380' FEL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 ED COM 306H: Pad C – A6

Surface Hole Location: 1,920' FEL & 1,902' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 1,050' FEL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-35 FED COM 307H: Pad C – A7

Surface Hole Location: 1,890' FEL & 1,902' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 660' FEL & 50' FSL, Section 35, T. 25 S, R. 29 E.

CORRAL 23-26 FED COM 308H: Pad C – A8

Surface Hole Location: 1,860' FEL & 1,902' FNL, Section 23, T. 25 S, R. 29 E. **Bottom Hole Location:** 540' FEL & 50' FSL, Section 26, T. 25 S, R. 29E.

CORRAL 23-26 FED COM 309H: Pad C – B1

Surface Hole Location: 2,440' FEL & 2,026' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,430' FEL & 50' FSL, Section 26, T. 25 S, R. 29 E.

CORRAL 23-26 FED COM 310H: Pad C – B2

Surface Hole Location: 2,410' FEL & 2,026' FNL, Section 23, T. 25 S. R. 29 E. **Bottom Hole Location:** 2,010' FEL & 50' FSL, Section 26, T. 25 S, R. 29 E.

FUTURE WELL #1: Pad B – B3

Surface Hole Location: 1,831' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #2: Pad B – B4

Surface Hole Location: 1,861' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #3: Pad B – B5

Surface Hole Location: 1,831' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #4: Pad B – B6

Surface Hole Location: 1,861' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #5: Pad B – B7

Surface Hole Location: 1,831' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #6: Pad B – B8

Surface Hole Location: 1,861' FWL & 1,673' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #7: Pad C – B3

Surface Hole Location: 2,380' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #8: Pad C – B4

Surface Hole Location: 2,350' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #9: Pad C – B5

Surface Hole Location: 1,950' FEL & 1,902' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #10: Pad C – B6

Surface Hole Location: 2,350' FEL & 1,901' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #11: Pad C – B7

Surface Hole Location: 1,950' FEL & 1,902' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

FUTURE WELL #12: Pad C – B8

Surface Hole Location: 1,950' FEL & 1,902' FNL, Section 23, T. 25 S. R. 29 E.

Bottom Hole Location: N/A

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1. GENERAL PROVISIONS

The failure of the operator to comply with these requirements may result in the assessment of liquidated damages or penalties pursuant to 43 CFR 3163.1 or 3163.2. A copy of these conditions of approval shall be present on the location during construction, drilling and reclamation activity. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

1.1. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural resource (historic or prehistoric site or object) discovered by the operator, or any person working on the operator's behalf, on the public or federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area (within 100ft) of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer, in conjunction with a BLM Cultural Resource Specialist, to determine appropriate actions to prevent the loss of significant scientific values. The operator shall be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

Traditional Cultural Properties (TCPs) are protected by NHPA as codified in 36 CFR 800 for possessing traditional, religious, and cultural significance tied to a certain group of individuals. Though there are currently no designated TCPs within the project area or within a mile of the project area, but it is possible for a TCP to be designated after the approval of this project. If a TCP is designated in the project area after the project's approval, the BLM Authorized Officer will notify the operator of the following conditions and the duration for which these conditions are required.

- 1. Temporary halting of all construction, drilling, and production activities to lower noise.
- 2. Temporary shut-off of all artificial lights at night.

The operator is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA), specifically NAGPRA Subpart B regarding discoveries, to protect human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered during project work. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and a BLM-CFO Authorized Officer will be notified immediately. The BLM will then be required to be notified, in writing, within 24 hours of the discovery. The written notification should include the geographic location by county and state, the contents of the discovery, and the steps taken to protect said discovery. You must also include any potential threats to the discovery and a conformation that all activity within 100ft of the discovery has ceased and work will not resume until written certification is issued. All work on the entire project must halt for a minimum of 3 days and work cannot resume until an Authorized Officer grants permission to do so.

Any paleontological resource discovered by the operator, or any person working on the operator's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. The operator will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the operator.

1.2. RANGELAND RESOURCES

1.2.1. Cattleguards

Where a permanent cattleguard is approved, an appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

1.2.2. Fence Requirement

Where entry granted across a fence line, the fence must be braced and tied off on both sides of the passageway prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

1.2.3. Livestock Watering Requirement

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment holder if any damage occurs to structures that provide water to livestock.

1.3. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA, New Mexico Department of Agriculture, and BLM requirements and policies.

1.3.1 African Rue (Peganum harmala)

Spraying: The spraying of African Rue must be completed by a licensed or certified applicator. In order to attempt to kill or remove African Rue the proper mix of chemical is needed. The mix consists of 2% Arsenal (Imazapyr) and 2% Roundup (Glyphosate) along with a nonionic surfactant. Any other chemicals or combinations shall be approved by the BLM Noxious Weeds Coordinator prior to treatment. African Rue shall be sprayed in connection to any dirt working activities or disturbances to the site being sprayed. Spraying of African Rue shall be done on immature plants at initial growth through flowering and mature plants between budding and flowering stages. Spraying shall not be conducted after flowering when plant is fruiting. This will ensure optimal intake of chemical and decrease chances of developing herbicide resistance. After spraying, the operator or necessary parties must contact the Carlsbad Field Office to inspect the effectiveness of the application treatment to the plant species. No ground disturbing activities can take place until the inspection by the authorized officer is complete. The operator may contact the Environmental Protection Department or the BLM Noxious Weed Coordinator at (575) 234-5972 or BLM NM CFO NoxiousWeeds@blm.gov.

Management Practices: In addition to spraying for African Rue, good management practices should be followed. All equipment should be washed off using a power washer in a designated containment area. The containment area shall be berned to allow for containment of the seed to prevent it from entering any open areas of the nearby landscape. The containment area shall be excavated near or adjacent to the well pad at a depth of three feet and just large enough to get equipment inside it to be washed off. This will allow all seeds to be in a centrally located area that can be treated at a later date if the need arises.

1.4. LIGHT POLLUTION

1.4.1. Downfacing

All permanent lighting will be pointed straight down at the ground in order to prevent light spill beyond the edge of approved surface disturbance.

1.4.2. Shielding

All permanent lighting will use full cutoff luminaires, which are fully shielded (i.e., not emitting direct or indirect light above an imaginary horizontal plane passing through the lowest part of the light source).

1.4.3. Lighting Color

Lighting shall be 3,500 Kelvin or less (Warm White) except during drilling, completion, and workover operations. No bluish-white lighting shall be used in permanent outdoor lighting.

2. SPECIAL REQUIREMENTS

2.1. WATERSHED

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No waterflow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be immediately corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location with waddles (minimum 9" height) surrounding the stockpiled soil to prevent soil loss due to water/wind erosion. The waddles are to be maintained throughout the life of the project. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

Any water erosion that may occur due to the construction of the well pad and during the life of the well pad will be immediately corrected and proper measures will be taken to prevent future erosion.

2.1.1. Tank Battery

Tank battery locations will be lined and bermed. A 20-mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hourproduction, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity). Automatic shut off, check valves, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

2.1.2. Buried/Surface Line(s)

When crossing ephemeral drainages (marked and unmarked), the pipeline(s) will be buried to a minimum depth of 48 inches from the top of pipe to ground level. In ephemeral flow paths, rivers, and streams excess soil is to be compacted and level to ground surface, allowing water to flow in its natural state. Erosion control methods such as gabions and/or rock aprons should be placed on both up and downstream sides of the pipeline crossing. In addition, curled (plastic and weed free) wood/straw fiber wattles/logs and/or silt fences should be placed on the downstream side for sediment control during construction and maintained until soils and vegetation have stabilized. Water bars should be placed within the ROW to divert and dissipate surface runoff. A pipeline access road is not permitted to cross these ephemeral drainages. Traffic should be diverted to a preexisting route. Additional seeding may be required in floodplains and drainages to restore energy dissipating vegetation. Any water erosion that may occur due to construction or during the life of the pipeline system will be immediately corrected and proper measures will be taken to prevent erosion. Any spills or leaks from the proposed pipeline must be reported to BLM immediately.

Prior to pipeline installation and construction, a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event. Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.

The pipeline is to not obstruct ephemeral drainages, draws, or streams allowing water to flow in its natural state unobstructed. Any water erosion that may occur due to the construction within the ROW would be corrected by the operator within two weeks and proper measures would be taken to prevent future erosion events. Any spills or leaks from the proposed produced water pipeline must be reported to BLM immediately.

2.1.3. Electric Line(s)

Any water erosion that may occur due to the construction of overhead electric line and during the life of the power line will be quickly corrected and proper measures will be taken to prevent future erosion. A power pole must not be placed in drainages, playas, wetlands, riparian areas, or floodplains and must span across the features at a distance away that does not promote further erosion.

2.1.4. Temporary Use Fresh Water Frac Line(s)

Once the temporary use exceeds the timeline of 180 days and/or with a 90 day extension status; further analysis will be required if the applicant pursues to turn the temporary ROW into a permanent ROW.

The pipeline is to not obstruct ephemeral drainages or streams allowing water to flow in its natural state unobstructed. Any water erosion that may occur due to the construction within the ROW would be corrected by the operator within two weeks and proper measures would be taken to prevent future erosion events. Any spills or leaks from the proposed produced water pipeline must be reported to BLM immediately.

2.2. CAVE/KARST

2.2.1. General Construction

- No blasting
- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction, and no additional construction shall occur until clearance has been issued by the Authorized Officer.
- All linear surface disturbance activities will avoid sinkholes and other karst features to lessen the possibility of encountering near surface voids during construction, minimize changes to runoff, and prevent untimely leaks and spills from entering the karst drainage system.
- This is a sensitive area and all spills or leaks will be reported to the BLM immediately for their immediate and proper treatment, as defined in NTL 3A for Major Undesirable Events.

2.2.2. Pad Construction

- The pad will be constructed and leveled by adding the necessary fill and caliche. No blasting will be used for any construction or leveling activities.
- The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.
- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised (i.e. an access road crossing the berm cannot be lower than the berm height).

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 Following a rain event, all fluids will be vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

2.2.3. Road Construction

- Turnout ditches and drainage leadoffs will not be constructed in such a manner as to alter the natural flow
 of water into or out of cave or karst features.
- Special restoration stipulations or realignment may be required if subsurface features are discovered during construction.

2.2.4. Buried Pipeline/Cable Construction

• Rerouting of the buried line(s) may be required if a subsurface void is encountered during construction to minimize the potential subsidence/collapse of the feature(s) as well as the possibility of leaks/spills entering the karst drainage system.

2.2.5. Powerline Construction

- Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems.
- Larger powerlines will adjust their pole spacing to avoid cave and karst features.
- Special restoration stipulations or realignment may be required if subsurface voids are encountered.

2.2.6. Surface Flowlines Installation

• Flowlines will be routed around sinkholes and other karst features to minimize the possibility of leaks/spills from entering the karst drainage system.

2.2.7. Production Mitigation

- Tank battery locations and facilities will be bermed and lined with a 20-mil thick permanent liner that has a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Secondary containment holding capacity must be large enough to contain 1 ½ times the content of the largest tank or 24-hour production, whichever is greater (displaced volume from all tanks within the berms MUST be subtracted from total volume of containment in calculating holding capacity).
- Implementation of a leak detection system to provide an early alert to operators when a leak has occurred.
- Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

2.2.8. Residual and Cumulative Mitigation

The operator will perform annual pressure monitoring on all casing annuli. If the test results indicate a casing failure has occurred, contact a BLM Engineer immediately, and take remedial action to correct the problem.

2.2.9. Plugging and Abandonment Mitigation

Upon well abandonment in high cave karst areas, additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

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2.3 WILDLIFE

2.3.2. Texas Hornshell Mussel

Oil and Gas and Associated Infrastructure Mitigation Measures for Zone D – CCA Boundary Requirements:

- Provide CEHMM with the permit, lease, or other authorization form BLM, if applicable.
- Provide CEHMM with plats or other electronic media describing the new surface disturbance for the project.

Oil and Gas Zone D - CCA Boundary requirements.

- Implement erosion control measures in accordance with the Reasonable and Prudent Practices for Stabilization ("RAPPS")
- Comply with SPCC requirements in accordance with 40 CFR Part 112;
- Comply with the United States Army Corp of Engineers (USACE) Nationwide 12 General Permit, where applicable;
- Utilize technologies (like underground borings for pipelines), where feasible;
- Educate personnel, agents, contractors, and subcontractors about the requirements of conservation measures, COAs, Stips and provide direction in accordance with the Permit.

2.4 VISUAL RESOURCE MANAGEMENT

2.5.1 VRM IV

Above-ground structures including meter housing that are not subject to safety requirements are painted a flat non-reflective paint color, Shale Green from the BLM Standard Environmental Color Chart (CC-001: June 2008).

3. CONSTRUCTION REQUIRENMENTS

3.1 CONSTRCUTION NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at BLM_NM_CFO_Construction_Reclamation@blm.gov at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and COAs on the well site and they shall be made available upon request by the Authorized Officer.

3.2 TOPSOIL

The operator shall strip the topsoil (the A horizon) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. No more than the top 6 inches of topsoil shall be removed. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

Other subsoil (the B horizon and below) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

3.3 CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No reserve pits will be used for drill cuttings. The operator shall properly dispose of drilling contents at an authorized disposal site.

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3.4 FEDERAL MINERAL PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

3.5 WELL PAD & SURFACING

Any surfacing material used to surface the well pad will be removed at the time of interim and final reclamation.

3.6 EXCLOSURE FENCING (CELLARS & PITS)

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the well cellar is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

The operator will also install and maintain mesh netting for all open well cellars to prevent access to smaller wildlife before and after drilling operations until the well cellar is free of fluids and the operator. Use a maximum netting mesh size of $1\frac{1}{2}$ inches. The netting must not have holes or gaps.

3.7 ON LEASE ACESS ROAD

3.7.1 Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

3.7.2 **Surfacing**

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements will be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

3.7.3 **Crowning**

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

3.7.4 **Ditching**

Ditching shall be required on both sides of the road.

3.7.5 Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

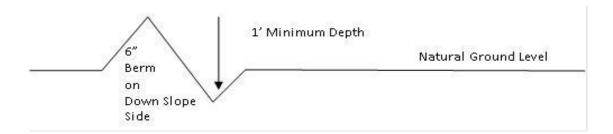
3.7.6 **Drainage**

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, leadoff ditches, culvert installation, and low water crossings).

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A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

3.7.7 **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Construction Steps

- Salvage topsoil
 Construct road
- Redistribute topsoil
 Revegetate slopes
- center line of roadway shoulderturnout 10' transition 100 full turnout width Intervisible turnouts shall be constructed on all single lane roads on all blind curves with additional tunouts as needed to keep spacing below 1000 feet. **Typical Turnout Plan** crown natural ground **Level Ground Section** road crown type earth surface .03 - .05 ft/ft aggregate surface .02 - .04 ft/ft

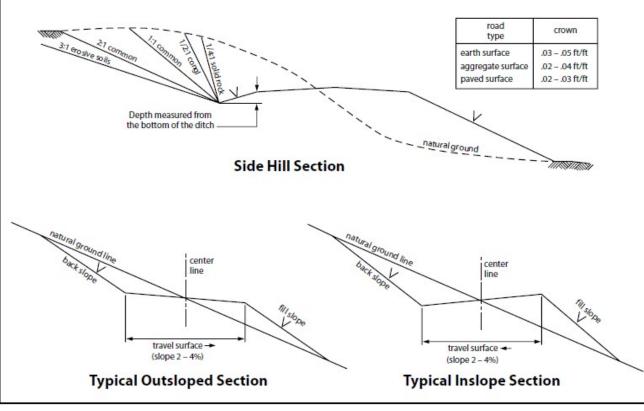


Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.

4. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- A leak detection plan <u>will be submitted to the BLM Carlsbad Field Office for approval</u> prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.1 BURIED PIPELINES

A copy of the application (APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the pipeline corridor or on facilities authorized under this APD. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to the operator's activity on the pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of operator, regardless of fault. Upon failure of operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and

fish and wildlife habitats, at the full expense of the operator. Such action by the Authorized Officer shall not relieve operator of any responsibility as provided herein.

- 5. All construction and maintenance activity will be confined to the authorized pipeline corridor.
- 6. The pipeline will be buried with a minimum cover of 36 inches between the top of the pipe and ground level.
- 7. The maximum allowable disturbance for construction in the 60ft pipeline corridor will be 60 feet:
 - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed <u>40</u> feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation*.)
 - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed <u>60</u> feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact.*Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
 - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.)
- 8. The maximum allowable disturbance for construction in the 100ft pipeline corridor will be 100 feet:
 - Blading of vegetation within the pipeline corridor will be allowed: maximum width of blading operations will not exceed 66 feet. The trench is included in this area. (Blading is defined as the complete removal of brush and ground vegetation.)
 - Clearing of brush species within the pipeline corridor will be allowed: maximum width of clearing operations will not exceed 100 feet. The trench and bladed area are included in this area. (Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.)
 - The remaining area of the pipeline corridor (if any) shall only be disturbed by compressing the vegetation. (Compressing can be caused by vehicle tires, placement of equipment, etc.)
- 9. The operator shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately ___6__ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.
- 10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this pipeline corridor and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire pipeline corridor shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted, and a 6-inch berm will be left over the ditch line to allow for settling back to grade.
- 11. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.
- 12. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator before maintenance begins. The operator will take whatever steps are necessary to ensure that the pipeline route is not

used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the operator to construct temporary deterrence structures.

- 13. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 14. <u>Escape Ramps</u> The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria:
 - a. Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.
 - b. For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30-degree slope and spaced no more than 500 feet apart) shall be placed in the trench. Before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them alive at least 100 yards from the trench.

15. Special Stipulations:

Karst:

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered, alignments may be rerouted to avoid the karst feature and lessen the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
- Special restoration stipulations or realignment may be required at such intersections, if any.
- A leak detection plan <u>will be submitted to the BLM Carlsbad Field Office for approval</u> prior to pipeline installation. The method could incorporate gauges to detect pressure drops, situating values and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
- Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
- All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

4.2 SURFACE PIPELINES

A copy of the APD and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. Operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. Operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 et seq. (1982) with regard to any toxic substances that are used, generated by or stored on the pipeline corridoror on facilities authorized under this APD (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any

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release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

- 3. Operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Pipeline corridor (unless the release or threatened release is wholly unrelated to activity of the Operator's activity on the Pipeline corridor), or resulting from the activity of the Operator on the pipeline corridor. This provision applies without regard to whether a release is caused by Operator, its agent, or unrelated third parties.
- 4. Operator shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Operator shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the pipeline corridor or permit area:
 - a. Activities of Operator including, but not limited to: construction, operation, maintenance, and termination of the facility;
 - b. Activities of other parties including, but not limited to:
 - (1) Land clearing
 - (2) Earth-disturbing and earth-moving work
 - (3) Blasting
 - (4) Vandalism and sabotage
 - c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

- 5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant is discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Operator, regardless of fault. Upon failure of Operator to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as they deem necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Operator. Such action by the Authorized Officer shall not relieve Operator of any responsibility as provided herein.
- 6. All construction and maintenance activity shall be confined to the authorized pipeline corridor width of 30-feet. If the pipeline route follows an existing road or buried pipeline corridor, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline corridor. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or pipeline corridors.

- 7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.
- 8. Operator shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.
- 9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.
- 10. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 11. In those areas where erosion control structures are required to stabilize soil conditions, the operator will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.
- 12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the operator to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" Shale Green, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.
- 13. The pipeline will be identified by signs at the point of origin and completion of the pipeline corridor and at all road crossings. At a minimum, signs will state the operator's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.
- 14. The operator shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the operator. The operator will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.
- 15. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.
- 16. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

4.3 RANGLAND MITIGATION FOR PIPELINES

4.5.1 Fence Requirement

Where entry is granted across a fence line, the fence must be braced and tied off on both sides of the passageway with H-braces prior to cutting. Once the work is completed, the fence will be restored to its prior condition, or better. The operator shall notify the private surface landowner or the grazing allotment operator prior to crossing any fence(s).

4.5.2 Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at road-fence crossing(s). Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations. A gate shall be constructed on one side of the cattleguard and fastened securely to H-braces.

4.5.3 Livestock Watering Requirement

Structures that provide water to livestock, such as windmills, pipelines, drinking troughs, and earthen reservoirs, will be avoided by moving the proposed action.

Any damage to structures that provide water to livestock throughout the life of the well, caused by operations from the well site, must be immediately corrected by the operator. The operator must notify the BLM office (575-234-5972) and the private surface landowner or the grazing allotment operator if any damage occurs to structures that provide water to livestock.

- Livestock operators will be contacted, and adequate crossing facilities will be provided as needed to ensure livestock are not prevented from reaching water sources because of the open trench.
- Wildlife and livestock trails will remain open and passable by adding soft plugs (areas where the
 trench is excavated and replaced with minimal compaction) during the construction phase. Soft
 plugs with ramps on either side will be left at all well-defined livestock and wildlife trails along
 the open trench to allow passage across the trench and provide a means of escape for livestock and
 wildlife that may enter the trench.
- Trenches will be backfilled as soon as feasible to minimize the amount of open trench. The Operator will avoid leaving trenches open overnight to the extent possible and open trenches that cannot be backfilled immediately will have escape ramps (wooden) placed at no more than 2,500 feet intervals and sloped no more than 45 degrees.

5. OVERHEAD ELECTRIC LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Operator agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

- 1. The operator shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this APD.
- 2. The operator shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the operator shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the powerline corridor or on facilities authorized under this powerline corridor. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.
- 3. The operator agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Powerline corridor(unless the release or threatened release is wholly unrelated to the operator's activity on the powerline

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- corridor), or resulting from the activity of the Operator on the powerline corridor. This agreement applies without regard to whether a release is caused by the operator, its agent, or unrelated third parties.
- 4. There will be no clearing or blading of the powerline corridor unless otherwise agreed to in writing by the Authorized Officer.
- 5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The operator shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this powerline corridor, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the operator without liability or expense to the United States.
- 6. Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.
- 7. The operator shall minimize disturbance to existing fences and other improvements on public lands. The operator is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The operator will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.
- 8. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.
- 9. Upon cancellation, relinquishment, or expiration of this APD, the operator shall comply with those abandonment procedures as prescribed by the Authorized Officer.
- 10. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this APD, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.
- 11. Special Stipulations:
 - For reclamation remove poles, lines, transformer, etc. and dispose of properly. Fill in any holes from the poles removed.
- 12. Karst stipulations for overhead electric lines
 - Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the
 possibility of encountering near surface voids and to minimize changes to runoff or possible leaks
 and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid
 cave and karst features.
 - The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage channels, cave passages, or voids are penetrated during construction.
 - No further construction will be done until clearance has been issued by the Authorized Officer.
 - Special restoration stipulations or realignment may be required.

6. PRODUCTION (POST DRILLING)

5.1 WELL STRUCTURES & FACILITIES

5.1.1 Placement of Production Facilities

Production facilities must be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

5.1.2 Exclosure Netting (Open-top Tanks)

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks until the operator removes the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

5.1.3. Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

5.1.4. Open-Vent Exhaust Stack Exclosures

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

5.1.5. Containment Structures

Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

7. RECLAMATION

Stipulations required by the Authorized Officer on specific actions may differ from the following general guidelines

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6.1 ROAD AND SITE RECLAMATION

Any roads constructed during the life of the well will have the caliche removed or linear burial. If contaminants are indicated then testing will be required for chlorides and applicable contaminate anomalies for final disposal determination (disposed of in a manner approved by the Authorized Officer within Federal, State and Local statutes, regulations, and ordinances) and seeded to the specifications in sections 6.5 and 6.6.

6.2 EROSION CONTROL

Install erosion control berms, windrows, and hummocks. Windrows must be level and constructed perpendicular to down-slope drainage; steeper slopes will require greater windrow density. Topsoil between windrows must be ripped to a depth of at least 12", unless bedrock is encountered. Any large boulders pulled up during ripping must be deep-buried on location. Ripping must be perpendicular to down-slope. The surface must be left rough in order to catch and contain rainfall on-site. Any trenches resulting from erosion cause by run-off shall be addressed immediately.

6.3 INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations must undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators must work with BLM surface protection specialists (BLM_NM_CFO_Construction_Reclamation@blm.gov) to devise the best strategies to reduce the size of the location. Interim reclamation must allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche and any other surface material is required. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided in section 6.6.

Upon completion of interim reclamation, the operator shall submit a Sundry Notice, Subsequent Report of Reclamation (Form 3160-5).

6.4 FINAL ABANDONMENT & RECLAMATION

Prior to surface abandonment, the operator shall submit a Notice of Intent Sundry Notice and reclamation plan.

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding will be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM. After earthwork and seeding is completed, the operator is required to submit a Sundry Notice, Subsequent Report of Reclamation.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (BLM NM CFO Construction Reclamation@blm.gov).

6.5 SEEDING TECHNIQUES

Seeds shall be hydro-seeded, mechanically drilled, or broadcast, with the broadcast-seeded area raked, ripped or dragged to aid in covering the seed. The seed mixture shall be evenly and uniformly planted over the disturbed area.

6.6 SOIL SPECIFIC SEED MIXTURE

The lessee/permitee shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the Authorized Officer.

Seed land application will be accomplished by mechanical planting using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area. Smaller/heavier seeds tend to drop the bottom of the drill and are planted first; the operator shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory BLM or Soil Conservation

District stand is established as determined by the Authorized Officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding or until several months of precipitation have occurred, enabling a full four months of growth, with one or more seed generations being established.

Seed Mixture 2, for Sandy Site Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre	
Sand dropseed (Sporobolus cryptandrus)	1.0	
Sand love grass (Eragrostis trichodes)		1.0
Plains bristlegrass (Setaria macrostachya)	2.0	

^{*}Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO

LEASE NO.: NMNM120895

LOCATION: Sec. 23, T.25 S, R 29 E

COUNTY: Eddy County, New Mexico

WELL NAME & NO.: Corral 23-26 Fed Com 308H

SURFACE HOLE FOOTAGE: 1902'/N & 1860'/E **BOTTOM HOLE FOOTAGE:** 50'/S & 540'/E

COA

H ₂ S	© No		© Yes	
Potash /	None	Secretary	□ R-111-Q	Open Annulus
WIPP	Choose	☐ WIPP		
Cave / Karst	Low	Medium	் High	Critical
Wellhead	Conventional	Multibowl	Both	Diverter
Cementing	Primary Squeeze	Cont. Squeeze	EchoMeter	DV Tool
Special Req	Capitan Reef	Water Disposal	▼ COM	Unit
Waste Prev.	Self-Certification	Waste Min. Plan	○ APD Submitted prior to 06/10/2024	
Additional	Flex Hose	Casing Clearance	Pilot Hole	Break Testing
Language	Four-String	Offline Cementing	Fluid-Filled	

A. HYDROGEN SULFIDE

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

B. CASING

- 1. The 9-5/8 inch surface casing shall be set at approximately 750 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 5827'.
 - 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. Excess calculates to -14%. Additional cement maybe required. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

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 Surface 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. **Excess calculates to 4%. Additional cement maybe required.**

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)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in 43 CFR 3171 and 3172.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

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
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per 43 CFR 3172.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

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

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

Casing Clearance

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

GENERAL REQUIREMENTS

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

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

Contact Eddy County Petroleum Engineering Inspection Staff:

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; **BLM NM CFO DrillingNotifications@BLM.GOV**; (575) 361-2822

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

A. CASING

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

Page 5 of 9

- 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 3/28/2025 575-234-5998 / zstevens@blm.gov

BUREAU OF LAND MANAGEMENT

NAME: VISHAL RAJAN

Email address:

Operator Certification Data Report

Signed on: 06/07/2024

04/08/2025

Operator

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Title: Regulatory Clerk		
Street Address: 6401 HOLIDAY H	ILL ROAD BLDG 5	
City: MIDLAND	State: TX	Zip: 79707
Phone: (432)620-6704		
Email address: VISHAL.RAJAN@	EXXONMOBIL.COM	
Field		
Representative Name:		
Street Address:		
City: S	tate:	Zip:
Phone:		



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

04/08/2025

APD ID: 10400098914

Operator Name: XTO ENERGY INCORPORATED

Well Name: CORRAL 23-26 FED COM

Well Type: OIL WELL

Submission Date: 06/08/2024

Well Number: 308H
Well Work Type: Drill

Highlighted data reflects the most recent changes Show Final Text

Section 1 - General

 Submission Date: 06/08/2024

BLM Office: Carlsbad **User:** VISHAL RAJAN

Title: Regulatory Clerk

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM120895 Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Zip: 77389

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? Y

Permitting Agent? NO APD Operator: XTO ENERGY INCORPORATED

Operator letter of

Operator Info

Operator Organization Name: XTO ENERGY INCORPORATED

Operator Address: 222777 SPRINGSWOODS VILLAGE PKWY

Operator PO Box:

Operator City: SPRING State: TX

Operator Phone: (817)870-2800

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO Master Development Plan name:

Well in Master SUPO? NO Master SUPO name:

Well in Master Drilling Plan? NO Master Drilling Plan name:

Well Name: CORRAL 23-26 FED COM Well Number: 308H Well API Number:

Field/Pool or Exploratory? Field and Pool Field Name: WILLOW LAKE Pool Name: BONE SPRING,

SOUTHEAST

Is the proposed well in an area containing other mineral resources? USEABLE WATER, NATURAL GAS, OIL

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: Number: C

CORRAL 23-26 FED COM

Well Class: HORIZONTAL Number of Legs: 1

Well Work Type: Drill
Well Type: OIL WELL
Describe Well Type:
Well sub-Type: INFILL

Describe sub-type:

Distance to town: Distance to nearest well: 30 FT Distance to lease line: 1860 FT

Reservoir well spacing assigned acres Measurement: 320 Acres

Well plat: Corral_23_26_FED_COM_308H_C102_20250224061919.pdf

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum: GROUND LEVEL

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
SHL Leg #1	190 2	FNL	186 0	FEL	25S	29E	23	Aliquot SWNE	32.11752 5	- 103.9525 75	EDD Y	NEW MEXI CO		Т	NMNM 120895	313 2	0	0	Υ
KOP Leg #1	190 2	FNL	186 0	FEL	25S	29E	23	Aliquot SWNE	32.11752 5	- 103.9525 75	EDD Y	NEW MEXI CO		F	NMNM 120895			838 0	Υ
PPP Leg #1-1	100	FNL	540	FEL	25S	29E	23	Aliquot NENE	32.12247 2	- 103.9483 01	EDD Y	NEW MEXI CO		F	NMNM 120895	- 596 4		909 6	Υ

Released to Imaging: 6/25/2025 7:51:45 AM

Wellbore	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD	Will this well produce from this
EXIT Leg #1	100	FSL	540	FEL	25S	29E	26	Aliquot SESE	32.09383 6	- 103.9482 09	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 100554	- 596 4	207 16	909 6	Υ
BHL Leg #1	50	FSL	540	FEL	25S	29E	26	Aliquot SESE	32.09369 8	- 103.9482 08		MEXI	NEW MEXI CO	F	NMNM 100554	- 596 4		909 6	Υ

Vishal Rajan Printed Name

vishal.rajan@exxonmobil.com

Email Address

23786 04-18-2025

ificate Number Date of Survey

ΚT

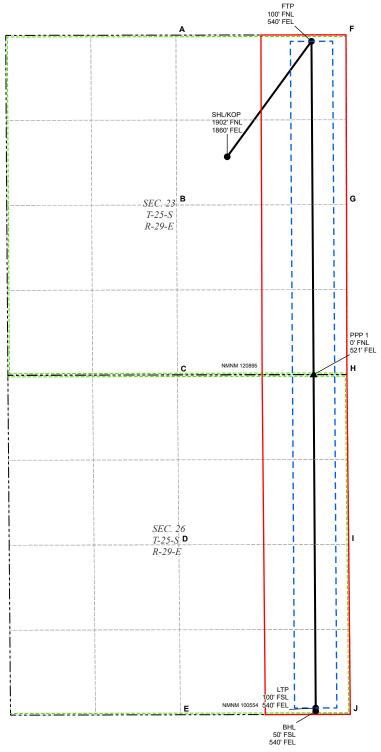
618.013013.11-23

Note: No allowable will be assigned to this completion until all interests 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 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 than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors 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 is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



LEGEND



	WELL COORDINATE TABLE													
WELL	NAD 83 NME X	NAD 83 NME Y	NAD 83 LAT	NAD 83 LON	NAD 27 NME X	NAD 27 NME Y	NAD 27 LAT	NAD 27 LON						
SHL/KOP	659,217.7	406,700.0	32.117525	-103.952575	618,033.3	406,641.5	32.117400	-103.952089						
FTP	660,534.3	408,504.4	32.122472	-103.948301	619,349.8	408,445.9	32.122347	-103.947816						
LTP	660,600.0	398,087.2	32.093836	-103.948209	619,415.2	398,029.0	32.093711	-103.947725						
BHL	660,600.5	398,037.2	32.093698	-103.948208	619,415.7	397,979.0	32.093573	-103.947724						
PPP 1	660,567.1	403,296.6	32.108156	-103.948255	619,382.5	403,238.3	32.108031	-103.947770						

CORNER COORDINATE TABLE												
CORNER	NAD 83 NME X	NAD 83 NME Y	NAD 27 NME X	NAD 27 NME Y								
Α	658,415.9	408,601.3	617,231.5	408,542.8								
В	658,427.5	405,946.2	617,243.1	405,887.7								
С	658,439.2	403,292.2	617,254.6	403,233.9								
D	658,462.7	400,636.9	617,278.1	400,578.6								
E	658,486.3	397,981.3	617,301.7	397,923.1								
F	661,074.3	408,605.3	619,889.8	408,546.8								
G	661,081.1	405,951.7	619,896.6	405,893.3								
Н	661,087.8	403,297.7	619,903.2	403,239.3								
ı	661,114.8	400,643.4	619,930.2	400,585.1								
J	661,140.9	397,988.7	619,956.1	397,930.5								

Drilling Plan Data Report

04/08/2025

BUREAU OF LAND MANAGEMENT

Well Name: CORRAL 23-26 FED COM

APD ID: 10400098914

Submission Date: 06/08/2024

Highlighted data reflects the most recent changes

Operator Name: XTO ENERGY INCORPORATED

Well Number: 308H

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15349654	QUATERNARY	3132	0	0	ALLUVIUM	USEABLE WATER	N
15349655	SALADO	2058	1074	1074	SALT	NONE	N
15349656	BASE OF SALT	-14	3146	3146	SALT	NONE	N
15349657	DELAWARE	-204	3336	3336	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER: Produced Water	N
15349658	BRUSHY CANYON	-2695	5827	5827	SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	N
15349659	BONE SPRING	-3954	7086	7086	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	Y
15349660	BONE SPRING 1ST	-4728	7860	7860	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	Y
15349661	BONE SPRING 2ND	-5323	8455	8455	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	Y
15349653	BONE SPRING 2ND	-5746	8878	8878	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : Produced Water	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M Rating Depth: 9096

Equipment: Once the permanent WH is installed on the surface casing, the BOP equipment will have a 5M Hydril Annular & a 10M Triple Ram BOP. XTO will use a Multi-Bowl System which is attached

Requesting Variance? YES

Variance request: XTO requests a variance to allow the use of a flex hose. See attached. XTO requests a variance to be able to batch drill this well if necessary. XTO requests a variance to utilize a spudder rig. See attached. XTO requests a break test variance. See attached.

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

Choke Diagram Attachment:

Corral_23_35_23_26_Fed_10MCM_20250211124301.pdf

BOP Diagram Attachment:

Corral_23_35_23_26_Fed_10MCM_20250211124301.pdf

Corral_23_35_23_26_Fed_5M10MBOP_20250211124327.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	12.2 5	9.625	NEW	API	N	0	1039	0	1039	3132	2093	1039	J-55	40	BUTT	5.99	1.85	DRY	15.1 6	DRY	15.1 6
	INTERMED IATE	8.75	7.625	NEW	API	Υ	0	8595	0	7889	3132	-4757	8595	L-80	29.7	FJ	2.67	2.99	DRY	2.97	DRY	2.97
	PRODUCTI ON	6.75	5.5	NEW	NON API	Υ	0	20767	0	9096	3132	-5964	20767	P- 110		OTHER - Freedom HTQ/Talon HTQ	2.58	1.26	DRY	2.3	DRY	2.3

Casing Attachments

Casing ID: 1	String	SURFACE
Inspection Document:		
Spec Document:		
opeo Boodinenti		
Tapered String Spec:		
Casing Design Assump	tions and W	orksheet(s):

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Freedom_semi_premium_5.5_production_casing_20250211124912.pdf Talon_semiflush_5.5_production_casing_20250211124912.pdf

Tapered String Spec:

CORRAL_23_26_FED_COM_308H_Csg_20250211124954.pdf

Casing Design Assumptions and Worksheet(s):

CORRAL_23_26_FED_COM_308H_Csg_20250211125035.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Тор МБ	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1039	240	1.87	10.5	448.8	100	EconoCem- HLTRRC	NA
SURFACE	Tail		0	1039	130	1.35	14.8	175.5	100	Class C	2% CaCl
INTERMEDIATE	Lead		0	5827	660	1.33	14.8	877.8	100	Class C	NA
INTERMEDIATE	Tail		5827	8595	250	1.35	14.8	337.5	100	Class C	NA

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		8295	8795	20	2.69	12.8	53.8	30	NeoCem	NA
PRODUCTION	Tail		8795	2076 7	860	1.51	13.2	1298. 6	30	VersaCem	NA

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: The necessary mud products for weight addition and fluid loss control will be on location at all times.

Describe the mud monitoring system utilized: 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.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ЬН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1039	8595	OTHER: Saturated Salt for Salt Interval/Direct Emulsion	9	9.5							
0	1039	WATER-BASED MUD	8.5	9							
8595	2076 7	OIL-BASED MUD	9.1	9.6							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Open hole logging will not be done on this well.

List of open and cased hole logs run in the well:

GAMMA RAY LOG,CEMENT BOND LOG,DIRECTIONAL SURVEY,MEASUREMENT WHILE DRILLING,MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No Coring is planned for the well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 4541

Anticipated Surface Pressure: 2539

Anticipated Bottom Hole Temperature(F): 175

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

XTO_Energy_H2S_Plan_Updated_20250211124144.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

CORRAL_23_26_FED_COM_308H_DD_20240606060248.pdf

Corral_23_26_Fed_Com_308H____Section__Plan__view_and_Formation_20250224061214.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

CORRAL_23_26_FED_COM_308H_Cmt_20240606060303.pdf

Corral_23_35_23_26_GCP_20250211125745.pdf

CC_23_35_23_26_MBS_20250211125751.pdf

CC_23_35_23_26_H2S_Diagram_A_B_and_C_20250211125803.pdf

Other Variance attachment:

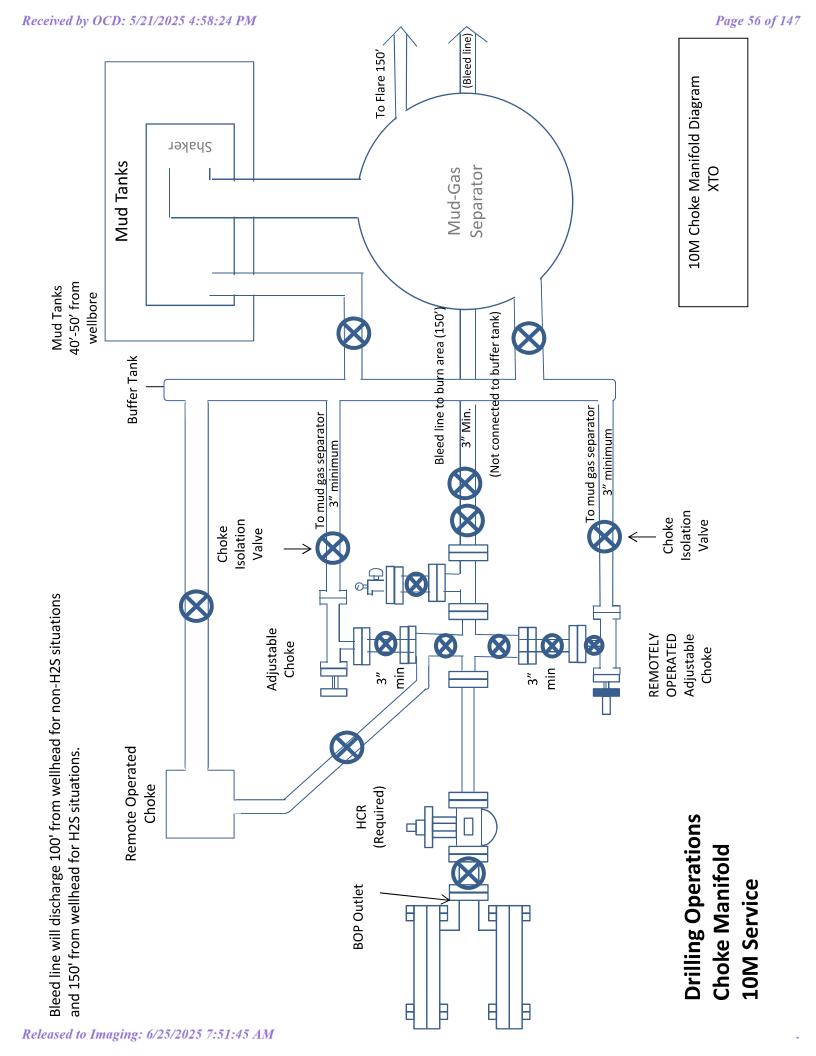
CC_23_35_OLCV_20240605122010.pdf

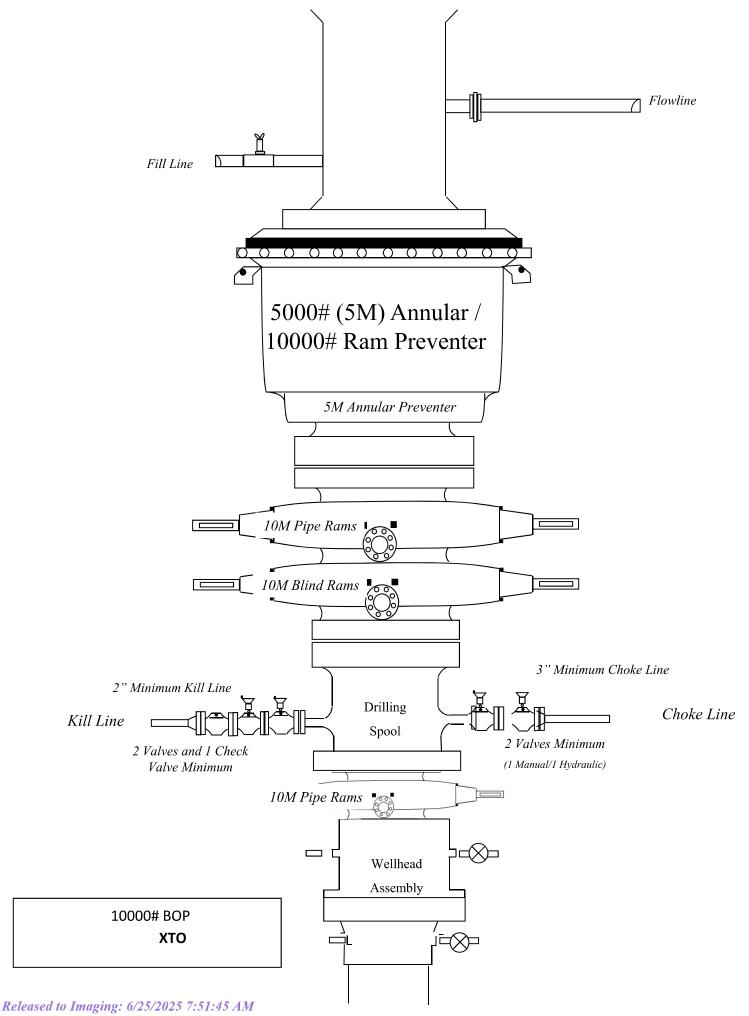
Spudder_Rig_Request_20250211130336.pdf

Updated Flex Hose 20250211130339.pdf

BOP_Break_Test_Variance_20250211130344.pdf









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

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

Notes

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- $2. \quad \text{Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.} \\$
- 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.

Legal Notice

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U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

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-Ib	_

Notes

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

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U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

Casing Assumptions

Casin	g Design									
	Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
	12.25	0' - 1039'	9.625	40	J-55	втс	New	1.85	5.99	15.16
	8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	4.11	2.86	2.19
	8.75	4000' – 8595.4'	7.625	29.7	HC L-80	Flush Joint	New	2.99	2.67	2.97
	6.75	0' - 8495.4'	5.5	20	RY P-110	Semi-Premium/ Freedom HTQ	New	1.26	2.76	2.30
	6.75	8495.4' - 20766.9'	5.5	20	RY P-110	Semi-Flush/ Talon HTQ	New	1.26	2.58	2.30

Casing Assumptions

Casing	Design									
	Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
	12.25	0' – 1039'	9.625	40	J-55	втс	New	1.85	5.99	15.16
	8.75	0' - 4000'	7.625	29.7	RY P-110	Flush Joint	New	4.11	2.86	2.19
	8.75	4000' – 8595.4'	7.625	29.7	HC L-80	Flush Joint	New	2.99	2.67	2.97
	6.75	0' - 8495.4'	5.5	20	RY P-110	Semi-Premium/ Freedom HTQ	New	1.26	2.76	2.30
	6.75	8495.4' - 20766.9'	5.5	20	RY P-110	Semi-Flush/ Talon HTQ	New	1.26	2.58	2.30



HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H2S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - o Detection of H₂S, and
 - o Measures for protection against the gas,
 - o Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H₂S	1.189 Air = I	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = I	2 ppm	N/A	1000 ppm

Contacting Authorities

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

CARLSBAD OFFICE – EDDY & LEA COUNTIES

3104 E. Greene St., Carlsbad, NM 88220 Carlsbad, NM	575-887-7329
XTO PERSONNEL: Will Dacus, Drilling Manager Brian Dunn, Drilling Supervisor Robert Bartels, Construction Execution Planner Andy Owens, EH & S Manager Frank Fuentes, Production Foreman	832-948-5021 832-653-0490 406-478-3617 903-245-2602 575-689-3363
SHERIFF DEPARTMENTS:	
Eddy County	575-887-7551
Lea County	575-396-3611
NEW MEXICO STATE POLICE:	575-392-5588
FIRE DEPARTMENTS: Carlsbad Eunice Hobbs Jal Lovington	911 575-885-2111 575-394-2111 575-397-9308 575-395-2221 575-396-2359
HOSPITALS:	911
Carlsbad Medical Emergency	575-885-2111
Eunice Medical Emergency	575-394-2112
Hobbs Medical Emergency	575-397-9308
Jal Medical Emergency	575-395-2221
Lovington Medical Emergency	575-396-2359
AGENT NOTIFICATIONS: For Lea County: Bureau of Land Management – Hobbs New Mexico Oil Conservation Division – Hobbs	575-393-3612 575-393-6161
For Eddy County:	575 224 5072
Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283

Long Lead_Well Planning

Corral Canyon Corral 23-26 Fed Com 308H Corral 23-26 Fed Com 308H

OH

Plan: Plan 1

Standard Planning Report

17 April, 2024

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: Corral Canyon

Site: Corral 23-26 Fed Com 308H
Well: Corral 23-26 Fed Com 308H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Corral 23-26 Fed Com 308H

RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

Minimum Curvature

Project Corral Canyon

Map System: US State Plane 1927 (Exact solution)
Geo Datum: NAD 1927 (NADCON CONUS)

Map Zone: New Mexico East 3001

System Datum:

Mean Sea Level

Site Corral 23-26 Fed Com 308H

 Site Position:
 Northing:
 406,641.50 usft
 Latitude:
 32° 7' 2.640 N

 From:
 Map
 Easting:
 618,033.30 usft
 Longitude:
 103° 57' 7.520 W

Position Uncertainty: 3.0 usft Slot Radius: 13-3/16 "

Well Corral 23-26 Fed Com 308H

32° 7' 2.640 N **Well Position** +N/-S 0.0 usftNorthing: 406,641.50 usft Latitude: 103° 57' 7.520 W +E/-W 0.0 usft Easting: 618,033.30 usft Longitude: **Position Uncertainty** 0.0 usft Wellhead Elevation: usft **Ground Level:** 3,132.0 usft

Grid Convergence: 0.20 $^{\circ}$

Wellbore OH

 Magnetics
 Model Name
 Sample Date (°)
 Dip Angle (°)
 Field Strength (nT)

 IGRF2020
 4/17/2024
 6.38
 59.65
 47,098.91180263

Design Plan 1

Audit Notes:

Version: PLAN Tie On Depth: 0.0

 Vertical Section:
 Depth From (TVD) (usft)
 +N/-S +E/-W (usft)
 Direction (usft)

 0.0
 0.0
 0.0
 179.64

Plan Survey Tool Program Date 4/17/2024

Depth From Depth To

(usft) (usft) Survey (Wellbore) Tool Name Remarks

1 0.0 20,766.3 Plan 1 (OH) XOM_R2OWSG MWD+IFR1+

OWSG MWD + IFR1 + Multi-St

lan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
4,870.1	33.40	23.21	4,777.1	434.9	186.5	2.00	2.00	0.00	23.21	
8,795.4	33.40	23.21	8,054.0	2,421.0	1,037.9	0.00	0.00	0.00	0.00	
10,299.2	90.00	179.64	9,096.0	1,804.4	1,316.5	8.00	3.76	10.40	152.41 FTF	_308H
20,716.3	90.00	179.64	9,096.0	-8,612.5	1,381.9	0.00	0.00	0.00	0.00 LTP	_308H
20,766.9	90.00	179.64	9,096.0	-8,663.1	1,382.2	0.00	0.00	0.00	0.00 BHL	308H

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning
Project: Corral Canyon

 Site:
 Corral 23-26 Fed Com 308H

 Well:
 Corral 23-26 Fed Com 308H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Corral 23-26 Fed Com 308H

RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

Measured Depth									
Depth									
(usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
SHL _308H									
1,074.0	0.00	0.00	1,074.0	0.0	0.0	0.0	0.00	0.00	0.00
Salado 3,146.0	0.00	0.00	3,146.0	0.0	0.0	0.0	0.00	0.00	0.00
Base of Salt	0.00	0.00	3,146.0	0.0	0.0	0.0	0.00	0.00	0.00
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	0.00
3,300.0	2.00	23.21	3,300.0	1.6	0.7	-1.6	2.00	2.00	0.00
3,336.1	2.72	23.21	3,336.0	3.0	1.3	-3.0	2.00	2.00	0.00
Delaware			,						
3,400.0	4.00	23.21	3,399.8	6.4	2.7	-6.4	2.00	2.00	0.00
3,500.0	6.00	23.21	3,499.5	14.4	6.2	-14.4	2.00	2.00	0.00
3,600.0 3,700.0	8.00 10.00	23.21 23.21	3,598.7 3,697.5	25.6 40.0	11.0 17.1	-25.6 -39.9	2.00 2.00	2.00 2.00	0.00 0.00
3,800.0 3,900.0	12.00 14.00	23.21 23.21	3,795.6 3,893.1	57.5 78.2	24.7 33.5	-57.4 -78.0	2.00 2.00	2.00 2.00	0.00 0.00
3,900.0 4,000.0	16.00	23.21	3,989.6	76.2 102.0	33.5 43.7	-76.0 -101.7	2.00	2.00	0.00
4,100.0	18.00	23.21	4,085.3	128.9	55.2	-128.5	2.00	2.00	0.00
4,200.0	20.00	23.21	4,179.8	158.8	68.1	-158.4	2.00	2.00	0.00
4,262.2	21.24	23.21	4,238.0	178.9	76.7	-178.4	2.00	2.00	0.00
Cherry Canyo	on								
4,300.0	22.00	23.21	4,273.2	191.7	82.2	-191.2	2.00	2.00	0.00
4,400.0	24.00	23.21	4,365.2	227.6	97.6	-227.0	2.00	2.00	0.00
4,500.0 4,600.0	26.00 28.00	23.21 23.21	4,455.8 4,544.9	266.5 308.2	114.2 132.1	-265.8 -307.4	2.00 2.00	2.00 2.00	0.00 0.00
4,700.0 4,800.0	30.00 32.00	23.21 23.21	4,632.4 4,718.1	352.8 400.1	151.2 171.5	-351.8 -399.0	2.00 2.00	2.00 2.00	0.00 0.00
4,870.1	33.40	23.21	4,777.1	434.9	186.5	-433.7	2.00	2.00	0.00
4,900.0	33.40	23.21	4,802.1	450.0	192.9	-448.8	0.00	0.00	0.00
5,000.0	33.40	23.21	4,885.5	500.6	214.6	-499.3	0.00	0.00	0.00
5,100.0	33.40	23.21	4,969.0	551.2	236.3	-549.7	0.00	0.00	0.00
5,200.0	33.40	23.21	5,052.5	601.8	258.0	-600.2	0.00	0.00	0.00
5,300.0	33.40	23.21	5,136.0	652.4	279.7	-650.6	0.00	0.00	0.00
5,400.0	33.40	23.21	5,219.5	703.0	301.4	-701.1	0.00	0.00	0.00
5,500.0	33.40	23.21	5,303.0	753.6	323.1	-751.6	0.00	0.00	0.00
5,600.0	33.40	23.21	5,386.4	804.2	344.8	-802.0	0.00	0.00	0.00
5,700.0 5,800.0	33.40 33.40	23.21 23.21	5,469.9 5,553.4	854.8 905.4	366.5 388.2	-852.5 -903.0	0.00 0.00	0.00 0.00	0.00 0.00
5,800.0	33.40	23.21	5,553.4 5,636.9	905.4 956.0	300.2 409.9	-903.0 -953.4	0.00	0.00	0.00
6,000.0	33.40	23.21	5,720.4	1,006.6	431.5	-1,003.9	0.00	0.00	0.00
6,100.0	33.40	23.21	5,803.8	1,057.2	453.2	-1,054.3	0.00	0.00	0.00
6,127.7	33.40	23.21	5,827.0	1,037.2	459.3	-1,054.3 -1,068.3	0.00	0.00	0.00
Brushy Canyo			•	,		,			
6,200.0	33.40	23.21	5,887.3	1,107.8	474.9	-1,104.8	0.00	0.00	0.00
6,300.0	33.40	23.21	5,970.8	1,158.4	496.6	-1,155.3	0.00	0.00	0.00
6,400.0	33.40	23.21	6,054.3	1,209.0	518.3	-1,205.7	0.00	0.00	0.00
6,500.0	33.40	23.21	6,137.8	1,259.6	540.0	-1,256.2	0.00	0.00	0.00
6,600.0	33.40	23.21	6,221.3	1,310.2	561.7	-1,306.6	0.00	0.00	0.00
6,700.0	33.40	23.21	6,304.7	1,360.8	583.4	-1,357.1	0.00	0.00	0.00
6,800.0	33.40	23.21	6,388.2	1,411.4	605.1	-1,407.6	0.00	0.00	0.00
6,900.0	33.40	23.21	6,471.7	1,462.0	626.8	-1,458.0	0.00	0.00	0.00
7,000.0 7,100.0	33.40 33.40	23.21 23.21	6,555.2 6,638.7	1,512.6 1,563.2	648.5 670.2	-1,508.5 -1,558.9	0.00 0.00	0.00 0.00	0.00 0.00

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning
Project: Corral Canyon

 Site:
 Corral 23-26 Fed Com 308H

 Well:
 Corral 23-26 Fed Com 308H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Corral 23-26 Fed Com 308H

RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

Measured											
Depth Inclination Color	lanne	d Survey									
7,300.0 33.40 23.21 6,895.6 1,864.4 713.5 -1,695.9 0.00 0.00 0.00 0.00 7,402.3 33.40 23.21 6,891.0 1,716.1 735.7 -1,711.5 0.00 0.00 0.00 0.00 7,402.3 33.40 23.21 6,972.6 1,765.6 759.9 1,790.8 0.00 0.00 0.00 0.00 7,500.0 33.40 23.21 7,086.1 1,816.2 778.8 -1,811.2 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,086.0 1,834.3 786.4 1,829.3 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,086.0 1,834.3 786.4 1,829.3 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,086.1 1,816.2 778.8 -1,811.2 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,289.0 1,816.4 882.0 -1,939.9 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,289.0 1,817.4 882.0 -1,939.9 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,289.0 1,816.2 882.9 -1,939.9 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,289.0 1,816.2 882.9 -1,939.9 0.00 0.00 0.00 0.00 7,635.8 33.40 23.21 7,289.0 1,816.2 882.9 -1,939.9 0.00 0.00 0.00 0.00 0.00 0.00 0.00		Depth			Depth			Section	Rate	Rate	Rate
Basal Erustry Carpyon 7.500.0		7,300.0	33.40	23.21	6,805.6	1,664.4	713.5	-1,659.9	0.00	0.00	0.00
7,590.0 33.40 23.21 7,766.1 1,766.6 766.9 1,766.8 1.00 0,00 0,00 0,00 7,680.5 33.40 23.21 7,066.1 1,316.2 778.6 1,318.12 0,00 0,00 0,00 0,00 7,685.8 33.40 23.21 7,139.6 1,866.8 80.3 1,861.7 0,00 0,00 0,00 0,00 7,865.0 33.40 23.21 7,139.6 1,866.8 80.3 1,861.7 0,00 0,00 0,00 0,00 7,865.0 33.40 23.21 7,223.1 1,917.4 82.0 1,912.2 0,00 0,00 0,00 0,00 7,865.0 33.40 23.21 7,229.1 1,917.4 82.0 1,912.2 0,00 0,00 0,00 0,00 7,865.0 33.40 23.21 7,269.0 1,945.2 833.9 1,939.9 0,00 0,00 0,00 0,00 8,000 33.40 23.21 7,306.5 1,968.0 843.7 1,962.6 0,00 0,00 0,00 8,100.0 33.40 23.21 7,306.5 1,968.0 843.7 1,962.6 0,00 0,00 0,00 0,00 8,100.0 33.40 23.21 7,305.5 1,968.0 865.4 2,013.1 0,00 0,00 0,00 0,00 8,300.0 33.40 23.21 7,365.7 0,2118.7 998.8 1,214.5 0,00 0,00 0,00 0,00 8,300.0 33.40 23.21 7,760.5 2,170.3 998.6 2,114.0 0,00 0,00 0,00 8,300.0 33.40 23.21 7,760.5 2,170.3 998.6 2,114.0 0,00 0,00 0,00 8,300.0 33.40 23.21 7,760.5 2,170.3 998.6 2,114.0 0,00 0,00 0,00 8,300.0 33.40 23.21 7,760.5 2,170.3 998.6 2,164.5 0,00 0,00 0,00 0,00 8,300.0 33.40 23.21 7,760.5 2,211.3 948.0 2,205.3 0,00 0,00 0,00 0,00 8,500.0 33.40 23.21 7,760.5 2,211.3 948.0 2,205.3 0,00 0,00 0,00 0,00 8,500.0 33.40 23.21 7,760.7 2,271.5 973.8 2,226.4 0,00 0,00 0,00 0,00 8,500.0 33.40 23.21 7,860.0 2,203.4 887.5 2,287.2 0,00 0,00 0,00 0,00 8,500.0 33.40 23.21 7,860.0 2,203.4 887.5 2,285.4 0,00 0,00 0,00 0,00 8,663.0 33.40 23.21 7,860.0 2,303.4 887.5 2,285.4 0,00 0,00 0,00 0,00 8,760.0 33.40 23.21 8,053.0 2,203.4 887.5 2,285.4 0,00 0,00 0,00 0,00 8,760.0 33.40 23.21 8,053.0 2,240.4 1,037.7 2,413.8 0,00 0,00 0,00 0,00 8,760.0 33.40 23.21 8,053.0 2,240.4 1,037.7 2,413.8 0,00 0,00 0,00 0,00 8,764.2 33.40 23.21 8,053.0 2,240.4 1,037.7 2,413.8 0,00 0,00 0,00 0,00 8,760.0 33.40 23.21 8,053.0 2,240.4 1,037.7 2,413.8 0,00 0,00 0,00 0,00 8,764.2 33.40 23.21 8,053.0 2,240.4 1,037.7 2,413.8 0,00 0,00 0,00 0,00 8,764.2 33.40 23.21 8,053.0 2,240.4 1,037.7 2,413.8 0,00 0,00 0,00 0,00 0,00 0,00 0,00 0,		7,402.3	33.40	23.21	6,891.0	1,716.1	735.7	-1,711.5	0.00	0.00	0.00
7,600.0 33.40 23.21 7,086.1 1,816.2 778.6 -1,811.2 0.00 0.00 0.00 0.00 Bons Spring Lm. 7,700.0 33.40 23.21 7,136.6 1,866.8 800.3 -1,861.7 0.00 0.00 0.00 7,800.0 33.40 23.21 7,223.1 1,917.4 82.2 -1,912.2 0.00 0.00 0.00 7,805.0 33.40 23.21 7,223.1 1,917.4 82.2 -1,912.2 0.00 0.00 0.00 7,805.0 33.40 23.21 7,203.1 1,917.4 82.0 -1,912.2 0.00 0.00 0.00 Avain Shale 7,900.0 33.40 23.21 7,306.5 1,986.0 843.7 -1,962.6 0.00 0.00 0.00 8,000.0 33.40 23.21 7,306.5 1,986.0 843.7 -1,962.6 0.00 0.00 0.00 8,000.0 33.40 23.21 7,307.5 2,968.2 887.1 -2,063.5 0.00 0.00 0.00 8,100.0 33.40 23.21 7,473.5 2,968.2 887.1 -2,063.5 0.00 0.00 0.00 8,300.9 33.40 23.21 7,404.5 2,170.3 930.5 -2,184.6 0.00 0.00 0.00 8,300.9 33.40 23.21 7,708.0 2,119.7 908.8 2,114.0 0.00 0.00 0.00 8,300.9 33.40 23.21 7,708.0 2,211.3 948.0 2,205.3 0.00 0.00 0.00 8,300.9 33.40 23.21 7,708.0 2,211.3 948.0 2,205.3 0.00 0.00 0.00 8,400.0 33.40 23.21 7,708.0 2,211.3 948.0 2,205.3 0.00 0.00 0.00 8,500.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,265.4 0.00 0.00 0.00 8,500.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,265.4 0.00 0.00 0.00 8,500.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,265.4 0.00 0.00 0.00 8,500.0 33.40 23.21 7,805.0 2,303.4 987.5 2,297.2 0.00 0.00 0.00 1st Bone Spring Lime 8,600.0 33.40 23.21 7,806.0 2,302.1 995.5 2,315.8 0.00 0.00 0.00 8,704.2 33.40 23.21 7,804.0 2,322.1 995.5 2,315.8 0.00 0.00 0.00 8,704.2 33.40 23.21 7,804.0 2,322.1 995.5 2,214.4 0.00 0.00 0.00 1st Bone Spring Sand 8,800.0 33.40 23.21 7,804.0 2,421.3 1,037.9 2,414.4 0.00 0.00 0.00 1st Bone Spring Sand 8,900.0 34.0 23.21 8,054.0 2,421.0 1,037.9 2,414.4 0.00 0.00 0.00 1st Bone Spring Sand 8,900.0 32.0 2,308 8,106.6 2,448.8 1,050.0 2,440.2 8.00 6.697 7.57 8,900.0 20.2 4 45.2 8,059.8 8,144.8 2,467.2 1,016.6 2,460.4 8.00 5.697 7.57 8,900.0 20.2 4 45.2 8,059.8 8,144.8 2,467.2 1,016.6 2,460.8 8.00 4.00 5.70 9.34 8,950.0 15.89 8,746 8,331.9 2,451.5 1,106.0 2,506.5 8.00 4.00 5.76 1,514.9 9,000.0 2,00 4.49 8,249.2 8,155.0 1,106.0 2,506.5 8.00 4.00 5.76 1,514.9 9,000.0 2,00 6.00 6		-				. ====		4 = 00 0			
7,700.0 33.40 23.21 7,139.6 1,866.8 800.3 -1,861.7 0.00 0.00 0.00 7,805.0 33.40 23.21 7,269.0 1,912.2 833.9 -1,939.9 0.00 0.00 0.00 0.00 7,855.0 33.40 23.21 7,269.0 1,912.2 833.9 -1,939.9 0.00 0.00 0.00 0.00 8,000.0 33.40 23.21 7,306.5 1,968.0 843.7 -1,962.6 0.00 0.00 0.00 0.00 8,000.0 33.40 23.21 7,390.0 2,018.6 865.4 -2,013.1 0.00 0.00 0.00 0.00 8,000.0 33.40 23.21 7,473.5 2,069.2 887.1 -2,063.5 0.00 0.00 0.00 0.00 8,300.0 33.40 23.21 7,567.0 2,119.7 908.8 -2,114.0 0.00 0.00 0.00 0.00 8,300.0 33.40 23.21 7,660.5 2,170.3 930.5 -2,164.6 0.00 0.00 0.00 0.00 8,300.0 33.40 23.21 7,600.5 2,170.3 930.5 -2,164.6 0.00 0.00 0.00 0.00 8,380.9 33.40 23.21 7,600.5 2,170.3 948.0 -2,205.3 0.00 0.00 0.00 0.00 8,380.9 33.40 23.21 7,680.5 2,170.3 948.0 -2,205.3 0.00 0.00 0.00 0.00 8,380.9 33.40 23.21 7,680.5 2,170.8 948.0 -2,205.3 0.00 0.00 0.00 0.00 8,500.0 33.40 23.21 7,800.0 2,211.3 948.0 -2,205.3 0.00 0.00 0.00 0.00 8,500.0 33.40 23.21 7,800.0 2,203.4 967.5 -2,287.2 0.00 0.00 0.00 0.00 8,500.0 33.40 23.21 7,800.0 2,303.4 967.5 -2,287.2 0.00 0.00 0.00 0.00 8,500.0 33.40 23.21 7,800.0 2,303.4 967.5 -2,287.2 0.00 0.00 0.00 0.00 8,704.2 33.40 23.21 8,053.0 2,203.4 967.5 -2,287.2 0.00 0.00 0.00 0.00 8,704.2 33.40 23.21 8,053.0 2,203.4 967.5 -2,287.2 0.00 0.00 0.00 0.00 8,704.2 33.40 23.21 8,053.0 2,204.1 1,077.2 -2,366.3 0.00 0.00 0.00 0.00 8,704.2 33.40 23.21 8,053.0 2,204.1 1,077.2 -2,366.3 0.00 0.00 0.00 0.00 8,704.2 33.40 23.21 8,053.0 2,204.1 1,077.2 -2,2418.4 0.00 0.00 0.00 0.00 8,704.2 33.40 23.21 8,053.0 2,204.1 1,077.2 -2,2418.0 0.00 0.00 0.00 0.00 8,000 33.40 23.21 8,053.0 2,204.1 1,077.2 -2,2418.4 0.00 0.00 0.00 0.00 8,000 0.00 0.00 0.0		7,600.0 7,635.8	33.40 33.40	23.21	7,056.1	1,816.2	778.6	-1,811.2	0.00	0.00	0.00
Available Avai				23.21	7,139.6	1,866.8	800.3	-1,861.7	0.00	0.00	0.00
Navion Shale		,			,						
7,900.0 33.40 23.21 7,306.5 1968.0 843.7 -1,962.6 0.00 0.00 0.00 8.00.0 33.40 23.21 7,306.5 196.5 865.4 -2,013.1 0.00 0.00 0.00 8.100.0 33.40 23.21 7,473.5 2,069.2 887.1 -2,063.5 0.00 0.00 0.00 0.00 8.300.0 33.40 23.21 7,670.5 2,170.3 930.5 -2,164.5 0.00 0.00 0.00 0.00 8.300.0 33.40 23.21 7,640.5 2,170.3 930.5 -2,164.5 0.00 0.00 0.00 0.00 8.380.9 33.40 23.21 7,708.0 2,211.3 948.0 -2,205.3 0.00 0.00 0.00 0.00 8.380.9 33.40 23.21 7,708.0 2,2113.9 948.0 -2,205.3 0.00 0.00 0.00 0.00 8.500.0 33.40 23.21 7,708.0 2,211.3 948.0 -2,205.3 0.00 0.00 0.00 0.00 8.503.0 33.40 23.21 7,807.4 2,220.9 952.2 -2,214.9 0.00 0.00 0.00 0.00 8.503.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,265.4 0.00 0.00 0.00 0.00 8.503.0 33.40 23.21 7,800.0 2,303.4 987.5 -2,297.2 0.00 0.00 0.00 0.00 8.503.0 33.40 23.21 7,800.0 2,303.4 987.5 -2,297.2 0.00 0.00 0.00 0.00 8.700.0 33.40 23.21 7,844 2,372.7 1,017.2 -2,366.3 0.00 0.00 0.00 8.704.2 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,415.8 0.00 0.00 0.00 0.00 8.794.2 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,415.8 0.00 0.00 0.00 0.00 1.00 1.00 1.00 1.				23.21	7,269.0	1,945.2	833.9	-1,939.9	0.00	0.00	0.00
8,300.0 33.40 23.21 7,640.5 2,170.3 930.5 -2,164.5 0.00 0.00 0.00 0.00 8,380.9 33.40 23.21 7,723.9 2,220.9 952.2 -2,214.9 0.00 0.00 0.00 0.00 8,500.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,266.4 0.00 0.00 0.00 0.00 8,563.0 33.40 23.21 7,860.0 2,303.4 987.5 -2,297.2 0.00 0.00 0.00 0.00 8,563.0 33.40 23.21 7,860.0 2,303.4 987.5 -2,297.2 0.00 0.00 0.00 0.00 8,563.0 33.40 23.21 7,970.9 2,322.1 995.5 -2,315.8 0.00 0.00 0.00 0.00 8,700.0 33.40 23.21 7,974.4 2,372.7 1,017.2 -2,366.3 0.00 0.00 0.00 0.00 8,700.0 33.40 23.21 7,974.4 2,372.7 1,017.2 -2,366.3 0.00 0.00 0.00 0.00 8,794.2 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 0.00 8,794.2 33.40 23.21 8,054.0 2,421.0 1,037.9 -2,414.4 0.00 0.00 0.00 0.00 0.00 8,800.0 33.07 23.52 8,057.9 2,423.3 1,038.9 -2,416.7 8.00 -7.08 6.79 8,850.0 28.99 27.30 8,100.6 2,446.8 1,050.0 -2,440.2 8.00 -6.07 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8.00 -6.70 9.34 8,900.0 20.20 45.42 8,236.7 2,498.1 1,085.6 -2,491.2 8.00 -5.76 15.10 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,516.5 8.00 -5.76 15.10 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,516.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,69 24.61 9,100.0 15.89 67.46 8,331.9 2,516.5 1,110.6 -2,508.5 8.00 -3,		7,900.0 8,000.0	33.40 33.40	23.21	7,390.0	2,018.6	865.4	-2,013.1	0.00	0.00	0.00
8,400.0 33.40 23.21 7,723.9 2,220.9 952.2 -2,214.9 0.00 0.00 0.00 0.00 8,500.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,265.4 0.00 0.00 0.00 0.00 8,563.0 33.40 23.21 7,800.0 2,303.4 987.5 -2,297.2 0.00 0.00 0.00 0.00 1st Bone Spring Lime 8,660.0 33.40 23.21 7,890.9 2,322.1 995.5 -2,315.8 0.00 0.00 0.00 0.00 8,700.0 33.40 23.21 7,874.4 2,372.7 1,017.2 -2,366.3 0.00 0.00 0.00 0.00 8,794.2 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 1st Bone Spring Sand 8,795.4 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 0.00 1st Bone Spring Sand 8,795.4 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 0.00 1st Bone Spring Sand 8,795.4 33.40 23.21 8,054.0 2,421.0 1,037.9 -2,414.4 0.00 0.00 0.00 0.00 0.00 1st Bone Spring Sand 8,795.4 33.40 23.21 8,057.9 2,423.3 1,038.9 -2,416.7 8,00 -7.08 6.79 8,850.0 29.59 27.30 8,100.6 2,446.8 1,055.0 -2,440.2 8,00 -6.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8,00 -6.70 9,34 8,950.0 23.08 37.87 8,190.2 2,484.3 1,073.4 -2,477.5 8,00 -6.32 11.78 9,000.0 20.20 454.2 8,236.7 2,498.1 1,085.6 -2,491.2 8,00 -6.32 11.78 9,000.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,501.6 8,00 -4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,110.6 -2,508.5 8,00 -3.69 24.61 9,150.0 14.89 82.09 8,300.1 1,160.0 -2,501.6 8,00 -4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,110.6 -2,508.5 8,00 -3.69 24.61 9,150.0 14.89 82.09 8,300.1 1,160.0 -2,511.8 8,00 -0.03 31.20 9,227.5 15.36 105.96 8,455.0 2,517.5 1,143.0 -2,510.3 8,00 3.74 24.44 9,350.0 20.29 14.41 8,571.8 2,484.5 1,163.0 -2,511.9 8,00 -0.03 31.20 9,227.5 15.36 105.96 8,455.0 2,517.5 1,143.0 -2,510.3 8,00 3.74 24.44 9,350.0 2.09 15.94 11.27 8,476.6 2,515.5 1,148.7 -2,508.3 8,00 2.58 28.09 9,300.0 17.81 124.49 8,524.5 2,508.6 1,161.4 -2,501.3 8,00 3.74 24.44 9,350.0 2.09 13.41 8,571.8 2,484.5 1,163.3 -2,477.0 8,00 6.34 11.69 9,500.0 29.70 152.11 8,707.8 2,447.1 1,210.1 -2,439.4 8,00 6.71 9,28 9,550.0 33.19 155.87 8,750.4 2,435.7 1,225.5 -2,389.4 8,00 7,46 4.13 9,550.0 36.77 158.98 8,791.4 2,		8,300.0	33.40	23.21	7,640.5	2,170.3	930.5	-2,164.5	0.00	0.00	0.00
8,500.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,265.4 0.00 0.00 0.00 0.00 8,563.0 33.40 23.21 7,807.4 2,271.5 973.8 -2,297.2 0.00 0.00 0.00 0.00 0.00 1st Bone Spring Line 8,600.0 33.40 23.21 7,890.9 2,322.1 995.5 -2,315.8 0.00 0.00 0.00 0.00 8,700.0 33.40 23.21 7,974.4 2,372.7 1,1017.2 -2,366.3 0.00 0.00 0.00 0.00 8,794.2 33.40 23.21 8,055.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 0.00 1st Bone Spring Sand 8,795.4 33.40 23.21 8,054.0 2,421.0 1,037.9 -2,414.4 0.00 0.00 0.00 0.00 8,800.0 33.07 23.52 8,057.9 2,423.3 1,038.9 -2,416.7 8.00 -7.08 6.79 8,860.0 29.59 27.30 8,100.6 2,446.8 1,050.0 -2,440.2 8.00 6.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8.00 6.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,2467.5 8.00 6.52 11.78 9,000.0 20.20 45.42 8,236.7 2,498.1 1,065.6 -2,491.2 8.00 -5.76 15.10 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,2501.6 8.00 4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,110.6 -2,2508.5 8.00 -3.69 24.61 9,150.0 14.89 82.09 8,380.1 2,519.0 1,123.3 -2,511.9 8.00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,123.3 -2,511.9 8.00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,123.3 -2,511.9 8.00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,136.0 -2,511.8 8.00 0.03 31.20 9,227.5 15.36 10.596 8,455.0 2,517.5 1,148.7 -2,508.3 8.00 1.64 30.02 2nd Bone Spring Line 9,250.0 23.18 141.63 8,618.2 2,484.5 1,173.9 -2,490.8 8.00 4.95 19.31 9,400.0 23.18 141.63 8,618.2 2,484.5 1,186.3 -2,477.0 8.00 6.74 9.28 9,550.0 33.19 155.87 8,750.4 2,434.1 1,210.1 -2,439.4 8.00 6.71 9,28 9,550.0 33.19 155.87 8,750.4 2,437.1 1,210.1 -2,439.4 8.00 6.71 9,28 9,550.0 33.19 155.87 8,750.4 2,437.1 1,210.1 -2,439.4 8.00 6.71 9,28 9,550.0 33.19 155.87 8,750.4 2,437.1 1,210.1 -2,439.4 8.00 6.71 9,28 9,550.0 33.19 155.87 8,750.4 2,437.1 1,210.1 -2,439.4 8.00 6.71 9,28 9,550.0 33.19 155.87 8,750.4 2,423.7 1,221.5 -2,245.9 8.00 6.98 7.52 9,650.0 40.42 161.61 8,830.5 2,367.8 1,243.0 -2,360.0 8.00 7.40 4.52 9,650.0 40.42 161.61 8,830.5 2,367.8 1,243.0 -2,360.0 8.00 7.40 4.52 9,650.0 40.42											
Section Sect						,					
8,600.0 33.40 23.21 7,890.9 2,322.1 995.5 -2,315.8 0.00 0.00 0.00 8,700.0 33.40 23.21 7,974.4 2,372.7 1,017.2 -2,366.3 0.00 0.00 0.00 0.00 8,794.2 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 0.00 1st Bone Spring Sand 8,795.4 33.40 23.21 8,054.0 2,421.0 1,037.9 -2,414.4 0.00 0.00 0.00 0.00 8,800.0 33.07 23.52 8,057.9 2,423.3 1,038.9 -2,416.7 8,00 -7.08 6.79 8,850.0 29.59 27.30 8,100.6 2,446.8 1,050.0 -2,440.2 8,00 -6.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8,00 -6.70 9,34 8,950.0 23.08 37.87 8,190.2 2,484.3 1,073.4 -2,477.5 8,00 -6.32 11.78 9,000.0 20.20 45.42 8,236.7 2,488.1 1,085.6 -2,481.2 8,00 -5.76 15.10 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,501.6 8,00 -4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,110.6 -2,508.5 8,00 -3.69 24.61 9,150.0 14.89 82.09 8,380.1 2,519.0 1,123.3 -2,511.9 8,00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,123.3 -2,511.8 8,00 0.03 31.20 9,227.5 15.36 105.96 8,455.0 2,517.5 1,143.0 -2,510.3 8,00 1.64 30.02 204.44 9,350.0 20.29 134.14 8,571.8 2,498.2 1,173.9 -2,498.8 8,00 4.95 19.31 9,400.0 20.29 134.14 8,571.8 2,498.2 1,173.9 -2,490.8 8,00 4.95 19.31 9,400.0 26.31 11.69 9,550.0 17.81 12.47 8,663.6 2,467.4 1,198.3 -2,459.8 8,00 6,34 11.69 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,459.8 8,00 6,34 11.69 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,459.8 8,00 6,34 11.69 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,459.8 8,00 6,34 11.69 9,550.0 33.19 155.87 8,750.4 2,423.7 1,221.5 -2,415.9 8,00 7,46 4,13 20.0 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.8 -2,317.7 8,00 7,46 4,13 20.0 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.8 -2,317.7 8,00 7,46 4,13 20.0 20.0 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.9 -2,327.8 8,00 7,46 4,13 20.0 20.0 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.8 -2,317.7 8,00 7,46 4,13 20.0 20.0 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.9 -2,327.8 8,00 7,46 4,13 20.0 20.0 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.9 -2,327.8 8,00 7,46 4,13 20.0 20.0 9,714.8 45.23 164.48 8,878.0 2,335.7 1,255.9 -2,32				23.21	7,860.0	2,303.4	987.5	-2,297.2	0.00	0.00	0.00
8,700.0 33.40 23.21 7,974.4 2,372.7 1,017.2 -2,366.3 0.00 0.00 0.00 0.00 8,794.2 33.40 23.21 8,053.0 2,420.4 1,037.7 -2,413.8 0.00 0.00 0.00 0.00 0.00 1.00 1.00 1.		•		23 21	7 800 0	2 322 1	995 5	-2 315 8	0.00	0.00	0.00
1st Bone Spring Sand 8,795.4 33.40 23.21 8,054.0 2,421.0 1,037.9 -2,414.4 0.00 0.00 0.00 8,800.0 33.07 23.52 8,057.9 2,423.3 1,038.9 -2,416.7 8.00 -7.08 6.79 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8.00 -6.70 9.34 8,950.0 23.08 37.87 8,190.2 2,484.3 1,073.4 -2,477.5 8.00 -6.70 9.34 8,950.0 20.20 45.42 8,236.7 2,498.1 1,085.6 -2,491.2 8.00 -6.32 11.78 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,501.6 8.00 -3.69 24.61 9,150.0 14.89 82.09 8,380.1 2,519.5 1,110.6 -2,508.5 8.00 -3.69 24.61 9,227.5 15.36 105.96 8,428.4 2,519.0 1,136.0 <td< td=""><td></td><td>8,700.0</td><td>33.40</td><td>23.21</td><td>7,974.4</td><td>2,372.7</td><td>1,017.2</td><td>-2,366.3</td><td>0.00</td><td>0.00</td><td>0.00</td></td<>		8,700.0	33.40	23.21	7,974.4	2,372.7	1,017.2	-2,366.3	0.00	0.00	0.00
8,795.4 33.40 23.21 8,054.0 2,421.0 1,037.9 -2,414.4 0.00 0.00 0.00 0.00 8,800.0 33.07 23.52 8,057.9 2,423.3 1,038.9 -2,416.7 8.00 -7.08 6.79 8,850.0 29.59 27.30 8,100.6 2,446.8 1,050.0 -2,440.2 8.00 4.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8.00 4.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8.00 4.670 9.34 8,950.0 23.08 37.87 8,190.2 2,484.3 1,073.4 -2,477.5 8.00 -6.32 11.78 9,000.0 20.20 45.42 8,236.7 2,498.1 1,085.6 -2,491.2 8.00 -5.76 15.10 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,501.6 8.00 4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,106.6 -2,508.5 8.00 -3.69 24.61 9,150.0 14.89 82.09 8,380.1 2,519.0 1,123.3 -2,511.9 8.00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,136.0 -2,511.8 8.00 0.03 31.20 9,227.5 15.36 105.96 8,455.0 2,517.5 1,143.0 -2,510.3 8.00 1.64 30.02 2nd Bone Spring Lime 9,250.0 15.94 112.27 8,476.6 2,515.5 1,148.7 -2,508.3 8.00 2.58 28.09 9,300.0 17.81 124.49 8,524.5 2,508.6 1,161.4 -2,501.3 8.00 3.74 24.44 9,350.0 20.29 134.14 8,571.8 2,498.2 1,173.9 -2,490.8 8.00 3.74 24.44 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,477.0 8.00 5.78 14.98 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,477.0 8.00 6.74 9,28 9,550.0 36.77 158.98 8,791.4 2,397.2 1,232.5 -2,389.4 8.00 7.16 6.22 9,650.0 40.42 161.61 8,830.5 2,367.8 1,243.0 -2,327.8 8.00 7.46 4.13 2nd Bone Spring Sand				23.21	6,055.0	2,420.4	1,037.7	-2,413.0	0.00	0.00	0.00
8,850.0 29.59 27.30 8,100.6 2,446.8 1,050.0 -2,440.2 8.00 -6.97 7.57 8,900.0 26.24 31.98 8,144.8 2,467.2 1,061.6 -2,460.4 8.00 -6.70 9.34 8,950.0 23.08 37.87 8,190.2 2,484.3 1,073.4 -2,477.5 8.00 -6.32 11.78 9,000.0 20.20 45.42 8,236.7 2,498.1 1,085.6 -2,491.2 8.00 -5.76 15.10 9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,501.6 8.00 -4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,110.6 -2,508.5 8.00 -3.69 24.61 9,150.0 14.89 82.09 8,380.1 2,519.0 1,123.3 -2,511.9 8.00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,136.0 -2,511.8 8.00 0.03 31.20 9,227.5 15.36 105.96 8,455.0 2,517.5 1,143.0 -2,510.3 8.00 1.64 30.02 2nd Bone Spring Lime 9,250.0 15.94 112.27 8,476.6 2,515.5 1,148.7 -2,508.3 8.00 2.58 28.09 9,300.0 17.81 124.49 8,524.5 2,508.6 1,161.4 -2,501.3 8.00 3.74 24.44 9,350.0 20.29 134.14 8,571.8 2,498.2 1,173.9 -2,490.8 8.00 4.95 19.31 9,400.0 23.18 141.63 8,618.2 2,484.5 1,186.3 -2,477.0 8.00 5.78 14.98 9,450.0 29.77 158.98 8,791.4 2,397.2 1,232.5 -2,415.9 8.00 6.34 11.69 9,500.0 33.79 155.87 8,750.4 2,423.7 1,221.5 -2,415.9 8.00 6.34 11.69 9,500.0 36.77 158.98 8,791.4 2,397.2 1,232.5 -2,389.4 8.00 7,46 4.13 2nd Bone Spring Sand				23.21	8,054.0	2,421.0	1,037.9	-2,414.4	0.00	0.00	0.00
9,050.0 17.74 55.15 8,284.0 2,508.5 1,098.0 -2,501.6 8.00 -4.92 19.47 9,100.0 15.89 67.46 8,331.9 2,515.5 1,110.6 -2,508.5 8.00 -3.69 24.61 9,150.0 14.89 82.09 8,380.1 2,519.0 1,123.3 -2,511.9 8.00 -2.00 29.27 9,200.0 14.91 97.69 8,428.4 2,519.0 1,136.0 -2,511.8 8.00 0.03 31.20 9,227.5 15.36 105.96 8,455.0 2,517.5 1,143.0 -2,510.3 8.00 1.64 30.02 200 200 200 200 200 200 200 200 200		8,850.0 8,900.0 8,950.0	29.59 26.24 23.08	27.30 31.98 37.87	8,100.6 8,144.8 8,190.2	2,446.8 2,467.2 2,484.3	1,050.0 1,061.6 1,073.4	-2,440.2 -2,460.4 -2,477.5	8.00 8.00 8.00	-6.97 -6.70 -6.32	7.57 9.34 11.78
2nd Bone Spring Lime 9,250.0 15.94 112.27 8,476.6 2,515.5 1,148.7 -2,508.3 8.00 2.58 28.09 9,300.0 17.81 124.49 8,524.5 2,508.6 1,161.4 -2,501.3 8.00 3.74 24.44 9,350.0 20.29 134.14 8,571.8 2,498.2 1,173.9 -2,490.8 8.00 4.95 19.31 9,400.0 23.18 141.63 8,618.2 2,484.5 1,186.3 -2,477.0 8.00 5.78 14.98 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,459.8 8.00 6.34 11.69 9,500.0 29.70 152.11 8,707.8 2,447.1 1,210.1 -2,439.4 8.00 6.71 9.28 9,550.0 33.19 155.87 8,750.4 2,423.7 1,221.5 -2,415.9 8.00 6.98 7.52 9,600.0 36.77 158.98 8,791.4 2,397.2 1,232.5 -2,389.4 8.00 7.16 6.22 9,650.0 40.42		9,100.0 9,150.0 9,200.0	15.89 14.89 14.91	67.46 82.09 97.69	8,331.9 8,380.1 8,428.4	2,515.5 2,519.0 2,519.0	1,110.6 1,123.3 1,136.0	-2,508.5 -2,511.9 -2,511.8	8.00 8.00 8.00	-3.69 -2.00 0.03	24.61 29.27 31.20
9,300.0 17.81 124.49 8,524.5 2,508.6 1,161.4 -2,501.3 8.00 3.74 24.44 9,350.0 20.29 134.14 8,571.8 2,498.2 1,173.9 -2,490.8 8.00 4.95 19.31 9,400.0 23.18 141.63 8,618.2 2,484.5 1,186.3 -2,477.0 8.00 5.78 14.98 9,450.0 26.35 147.47 8,663.6 2,467.4 1,198.3 -2,459.8 8.00 6.34 11.69 9,500.0 29.70 152.11 8,707.8 2,447.1 1,210.1 -2,439.4 8.00 6.71 9.28 9,550.0 33.19 155.87 8,750.4 2,423.7 1,221.5 -2,415.9 8.00 6.98 7.52 9,600.0 36.77 158.98 8,791.4 2,397.2 1,232.5 -2,389.4 8.00 7.16 6.22 9,650.0 40.42 161.61 8,830.5 2,367.8 1,243.0 -2,360.0 8.00 7.30 5.25 9,700.0 44.12 163.87 8,867.4 2,335.7 1,252.9 -2,327.8 8.00 7.40 4.52 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.8 -2,317.7 8.00 7.46 4.13 2nd Bone Spring Sand		2nd Bone Sp	ring Lime								
9,550.0 33.19 155.87 8,750.4 2,423.7 1,221.5 -2,415.9 8.00 6.98 7.52 9,600.0 36.77 158.98 8,791.4 2,397.2 1,232.5 -2,389.4 8.00 7.16 6.22 9,650.0 40.42 161.61 8,830.5 2,367.8 1,243.0 -2,360.0 8.00 7.30 5.25 9,700.0 44.12 163.87 8,867.4 2,335.7 1,252.9 -2,327.8 8.00 7.40 4.52 9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.8 -2,317.7 8.00 7.46 4.13 2nd Bone Spring Sand		9,300.0 9,350.0 9,400.0	17.81 20.29 23.18	124.49 134.14 141.63	8,524.5 8,571.8 8,618.2	2,508.6 2,498.2 2,484.5	1,161.4 1,173.9 1,186.3	-2,501.3 -2,490.8 -2,477.0	8.00 8.00 8.00	3.74 4.95 5.78	24.44 19.31 14.98
9,714.8 45.23 164.48 8,878.0 2,325.7 1,255.8 -2,317.7 8.00 7.46 4.13 2nd Bone Spring Sand		9,550.0 9,600.0 9,650.0	33.19 36.77 40.42	155.87 158.98 161.61	8,750.4 8,791.4 8,830.5	2,423.7 2,397.2 2,367.8	1,221.5 1,232.5 1,243.0	-2,415.9 -2,389.4 -2,360.0	8.00 8.00 8.00	6.98 7.16 7.30	7.52 6.22 5.25
2nd Bone Spring Sand											
		2nd Bone Sp	ring Sand				·				

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: Corral Canyon

Site: Corral 23-26 Fed Com 308H Well: Corral 23-26 Fed Com 308H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Corral 23-26 Fed Com 308H

RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

esign:	Plan 1								
lanned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,800.0	51.63	167.59	8,934.5	2,263.9	1,271.0	-2,255.8	8.00	7.54	3.51
9,850.0	55.43	169.17	8,964.2	2,224.5	1,279.1	-2,216.4	8.00	7.59	3.16
9,900.0	59.24	170.61	8,991.2	2,183.1	1,286.5	-2,174.9	8.00	7.62	2.88
9,950.0	63.06	171.94	9,015.3	2,139.8	1,293.1	-2,131.6	8.00	7.65	2.66
10,000.0	66.90	173.18	9,036.4	2,094.9	1,299.0	-2,086.6	8.00	7.68	2.49
10,050.0	70.75	174.36	9,054.5	2,048.5	1,304.0	-2,040.3	8.00	7.70	2.35
10,100.0	74.61	175.48	9,069.4	2,001.0	1,308.3	-1,992.7	8.00	7.71	2.24
10,150.0	78.47	176.56	9,081.0	1,952.5	1,311.6	-1,944.2	8.00	7.72	2.16
10,200.0	82.33	177.61	9,089.4	1,903.3	1,314.1	-1,895.0	8.00	7.73	2.10
10,250.0	86.20	178.64	9,094.4	1,853.5	1,315.8	-1,845.2	8.00	7.73	2.06
10,299.2	90.00	179.64	9,096.0	1,804.4	1,316.5	-1,796.1	8.00	7.74	2.04
Landing - F	_								
10,400.0	90.00	179.64	9,096.0	1,703.6	1,317.1	-1,695.3	0.00	0.00	0.00
10,500.0	90.00	179.64	9,096.0	1,603.6	1,317.8	-1,595.3	0.00	0.00	0.00
10,600.0	90.00	179.64	9,096.0	1,503.6	1,318.4	-1,495.3	0.00	0.00	0.00
10,700.0	90.00	179.64	9,096.0	1,403.6	1,319.0	-1,395.3	0.00	0.00	0.00
10,800.0	90.00	179.64	9,096.0	1,303.6	1,319.6	-1,295.3	0.00	0.00	0.00
10,900.0	90.00	179.64	9,096.0	1,203.6	1,320.3	-1,195.3	0.00	0.00	0.00
11,000.0	90.00	179.64	9,096.0	1,103.6	1,320.9	-1,095.3	0.00	0.00	0.00
11,100.0	90.00	179.64	9,096.0	1,003.6	1,321.5	-995.3	0.00	0.00	0.00
11,200.0	90.00	179.64	9,096.0	903.6	1,322.2	-895.3	0.00	0.00	0.00
11,300.0	90.00	179.64	9,096.0	803.6	1,322.8	-795.3	0.00	0.00	0.00
11,400.0	90.00	179.64	9,096.0	703.6	1,323.4	-695.3	0.00	0.00	0.00
11,500.0	90.00	179.64	9,096.0	603.6	1,324.0	-595.3	0.00	0.00	0.00
11,600.0	90.00	179.64	9,096.0	503.6	1,324.7	-495.3	0.00	0.00	0.00
11,700.0	90.00	179.64	9,096.0	403.6	1,325.3	-395.3	0.00	0.00	0.00
11,800.0	90.00	179.64	9,096.0	303.6	1,325.9	-295.3	0.00	0.00	0.00
11,900.0	90.00	179.64	9,096.0	203.6	1,326.6	-195.3	0.00	0.00	0.00
12,000.0	90.00	179.64	9,096.0	103.6	1,327.2	-95.3	0.00	0.00	0.00
12,100.0	90.00	179.64	9,096.0	3.6	1,327.8	4.7	0.00	0.00	0.00
12,200.0	90.00	179.64	9,096.0	-96.4	1,328.4	104.7	0.00	0.00	0.00
12,300.0	90.00	179.64	9,096.0	-196.4	1,329.1	204.7	0.00	0.00	0.00
12,400.0	90.00	179.64	9,096.0	-296.4	1,329.7	304.7	0.00	0.00	0.00
12,500.0	90.00	179.64	9,096.0	-396.4	1,330.3	404.7	0.00	0.00	0.00
12,600.0	90.00	179.64	9,096.0	-496.4	1,330.9	504.7	0.00	0.00	0.00
12,700.0	90.00	179.64	9,096.0	-596.4	1,331.6	604.7	0.00	0.00	0.00
12,800.0	90.00	179.64	9,096.0	-696.4	1,332.2	704.7	0.00	0.00	0.00
12,900.0 13,000.0	90.00 90.00	179.64 179.64	9,096.0 9,096.0	-796.4 -896.4	1,332.8 1,333.5	804.7 904.7	0.00 0.00	0.00 0.00	0.00 0.00
13,100.0	90.00	179.64	9,096.0	-996.4	1,334.1	1,004.7	0.00	0.00	0.00
13,200.0	90.00	179.64	9,096.0	-1,096.4	1,334.7	1,104.7	0.00	0.00	0.00
13,300.0 13,400.0	90.00 90.00	179.64 179.64	9,096.0 9,096.0	-1,196.4 -1,296.4	1,335.3 1,336.0	1,204.7 1,304.7	0.00 0.00	0.00 0.00	0.00 0.00
13,400.0	90.00	179.64	9,096.0	-1,296.4 -1,396.4	1,336.0	1,304.7	0.00	0.00	0.00
13,600.0	90.00	179.64	9,096.0	-1,496.4	1,337.2	1,504.7	0.00	0.00	0.00
13,700.0	90.00	179.64	9,096.0	-1,596.4	1,337.9	1,604.7	0.00	0.00	0.00
13,800.0 13,900.0	90.00 90.00	179.64 179.64	9,096.0 9,096.0	-1,696.3 -1,796.3	1,338.5 1,339.1	1,704.7 1,804.7	0.00 0.00	0.00 0.00	0.00 0.00
14,000.0	90.00	179.64	9,096.0	-1,796.3 -1,896.3	1,339.1	1,804.7 1,904.7	0.00	0.00	0.00
14,100.0	90.00	179.64	9,096.0	-1,996.3	1,340.4	2,004.7	0.00	0.00	0.00
14,200.0	90.00	179.64	9,096.0	-2,096.3	1,341.0	2,104.7	0.00	0.00	0.00
14,300.0 14,400.0	90.00	179.64 179.64	9,096.0	-2,196.3	1,341.6	2,204.7	0.00	0.00	0.00
14,400.0 14,500.0	90.00 90.00	179.64 179.64	9,096.0 9,096.0	-2,296.3 -2,396.3	1,342.2 1,342.9	2,304.7 2,404.7	0.00 0.00	0.00 0.00	0.00 0.00

XTO Energy Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

 Project:
 Corral Canyon

 Site:
 Corral 23-26 Fed Com 308H

 Well:
 Corral 23-26 Fed Com 308H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well Corral 23-26 Fed Com 308H

RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

ssigii.	Flail								
lanned Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(usft)	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(°/100usft)	(°/100usft)	(°/100usft)
14,600.0	90.00	179.64	9,096.0	-2,496.3	1,343.5	2,504.7	0.00	0.00	0.00
			,						
14,700.0	90.00	179.64	9,096.0	-2,596.3	1,344.1	2,604.7	0.00	0.00	0.00
14,800.0	90.00	179.64	9,096.0	-2,696.3	1,344.8	2,704.7	0.00	0.00	0.00
14,900.0	90.00	179.64	9,096.0	-2,796.3	1,345.4	2,804.7	0.00	0.00	0.00
15,000.0	90.00	179.64	9,096.0	-2,896.3	1,346.0	2,904.7	0.00	0.00	0.00
45 400 0	00.00	470.04	0.000.0	0.000.0	4.040.0	0.004.7	0.00	0.00	0.00
15,100.0	90.00	179.64	9,096.0	-2,996.3	1,346.6	3,004.7	0.00	0.00	0.00
15,200.0	90.00	179.64	9,096.0	-3,096.3	1,347.3	3,104.7	0.00	0.00	0.00
15,300.0	90.00	179.64	9,096.0	-3,196.3	1,347.9	3,204.7	0.00	0.00	0.00
15,400.0	90.00	179.64	9,096.0	-3,296.3	1,348.5	3,304.7	0.00	0.00	0.00
15,500.0	90.00	179.64	9,096.0	-3,396.3	1,349.2	3,404.7	0.00	0.00	0.00
15,600.0	90.00	179.64	9,096.0	-3,496.3	1,349.8	3,504.7	0.00	0.00	0.00
15,700.0	90.00	179.64	9,096.0	-3,596.3	1,350.4	3,604.7	0.00	0.00	0.00
15,800.0	90.00	179.64	9,096.0	-3,696.3	1,351.0	3,704.7	0.00	0.00	0.00
15,900.0	90.00	179.64	9,096.0	-3,796.3	1,351.7	3,804.7	0.00	0.00	0.00
•									
16,000.0	90.00	179.64	9,096.0	-3,896.3	1,352.3	3,904.7	0.00	0.00	0.00
16,100.0	90.00	179.64	9,096.0	-3,996.3	1,352.9	4,004.7	0.00	0.00	0.00
16,200.0	90.00	179.64	9.096.0	-4,096.3	1,353.5	4,104.7	0.00	0.00	0.00
			, , , , , , , , , , , , , , , , , , , ,						
16,300.0	90.00	179.64	9,096.0	-4,196.3	1,354.2	4,204.7	0.00	0.00	0.00
16,400.0	90.00	179.64	9,096.0	-4,296.3	1,354.8	4,304.7	0.00	0.00	0.00
16,500.0	90.00	179.64	9,096.0	-4,396.3	1,355.4	4,404.7	0.00	0.00	0.00
10.000.0	00.00	170.01	0.000.0	4 400 0	4.050.4	4 50 4 7		0.00	0.00
16,600.0	90.00	179.64	9,096.0	-4,496.3	1,356.1	4,504.7	0.00	0.00	0.00
16,700.0	90.00	179.64	9,096.0	-4,596.3	1,356.7	4,604.7	0.00	0.00	0.00
16,800.0	90.00	179.64	9,096.0	-4,696.3	1,357.3	4,704.7	0.00	0.00	0.00
16,900.0	90.00	179.64	9,096.0	-4,796.3	1,357.9	4,804.7	0.00	0.00	0.00
17,000.0	90.00	179.64	9,096.0	-4,896.3	1,358.6	4,904.7	0.00	0.00	0.00
17,100.0	90.00	179.64	9,096.0	-4,996.3	1,359.2	5,004.7	0.00	0.00	0.00
17,200.0	90.00	179.64	9,096.0	-5,096.3	1,359.8	5,104.7	0.00	0.00	0.00
17,300.0	90.00	179.64	9,096.0	-5,196.3	1,360.5	5,204.7	0.00	0.00	0.00
17,400.0	90.00	179.64	9,096.0	-5,296.3	1,361.1	5,304.7	0.00	0.00	0.00
17,500.0	90.00	179.64	9,096.0	-5,396.3	1,361.7	5,404.7	0.00	0.00	0.00
17,600.0	90.00	179.64	9,096.0	-5,496.3	1,362.3	5,504.7	0.00	0.00	0.00
17,700.0	90.00	179.64	9,096.0	-5,596.3	1,363.0	5,604.7	0.00	0.00	0.00
·			· ·						
17,800.0	90.00	179.64	9,096.0	-5,696.3	1,363.6	5,704.7	0.00	0.00	0.00
17,900.0	90.00	179.64	9,096.0	-5,796.3	1,364.2	5,804.7	0.00	0.00	0.00
18,000.0	90.00	179.64	9,096.0	-5,896.3	1,364.8	5,904.7	0.00	0.00	0.00
10 100 0	00.00	170.64	0.006.0	E 000 0	1 205 5	6.004.7	0.00	0.00	0.00
18,100.0	90.00	179.64	9,096.0	-5,996.3	1,365.5	6,004.7	0.00	0.00	0.00
18,200.0	90.00	179.64	9,096.0	-6,096.3	1,366.1	6,104.7	0.00	0.00	0.00
18,300.0	90.00	179.64	9,096.0	-6,196.3	1,366.7	6,204.7	0.00	0.00	0.00
18,400.0	90.00	179.64	9,096.0	-6,296.3	1,367.4	6,304.7	0.00	0.00	0.00
18,500.0	90.00	179.64	9,096.0	-6,396.3	1,368.0	6,404.7	0.00	0.00	0.00
18,600.0	90.00	179.64	9,096.0	-6,496.3	1,368.6	6,504.7	0.00	0.00	0.00
			•						
18,700.0	90.00	179.64	9,096.0	-6,596.3	1,369.2	6,604.7	0.00	0.00	0.00
18,800.0	90.00	179.64	9,096.0	-6,696.2	1,369.9	6,704.7	0.00	0.00	0.00
18,900.0	90.00	179.64	9,096.0	-6,796.2	1,370.5	6,804.7	0.00	0.00	0.00
19,000.0	90.00	179.64	9,096.0	-6,896.2	1,371.1	6,904.7	0.00	0.00	0.00
19,100.0	90.00	179.64	9,096.0	-6,996.2	1,371.8	7,004.7	0.00	0.00	0.00
19,200.0	90.00	179.64	9,096.0	-7,096.2	1,372.4	7,104.7	0.00	0.00	0.00
19,300.0	90.00	179.64	9,096.0	-7,196.2	1,373.0	7,204.7	0.00	0.00	0.00
19,400.0	90.00	179.64	9,096.0	-7,196.2 -7,296.2	1,373.6	7,304.7	0.00	0.00	0.00
19,500.0	90.00	179.64	9,096.0	-7,396.2	1,374.3	7,404.7	0.00	0.00	0.00
19,600.0	90.00	179.64	9,096.0	-7,496.2	1,374.9	7,504.7	0.00	0.00	0.00
19,700.0	90.00	179.64	9,096.0	-7,596.2	1,375.5	7,604.7	0.00	0.00	0.00
19,800.0	90.00	179.64	9,096.0	-7,696.2	1,376.1	7,704.7	0.00	0.00	0.00
19,900.0	90.00	179.64	9,096.0	-7,796.2	1,376.8	7,804.7	0.00	0.00	0.00

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RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,000.0	90.00	179.64	9,096.0	-7,896.2	1,377.4	7,904.7	0.00	0.00	0.00
20,100.0 20,200.0 20,300.0 20,400.0 20,500.0 20,600.0 20,700.0 20,716.3	90.00 90.00 90.00 90.00 90.00 90.00 90.00 90.00	179.64 179.64 179.64 179.64 179.64 179.64 179.64 179.64	9,096.0 9,096.0 9,096.0 9,096.0 9,096.0 9,096.0 9,096.0 9,096.0	-7,996.2 -8,096.2 -8,196.2 -8,296.2 -8,396.2 -8,496.2 -8,596.2 -8,612.5	1,378.0 1,378.7 1,379.3 1,379.9 1,380.5 1,381.2 1,381.8 1,381.9	8,004.7 8,104.7 8,204.7 8,304.7 8,404.7 8,504.7 8,604.7 8,621.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0
LTP _308H									
20,766.3 BHL 308H	90.00	179.64	9,096.0	-8,662.5	1,382.2	8,671.0	0.00	0.00	0.00
20,766.9	90.00	179.64	9,096.0	-8,663.1	1,382.2	8,671.6	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL_308H - plan hits target cer - Point	0.00 nter	0.00	0.0	0.0	0.0	406,641.50	618,033.30	32° 7' 2.640 N	103° 57' 7.520 W
BHL_308H - plan misses target - Point	0.00 center by 0.2u	0.00 usft at 20766.	9,096.0 .3usft MD (9	-8,662.5 096.0 TVD, -8	1,382.4 662.5 N, 1382	397,979.00 .2 E)	619,415.70	32° 5' 36.864 N	103° 56' 51.806 W
LTP _308H - plan hits target cer - Point	0.00 nter	0.00	9,096.0	-8,612.5	1,381.9	398,029.00	619,415.20	32° 5' 37.359 N	103° 56' 51.810 W
FTP _308H - plan hits target cer - Point	0.00 nter	0.00	9,096.0	1,804.4	1,316.5	408,445.90	619,349.80	32° 7' 20.450 N	103° 56' 52.137 W

Planning Report

Database: LMRKPROD3

Company: Long Lead_Well Planning

Project: Corral Canyon

 Site:
 Corral 23-26 Fed Com 308H

 Well:
 Corral 23-26 Fed Com 308H

Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

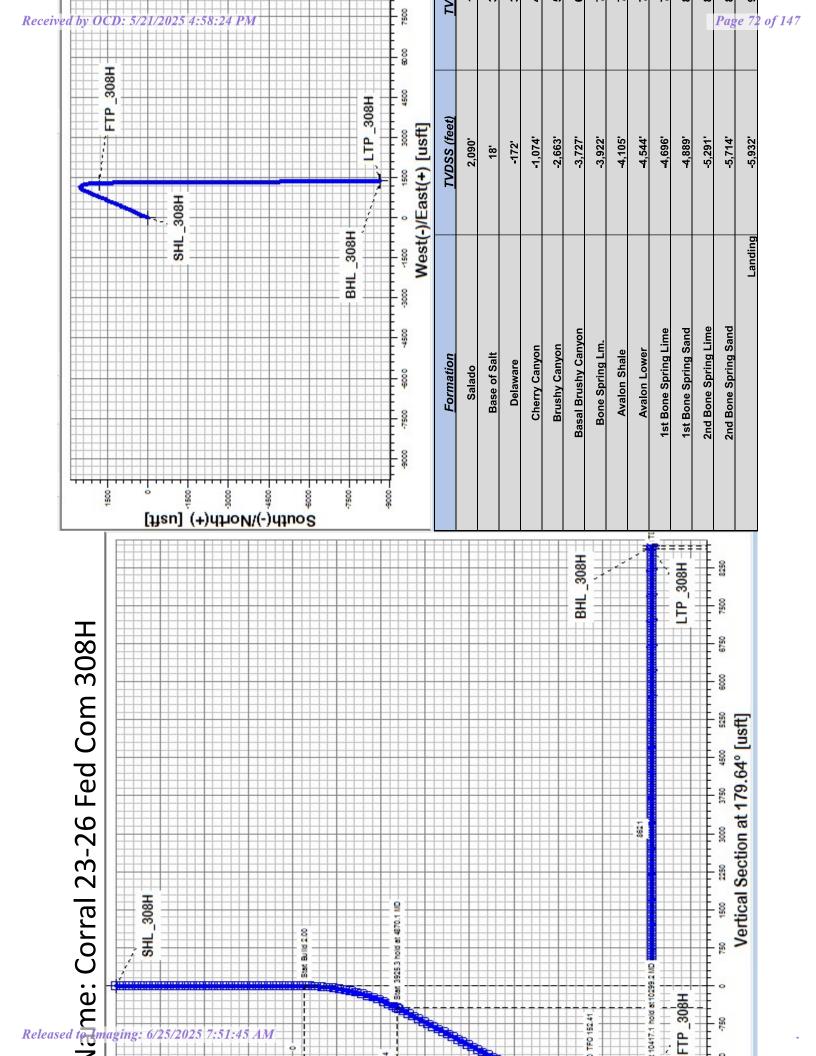
Survey Calculation Method:

Well Corral 23-26 Fed Com 308H

RKB (+32) @ 3164.0usft RKB (+32) @ 3164.0usft

Grid

Formations							
	Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
	1,074.0	1,074.0	Salado				
	3,146.0	3,146.0	Base of Salt				
	3,336.1	3,336.0	Delaware				
	4,262.2	4,238.0	Cherry Canyon				
	6,127.7	5,827.0	Brushy Canyon				
	7,402.3	6,891.0	Basal Brushy Canyon				
	7,635.8	7,086.0	Bone Spring Lm.				
	7,855.0	7,269.0	Avalon Shale				
	8,380.9	7,708.0	Avalon Lower				
	8,563.0	7,860.0	1st Bone Spring Lime				
	8,794.2	8,053.0	1st Bone Spring Sand				
	9,227.5	8,455.0	2nd Bone Spring Lime				
	9,714.8	8,878.0	2nd Bone Spring Sand				
	10,299.2	9,096.0	Landing				



Cement Variance Request

Intermediate Casing:

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 Brushy Canyon (5827') 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 include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

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

XTO requests 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:

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.

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description <u>Effective May 25, 2021</u>

I. Operato	r:>	KTO ENERGY INC.		OGRID:		005380		Date:	
02 / 06	2025								
II. Type:	⊠ Original	\square Amendment due to \square	19.15.27.9.	O(6)(a) NM	AC □	19.15.27.9	9.D(6)(b)	NMAC □	Other.
If Other, pl	ease descril	be:							

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

Well Name | AP | III.ST | Footag | Anticipat | 3 | vr | Anticipat

Well Name	AP	R R	Footag es	Anticipat ed Oil BBL/D	3 yr Anticipat ed Decline oil BBL/D	Anticipat ed Gas MCF/D	3 yr anticipat ed decline Gas MCF/D	Anticipat ed Produce d Water BBL/D	3 yr anticipat ed decline Water BBL/D
Corral 23-35		23	86						
Fed Com 101H		T25S R29E	FNL, 257 FWL	2,100	250	9,000	1,400	8,500	950
Corral 23-35		23	91						
Fed Com 102H		T25S R29E	FNL, 287 FWL	2,300	250	3,750	1,000	4,500	500
Corral 23-35		23	96						
Fed Com 103H		T25S R29E	FNL, 316 FWL	2,100	250	9,000	1,400	8,500	950
Corral 23-35		23	382						
Fed Com 104H		T25S R29E	FNL, 209 FWL	2,300	250	3,750	1,000	4,500	500
Corral 23-35 Fed Com 105H		23 T25S R29E	387 FNL,	2,100	250	9,000	1,400	8,500	950

		220	T	1	1	1	1	
		238						
		FWL						
Corral 23-35	23	392						
Fed Com	T25S	FNL,						
106H	R29E	268	2,300	250	3,750	1,000	4,500	500
		FWL						
Corral 23-26	23	1673						
Fed Com	T25S	FNL,						
201H	R29E	1771	1,500	150	2,500	700	3,000	350
		FWL						
Corral 23-35	23	1673						
Fed Com	T25S	FNL,						
202H	R29E	1801	2,100	250	9,000	1,400	8,500	950
20211	KZ9L		2,100	230	9,000	1,400	8,500	930
G 122.25	22	FWL						
Corral 23-35	23	1673						
Fed Com	T25S	FNL,						
203H	R29E	1831	2,300	250	3,750	1,000	4,500	500
		FWL						
Corral 23-26	23	1673						
Fed Com	T25S	FNL,						
204H	R29E	1861	1,400	150	6,000	900	5,500	650
		FWL						
Corral 23-35	23	1675						
Fed Com	T25S	FNL,						
205H	R29E	2261	2,300	250	3,750	1,000	4,500	500
20311	K29E	FWL	2,300	250	3,730	1,000	4,500	300
C 122.25	22							
Corral 23-35	23	1675						
Fed Com	T25S	FNL,	2.400	2.50		1 400		0.50
206Н	R29E	2291	2,100	250	9,000	1,400	8,500	950
		FWL						
Corral 23-26	23	1675						
Fed Com	T25S	FNL,						
207H	R29E	2321	1,400	150	6,000	900	5,500	650
		FWL						
Corral 23-35	23	1675						
Fed Com	T25S	FNL,						
208H	R29E	2351	2,300	250	3,750	1,000	4,500	500
		FWL			-,		',	
Corral 23-35	23	1798					1	1
Fed Com	T25S	FNL,						
209H	R29E	1770	2 100	250	9,000	1,400	8,500	950
20711	KZ9E		2,100	230	3,000	1,400	0,500	750
C122.26		FWL					-	
Corral 23-26	23	1798						
Fed Com	T25S	FNL,		1.50				[
210H	R29E	1800	1,400	150	6,000	900	5,500	650
		FWL					1	
Corral 23-35	23	1901						
Fed Com	T25S	FNL,						
301H	R29E	2440	2,300	250	3,750	1,000	4,500	500
		FEL]		,		,	
Corral 23-35	23	1901						
Fed Com	T25S	FNL,						
302H	R29E	2410	2,100	250	9,000	1,400	8,500	950
30211	1,72915	FEL	2,100	250	7,000	1,700	0,500	100
		LEL				1	1	

Corral 23-35	23	1901						
Fed Com	T25S	FNL,						
303H	R29E	2380	2,300	250	3,750	1,000	4,500	500
30311	11232	FEL	2,500	250	3,700	1,000	1,500	200
Corral 23-26	23	1901						
Fed Com	T25S	FNL,						
304H	R29E	2350	1,400	150	6,000	900	5,500	650
		FEL	,					
Corral 23-35	23	1902						
Fed Com	T25S	FNL,						
305H	R29E	1950	2,300	250	3,750	1,000	4,500	500
		FEL						
Corral 23-35	23	1902						
Fed Com	T25S	FNL,						
306H	R29E	1920	2,300	250	3,750	1,000	4,500	500
		FEL						
Corral 23-35	23	1902						
Fed Com	T25S	FNL,						
307H	R29E	1890	2,300	250	3,750	1,000	4,500	500
		FEL						
Corral 23-26	23	1902						
Fed Com	T25S	FNL,						
308H	R29E	1860	1,500	150	2,500	700	3,000	350
		FEL						
Corral 23-26	23	2026						
Fed Com	T25S	FNL,						
309H	R29E	2440	1,400	150	6,000	900	5,500	650
		FEL						
Corral 23-26	23	2026						
Fed Com	T25S	FNL,						
310H	R29E	2410	1,400	150	6,000	900	5,500	650
		FEL						

IV. Central Delivery Point Name: CVB 23/Hawkeye CDP [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commenceme nt Date	Initial Flow Back Date	First Productio n Date
Corral 23-35 Fed Com 101H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 102H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 103H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 104H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 105H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 106H	TBD	TBD	TBD	TBD	TBD	TBD

Corral 23-26 Fed Com 201H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 202H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 203H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 204H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 205H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 206H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 207H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 208H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 209H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 210H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 301H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 302H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 303H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 304H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 305H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 306H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-35 Fed Com 307H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 308H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 309H	TBD	TBD	TBD	TBD	TBD	TBD
Corral 23-26 Fed Com 310H	TBD	TBD	TBD	TBD	TBD	TBD

VI. Separation Equipment:

Attach a complete description of how Operator will size separation equipment to optimize gas capture.

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

VIII. Best Management Practices:

Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Anticipated Volume of Natural

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

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

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

API

Anticipated Average

IX. Anticipated Natural Gas Production:

Well

			Natural Gas Rate MCF/I	Gas for the First Year MC
X. Natura	l Gas Gathering Sy	stem (NGGS):		
Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capa of System Segment Tie-in
connecting and the ma will be con	the production open ximum daily capacit nected. Capacity. The natu	rations to the existing or ty of the segment or portional gas gathering system	planned interconnect of the ion of the natural gas gatherical m □ will □ will not have	the anticipated pipeline route(s) anatural gas gathering system(s), and system(s) to which the well(s) capacity to gather 100% of the
XIII. Line or portion,	Pressure. Operator	☐ does ☐ does not anticathering system(s) descri		duction.) connected to the same segment, meet anticipated increases in line
☐ Attach (Operator's plan to ma	anage production in resp	onse to the increased line pro	essure.
	• •			3 NMSA 1978 for the information 27.9 NMAC, and attaches a full

description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications Effective May 25, 2021

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

capacity to transport commencing on the c	ole to connect the well(s) to a natural gas gathering system in the general area with sufficient one hundred percent of the anticipated volume of natural gas produced from the well(s) ate of first production, taking into account the current and anticipated volumes of produced wells connected to the pipeline gathering system; or
to transport one hundi the date of first produc wells connected to the	e able to connect to a natural gas gathering system in the general area with sufficient capacity ed percent of the anticipated volume of natural gas produced from the well(s) commencing on tion, taking into account the current and anticipated volumes of produced natural gas from other pipeline gathering system. is box, Operator will select one of the following:
	rator will shut-in and not produce the well until it submits the certification required by Paragraph F19.15.27.9 NMAC; or
	Plan. □ Operator has attached a venting and flaring plan that evaluates and selects one or more native beneficial uses for the natural gas until a natural gas gathering system is available,
(a)	power generation on lease;
(b)	power generation for grid;
(c)	compression on lease;
(d)	liquids removal on lease;
(e)	reinjection for underground storage;
(f)	reinjection for temporary storage;
(g) (h)	reinjection for enhanced oil recovery; fuel cell production; and
(i)	other alternative beneficial uses approved by the division.

Section 4 - Notices

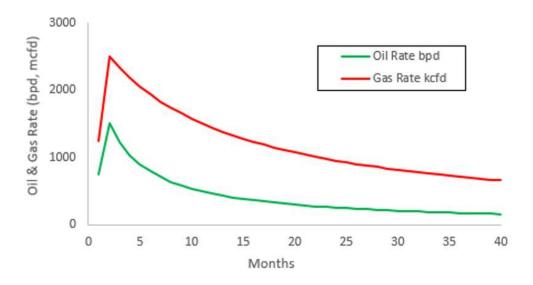
- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
 - (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
 - (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

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

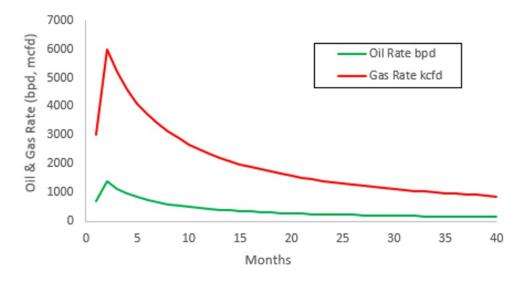
I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Vishal Rajan
Printed Name: Vishal Rajan
Title: Regulatory Analyst
E-mail Address: vishal.rajan@exxonmobil.com
Date: 2/6/2025
Phone:
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

Corral Canyon – Decline Curves Bone Spring:



Wolfcamp:



VI. Separation Equipment:

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

VII. Operational Practices

XTO ENERGY, INC. will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

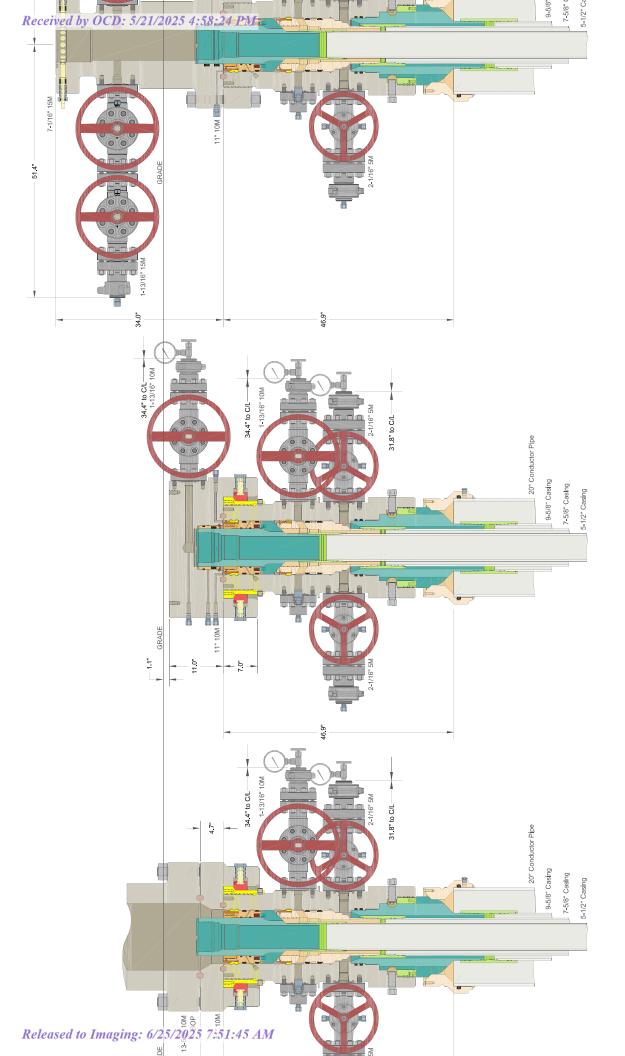
- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically infeasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO ENERGY, INC. will turn operations to onsite separation vessels and flow to the gathering pipeline.
- During production operations, XTO ENERGY, INC. will take every practical effort to minimize waste of natural gas through venting and flaring by:
 - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
 - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
 - Flaring in lieu of venting, where technically feasible
 - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
 - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
 - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
 - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications

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

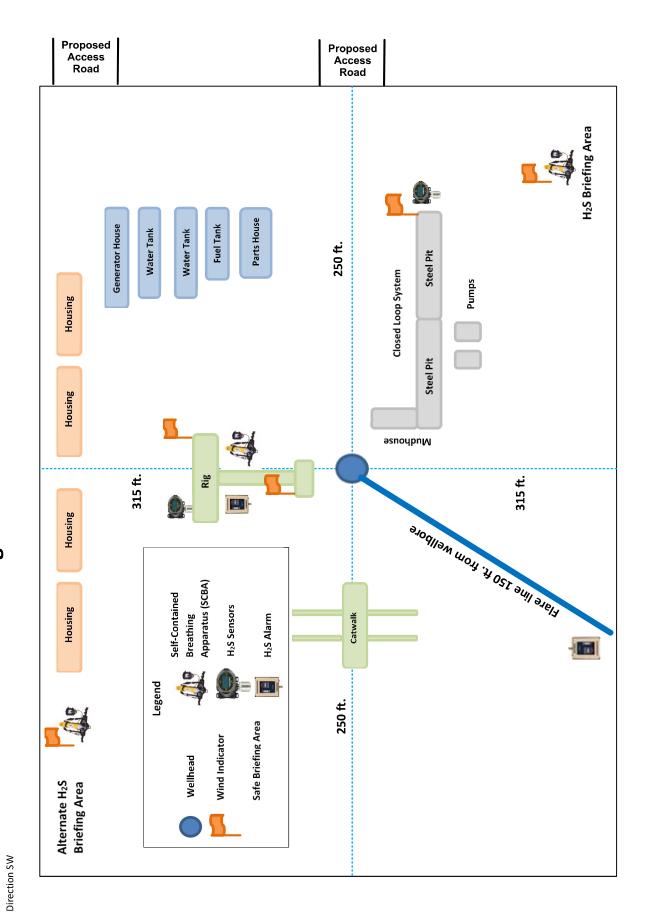
VIII. Best Management Practices during Maintenance

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

C I GVAH I HAN CITOVO

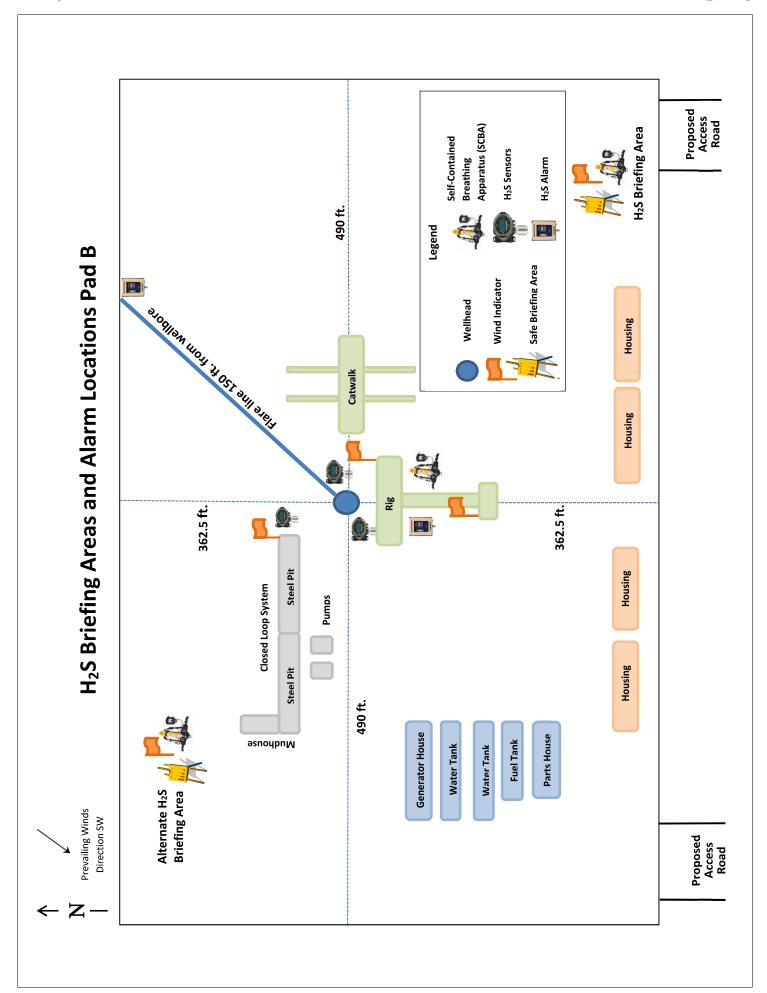


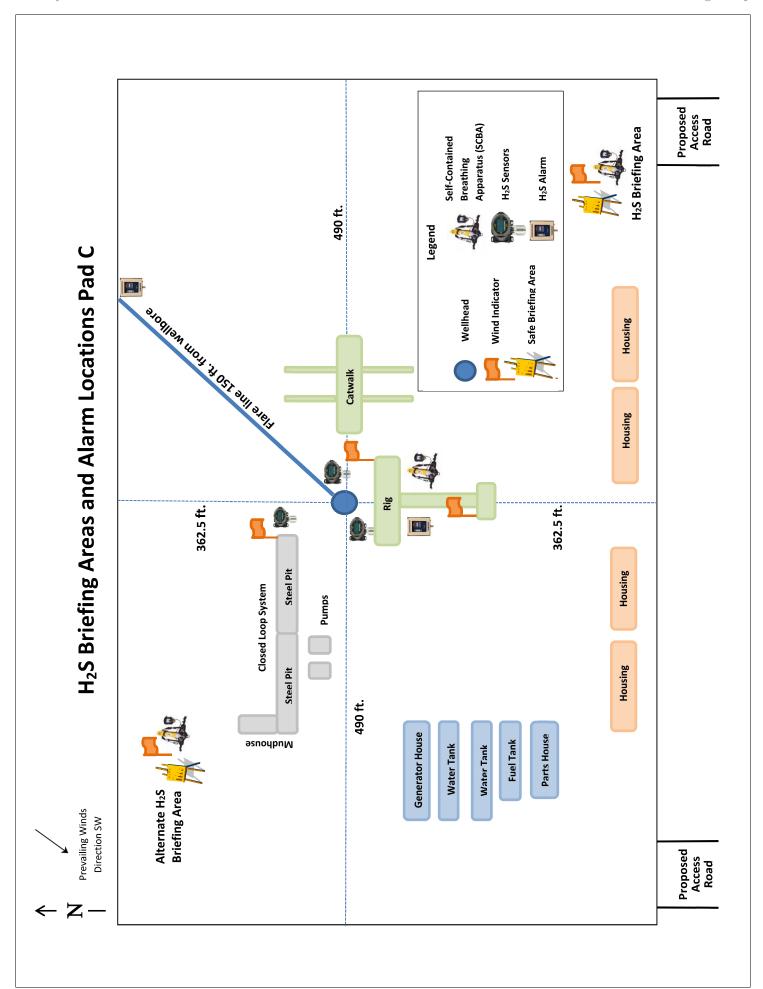
H2S Briefing Areas and Alarm Locations Pad A





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XTO Permian Operating, LLC Offline Cementing Variance Request

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

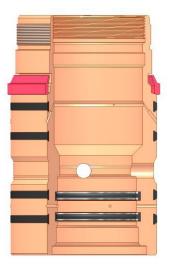
1. Cement Program

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

2. Offline Cementing Procedure

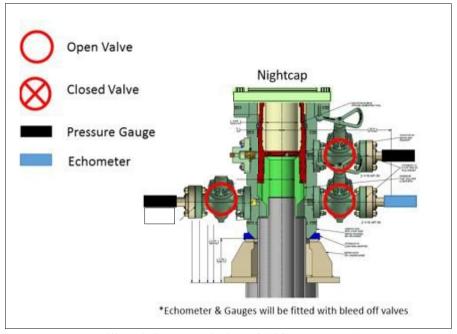
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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



Annular packoff with both external and internal seals

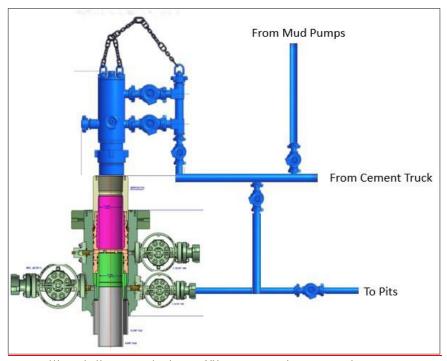
XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

- 6. Skid rig to next well on pad.
- 7. Confirm well is static before removing cap flange, flange will not be removed and offline cementing operations will not commence until well is under control. If well is not static, casing outlet valves will provide access to both the casing ID and annulus. Rig or third party pump truck will kill well prior to cementing or nippling up for further remediation.
 - a. Well Control Plan
 - i. The Drillers Method will be the primary well control method to regain control of the wellbore prior to cementing, if wellbore conditions do not permit the drillers method other methods of well control may be used
 - ii. Rig pumps or a 3rd party pump will be tied into the upper casing valve to pump down the casing ID
 - iii. A high pressure return line will be rigged up to lower casing valve and run to choke manifold to control annular pressure
 - iv. Once influx is circulated out of the hole, kill weight mud will be circulated
 - v. Well will be confirmed static
 - vi. Once confirmed static, cap flange will be removed to allow for offline cementing operations to commence
- 8. Install offline cement tool
- 9. Rig up cement equipment

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

- 10. Circulate bottoms up with cement truck
 - a. If gas is present on bottoms up, well will be shut in and returns rerouted through gas buster to handle entrained gas
 - b. Max anticipated time before circulating with cement truck is 6 hrs
- 11. Perform cement job taking returns from the annulus wellhead valve
- 12. Confirm well is static and floats are holding after cement job
- 13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

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

Description of Operations:

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



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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:	
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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. CUSTUSE

TITLE: QUALITY ASSURANCE

DATE: 1/25/2024

H3-15/16



1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company:

Nabors Industries Inc.

TEST OBJECT

Serial number: H3-012524-1

Lot number:

Production description:

74621/66-1531

Description:

74621/66-1531

Sales order #:

529480

Customer reference:

FG1213

Hose ID: Part number: 3" 16C CK

TEST INFORMATION

Test procedure:

GTS-04-053

Fitting 1:

Test pressure:

15000.00

Part number:

3.0 x 4-1/16 10K

Test pressure hold:

3600.00

Description:

Work pressure:

10000.00

Fitting 2:

3.0 x 4-1/16 10K

45

Work pressure hold: Length difference: Length difference:

900.00 0.00 0.00

sec % inch

psi

sec

psi

Part number:

Length:

Description:

feet

n. . . . 1/2

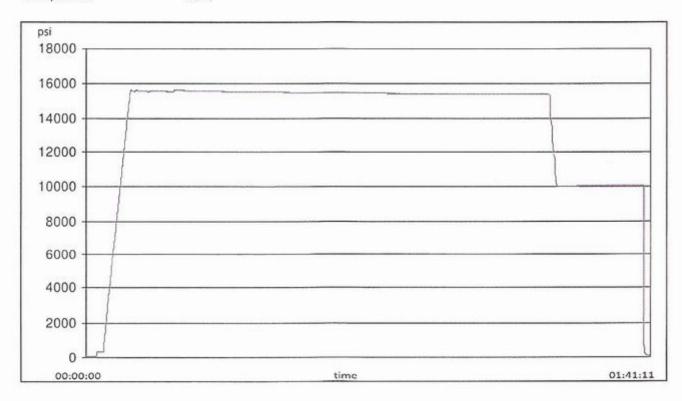
Visual check: Pressure test result:

PASS

Length measurement result:

Test operator:

Travis





H3-15/16

1/25/2024 11:48:06 AM

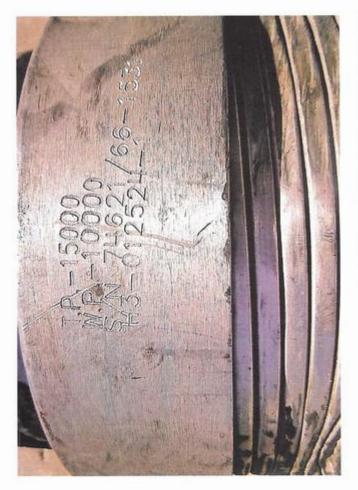
TEST REPORT

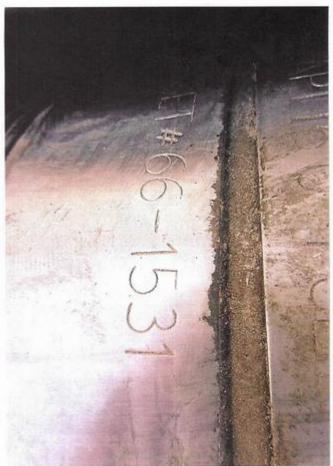
GAUGE TRACEABILITY

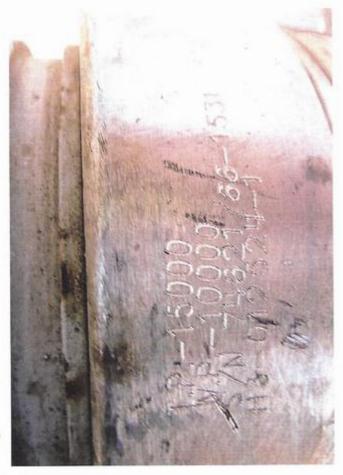
Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16
Comment			
- Comment			



Released to Imaging: 6/25/2025 7:51:45 AM









Released to Imaging: 6/25/2025 7:51:45 AM

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

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

Background

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

Supporting Documentation

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



Figure 1: Winch System attached to BOP Stack



Figure 2: BOP Winch System

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

Tab	ole C.4—Initial Pressure Te	esting, Surface BOP Stacks	
	Pressure Test—Low	Pressure Test-	-High Pressure ^{ac}
Component to be Pressure Tested	Pressure ^{ac} psig (MPa)	Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer ^b	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers ^{bd}	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokese	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or M whichever is lower	MASP for the well program,
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	
 Annular(s) and VBR(s) shall be pre For pad drilling operations, moving pressure-controlling connections For surface offshore operations, the 	during the evaluation period. The pssure tested on the largest and sm from one wellhead to another within when the integrity of a pressure se ram BOPs shall be pressure testand operations, the ram BOPs shall	oressure shall not decrease below the allest OD drill pipe to be used in well n the 21 days, pressure testing is req	program. juired for pressure-containing an the closing and locking pressur

The Bureau of Safety and Environmental Enforcement (BSEE), Department of Interior, has also utilized the API standards, specification and best practices in the development of its offshore oil and gas regulations and incorporates them by reference within its regulations.

Break testing has been approved by the BLM in the past with other operators based on the detailed information provided in this document.

XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 Oand often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after

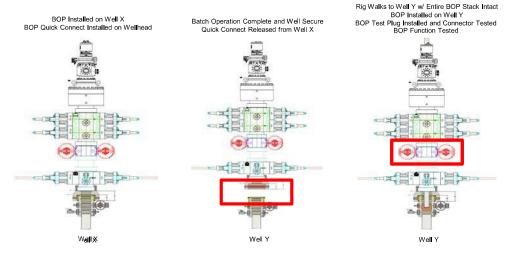
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

Procedures

- XTO Energy will use this document for our break testing plan for New Mexico Delaware basin.
 The summary below will be referenced in the APD or Sundry Notice and receive approval prior
 to implementing this variance.
- 2. XTO Energy will perform BOP break testing on multi-wells pads where multiple intermediate sections can be drilled and cased within the 21-day BOP test window.
 - a. A full BOP test will be conducted on the first well on the pad.
 - b. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
 - i. Our Lower WC targets set the intermediate casing shoe no deeper than the Wolfcamp B.
 - ii. Our Upper WC targets set the intermediate casing shoe shallower than the Wolfcamp B.
 - c. A Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
 - d. A full BOP test will be required prior to drilling any production hole.
- 3. After performing a complete BOP test on the first well, the intermediate hole section will be drilled and cased, two breaks would be made on the BOP equipment.
 - a. Between the HCV valve and choke line connection
 - b. Between the BOP quick connect and the wellhead
- 4. The BOP is then lifted and removed from the wellhead by a hydraulic system.
- 5. After skidding to the next well, the BOP is moved to the wellhead by the same hydraulic system and installed.
- 6. The connections mentioned in 3a and 3b will then be reconnected.
- 7. Install test plug into the wellhead using test joint or drill pipe.
- 8. A shell test is performed against the upper pipe rams testing the two breaks.
- 9. The shell test will consist of a 250 psi low test and a high test to the value submitted in the APD or Sundry (e.g. 5,000 psi or 10,000psi).
- 10. Function test will be performed on the following components: lower pipe rams, blind rams, and annular.

- 11. For a multi-well pad the same two breaks on the BOP would be made and on the next wells and steps 4 through 10 would be repeated.
- 12. A second break test would only be done if the intermediate hole section being drilled could not be completed within the 21 day BOP test window.

Note: Picture below highlights BOP components that will be tested during batch operations



Summary

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API Standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

Based on discussions with the BLM on February 27th 2020 and the supporting documentation submitted to the BLM, we will request permission to ONLY retest broken pressure seals if the following conditions are met:

- 1. After a full BOP test is conducted on the first well on the pad.
- 2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
- 3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.
- 4. Full BOP test will be required prior to drilling the production hole.

All valves in red including the upper pipe rams will be shut to test the broken connections.

** Each valve on choke manifold will alternate being tested against during each rig skid. The connection between the BOP stack Choke Line on each skid and will be / BOP Quick Connect and wellhead connection between the HCV and will be broken, as well as, the re-tested each time.

NOT be broken on each skid and HCV and kill line connection will does not need to be retested. The connection between the

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

General Information Phone: (505) 629-6116

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

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

CONDITIONS

Action 466110

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	466110
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
vrajan	Cement is required to circulate on both surface and intermediate1 strings of casing.	5/21/2025
vrajan	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	5/21/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	6/25/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	6/25/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	6/25/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	6/25/2025