

Well Name	Well Number	US Well Number	Lease Number	Case Number	Operator
JAMES RANCH	111H	3001550085	NMNM02887D	NMNM70965X	XTO PERMIAN
JAMES RANCH	901H	3001550088	NMNM02887D	NMNM70965X	XTO PERMIAN
JAMES RANCH	112H	3001550086	NMNM02887A	NMNM70965X	XTO PERMIAN
JAMES RANCH	110H	3001550084	NMNM02887D	NMNM70965X	XTO PERMIAN
JAMES RANCH	803H	3001554884	NMNM02887B	NMNM70965X	XTO PERMIAN
JAMES RANCH	906H	3001554772	NMNM02953C	NMNM070965Z	XTO PERMIAN
JAMES RANCH	705H	3001554876	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	701H		NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	801H	3001554861	NMNM02887D	NMNM70965X	XTO PERMIAN
JAMES RANCH	905H	3001554771	NMNM02953C	NMNM070965Z	XTO PERMIAN
JAMES RANCH	802H	3001554866	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	116H	3001554882	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	117H	3001554883	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	805H	3001554773	NMNM02953C	NMNM070965Z	XTO PERMIAN
JAMES RANCH	903H	3001550090	NMNM02887A	NMNM70965X	XTO PERMIAN
JAMES RANCH	114H	3001555006	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	702H	3001554879	NMNM02887D	NMNM70965X	XTO PERMIAN
JAMES RANCH	706H	3001554875	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	806H	3001554963	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	907H	3001554881	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	807H	3001554774	NMNM02953C	NMNM070965Z	XTO PERMIAN
JAMES RANCH	704H	3001554877	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	708H	3001554960	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	902H	3001550089	NMNM02887D	NMNM70965X	XTO PERMIAN
JAMES RANCH	113H	3001550087	NMNM02887A	NMNM70965X	XTO PERMIAN
JAMES RANCH	904H	3001550091	NMNM02887A	NMNM70965X	XTO PERMIAN
JAMES RANCH	804H	3001554885	NMNM02887B	NMNM70965X	XTO PERMIAN
JAMES RANCH	703H	3001554878	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	707H	3001554874	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	115H	3001555005	NMNM02953C	NMNM70965X	XTO PERMIAN
JAMES RANCH	118H	3001555028	NMNM02887B	NMNM70965X	XTO PERMIAN
JAMES RANCH	908H	3001554880	NMNM02953C	NMNM70965X	XTO PERMIAN

Notice of Intent

Sundry ID: 2797251

Type of Submission: Notice of Intent

Date Sundry Submitted: 06/25/2024

Date proposed operation will begin: 06/25/2024

Type of Action: APD Change

Time Sundry Submitted: 04:53

**Procedure Description:** XTO Permian Operating LLC is aware of R-111-Q update and will comply with these requirements including (but not limited to):

- Alignment with KPLA requirements per schematic per schematic below, with engineering weak point casing design and utilizing new casing that meets API standards.
- Intermediate 2 casing will consist of a primary cement job with TOC at the top of the Brushy Canyon formation within the Delaware Mountain Group.
- Bradenhead squeeze to be completed after primary cement job to tie back TOC to intermediate 1 “Salt string” at least 500’ but with top below Marker Bed 126 “Potash Interval”.
- Production cement to be tied back no less than 500’ inside previous casing shoe (intermediate 2 casing) and below the engineered weak point.
- Monitor separation Distance to offsets and maintain a Separation Factor greater than 1.0 while drilling through the salt intervals. For blind or inclination only wells, XTO Permian Operating LLC will maintain greater than 300’ center-to-center separation.

NOI Attachments

Procedure Description

JRU\_DI\_7\_Wellbore\_diagram\_20240625165246.pdf

Conditions of Approval

Additional

James\_Ranch\_Unit\_DI\_7\_Sawtooth\_Batch\_Wells\_COA\_20240627101348.pdf

Operator

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

**Operator Electronic Signature:** RICHARD REDUS

**Signed on:** JUN 25, 2024 04:52 PM

**Name:** XTO PERMIAN OPERATING LLC

**Title:** Permitting Manager

**Street Address:** 22777 SPRINGWOODS VILLAGE PARKWAY

**City:** SPRING**State:** TX

**Phone:** (720) 539-1673

**Email address:** RICHARD.L.REDUS@EXXONMOBIL.COM

Field

**Representative Name:**

**Street Address:**

**City:****State:****Zip:**

**Phone:**

**Email address:**

BLM Point of Contact

**BLM POC Name:** CHRISTOPHER WALLS

**BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234

**BLM POC Email Address:** cwalls@blm.gov

**Disposition:** Approved

**Disposition Date:** 06/27/2024

**Signature:** Chris Walls

Form 3160-5  
(June 2019)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: October 31, 2021

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No. **MULTIPLE**

6. If Indian, Allottee or Tribe Name  
**MULTIPLE**

<b>SUBMIT IN TRIPLICATE - Other instructions on page 2</b>		7. If Unit of CA/Agreement, Name and/or No. <b>MULTIPLE</b>
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. <b>MULTIPLE</b>
2. Name of Operator <b>XTO PERMIAN OPERATING LLC</b>		9. API Well No. <b>MULTIPLE</b>
3a. Address <b>6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND,</b>	3b. Phone No. (include area code) <b>(432) 683-2277</b>	10. Field and Pool or Exploratory Area <b>MULTIPLE</b>
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) <b>MULTIPLE</b>		11. Country or Parish, State <b>MULTIPLE</b>

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA				
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

XTO Permian Operating LLC is aware of R-111-Q update and will comply with these requirements including (but not limited to):

Alignment with KPLA requirements per schematic per schematic below, with engineering weak point casing design and utilizing new casing that meets API standards.

Intermediate 2 casing will consist of a primary cement job with TOC at the top of the Brushy Canyon formation within the Delaware Mountain Group.

o Bradenhead squeeze to be completed after primary cement job to tie back TOC to intermediate 1 Salt string at least 500 but with top below Marker Bed 126 Potash Interval.

Production cement to be tied back no less than 500 inside previous casing shoe (intermediate 2 casing) and below the engineered weak point.

Monitor separation Distance to offsets and maintain a Separation Factor greater than 1.0 while drilling through the salt intervals. For blind or inclination only wells, XTO Permian Operating LLC will maintain greater than 300 center-to-center separation.

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) <b>RICHARD REDUS / Ph: (720) 539-1673</b>	Title <b>Permitting Manager</b>
Signature (Electronic Submission)	Date <b>06/25/2024</b>

THE SPACE FOR FEDERAL OR STATE OFFICE USE		
Approved by <b>CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved</b>	Title <b>Petroleum Engineer</b>	Date <b>06/27/2024</b>
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office <b>CARLSBAD</b>	

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

(Instructions on page 2)

## GENERAL INSTRUCTIONS

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

## SPECIFIC INSTRUCTIONS

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

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

## NOTICES

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

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

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

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

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

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

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

Response to this request is mandatory.

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

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

## Additional Information

### Batch Well Data

JAMES RANCH UNIT DI 7 SAWTOOTH 902H, US Well Number: 3001550089, Case Number: NMNM70965X, Lease Number: NMNM02887D,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 111H, US Well Number: 3001550085, Case Number: NMNM70965X, Lease Number: NMNM02887D,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Fed Com 903H, US Well Number: 3001550090, Case Number: NMNM70965X, Lease Number: NMNM02887A,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 901H, US Well Number: 3001550088, Case Number: NMNM70965X, Lease Number: NMNM02887D,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Com 112H, US Well Number: 3001550086, Case Number: NMNM70965X, Lease Number: NMNM02887A,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 110H, US Well Number: 3001550084, Case Number: NMNM70965X, Lease Number: NMNM02887D,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Fed Com 113H, US Well Number: 3001550087, Case Number: NMNM70965X, Lease Number: NMNM02887A,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Fed Com 904H, US Well Number: 3001550091, Case Number: NMNM70965X, Lease Number: NMNM02887A,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 701H, US Well Number: null, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Fed Com 803H, US Well Number: 3001554884, Case Number: NMNM70965X, Lease Number: NMNM02887B,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 801H, US Well Number: 3001554861, Case Number: NMNM70965X, Lease Number: NMNM02887D,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Fed Com 804H, US Well Number: 3001554885, Case Number: NMNM70965X, Lease Number: NMNM02887B,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 802H, US Well Number: 3001554866, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 114H, US Well Number: 3001555006, Case Number: NMNM70965X, Lease Number: NMNM02953C,

Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 115H, US Well Number: 3001555005, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 116H, US Well Number: 3001554882, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH Com 117H, US Well Number: 3001554883, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH COM 118H, US Well Number: 3001555028, Case Number: NMNM70965X, Lease Number: NMNM02887B,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 805H, US Well Number: 3001554773, Case Number: NMNM070965Z, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 806H, US Well Number: 3001554963, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH FEDERAL COM 807H, US Well Number: 3001554774, Case Number: NMNM070965Z, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 905H, US Well Number: 3001554771, Case Number: NMNM070965Z, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 906H, US Well Number: 3001554772, Case Number: NMNM070965Z, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 907H, US Well Number: 3001554881, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH COM 908H, US Well Number: 3001554880, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 702H, US Well Number: 3001554879, Case Number: NMNM70965X, Lease Number: NMNM02887D,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 703H, US Well Number: 3001554878, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 704H, US Well Number: 3001554877, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 705H, US Well Number: 3001554876, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 706H, US Well Number: 3001554875, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 707H, US Well Number: 3001554874, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

JAMES RANCH UNIT DI 7 SAWTOOTH 708H, US Well Number: 3001554960, Case Number: NMNM70965X, Lease Number: NMNM02953C,  
Operator:XTO PERMIAN OPERATING LLC

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b> XTO <b>LEASE NO.:</b> <b>LOCATION:</b> <b>COUNTY:</b> Eddy County, New Mexico ▼	
<b>WELL NAME &amp; NO.:</b> James Ranch Unit DI 7 Sawtooth Batch Wells <b>SURFACE HOLE FOOTAGE:</b> <b>BOTTOM HOLE FOOTAGE:</b>	

*Changes approved through engineering via **Sundry 2797251**\_\_\_\_\_ on 6-27-2024\_. Any previous COAs not addressed within the updated COAs still apply.*

COA

H <sub>2</sub> S	<input type="radio"/> No	<input checked="" type="radio"/> Yes
<b>Potash / WIPP</b>	<input type="radio"/> None <input type="radio"/> Secretary <input checked="" type="radio"/> R-111-Q <span style="color: red;">Choose an option (including blank option.)</span>	<input checked="" type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
<b>Cave / Karst</b>	<input type="radio"/> Low <input checked="" type="radio"/> Medium <input type="radio"/> High	<input type="radio"/> Critical
<b>Wellhead</b>	<input type="radio"/> Conventional <input checked="" type="radio"/> Multibowl <input type="radio"/> Both	<input type="radio"/> Diverter
<b>Cementing</b>	<input type="checkbox"/> Primary Squeeze <input type="checkbox"/> Cont. Squeeze <input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
<b>Special Req</b>	<input type="checkbox"/> Capitan Reef <input type="checkbox"/> Water Disposal <input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
<b>Waste Prev.</b>	<input type="radio"/> Self-Certification <input type="radio"/> Waste Min. Plan <input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
<b>Additional Language</b>	<input checked="" type="checkbox"/> Flex Hose <input checked="" type="checkbox"/> Casing Clearance <input type="checkbox"/> Pilot Hole <input type="checkbox"/> Four-String <input checked="" type="checkbox"/> Offline Cementing <input type="checkbox"/> Fluid-Filled	<input checked="" type="checkbox"/> Break Testing

### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

***APD is within the R-111-Q defined boundary. Operator must follow all procedures and requirements listed within the updated order.***

## B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **581** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8** inch 1<sup>st</sup> Intermediate casing is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, or potash.**
3. The minimum required fill of cement behind the **7-5/8** inch 2<sup>nd</sup> 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 return to back 500 feet into the previous casing but not higher than USGS Marker Bed No. 126 .

**First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon at 6500'**

**Second stage:** Cement should tie-back 500 feet into the previous casing but not higher than USGS Marker Bed No. 126. **Operator must verify top of cement per R-111-Q requirements.** Submit results to the BLM. If cement does not circulate, contact the appropriate BLM office.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, or potash.**

Operator has proposed to pump down annulus after primary cementing stage. **Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the Intermediate 2 casing to tieback requirements listed above after the second stage BH to verify TOC.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

- ❖ **A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the Intermediate String.** Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within **180 days**.

Operator has proposed to pump down **intermediate x production** annulus post completion. **Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the production casing to surface after the second stage BH to verify TOC.** Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry during second stage bradenhead when running Echo-meter if cement is required to surface. Adjust cement volume and excess based on a fluid caliper or similar method that reflects the as-drilled size of the wellbore.

Operator has proposed an open annulus completion in R-111-Q. Operator shall provide a method of verification pre-completion top of cement. **Submit results to the BLM. Pressure monitoring device and Pressure Safety Valves must be installed at surface on both the intermediate annulus and the production annulus for the life of the well.**

**In the event of a casing failure during completion, the operator must contact the BLM at (575-706-2779) and (575-361-2822 Eddy County).**

- ❖ **A monitored open annulus will be incorporated during completion by leaving the Intermediate Casing x Production Casing annulus un-cemented and monitored inside the Intermediate String.** Operator must follow monitoring requirements listed within R-111-Q. Tieback requirements shall be met within **180 days**.

4. The minimum required fill of cement behind the **5-1/2** inch production liner is:
  - Cement should tie-back 500 feet into the previous casing but not higher than USGS Marker Bed No. 126. Operator shall provide method of verification.

## **C. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.

- d. If the cement does not circulate and one-inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

#### **D. SPECIAL REQUIREMENT (S)**

##### **Unit Wells**

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

##### **Commercial Well Determination**

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

##### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted **(575-361-2822 Eddy County)** 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

##### **Offline Cementing**

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

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

**Casing Clearance**

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

## GENERAL REQUIREMENTS

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

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

### Contact Eddy County Petroleum Engineering Inspection Staff:

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

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

### A. CASING

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

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

## **B. PRESSURE CONTROL**

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

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

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - iii. Manufacturer representative shall install the test plug for the initial BOP test.
  - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
  - v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

- open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
  - iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
  - v. The results of the test shall be reported to the appropriate BLM office.
  - vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
  - viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

### **C. DRILLING MUD**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

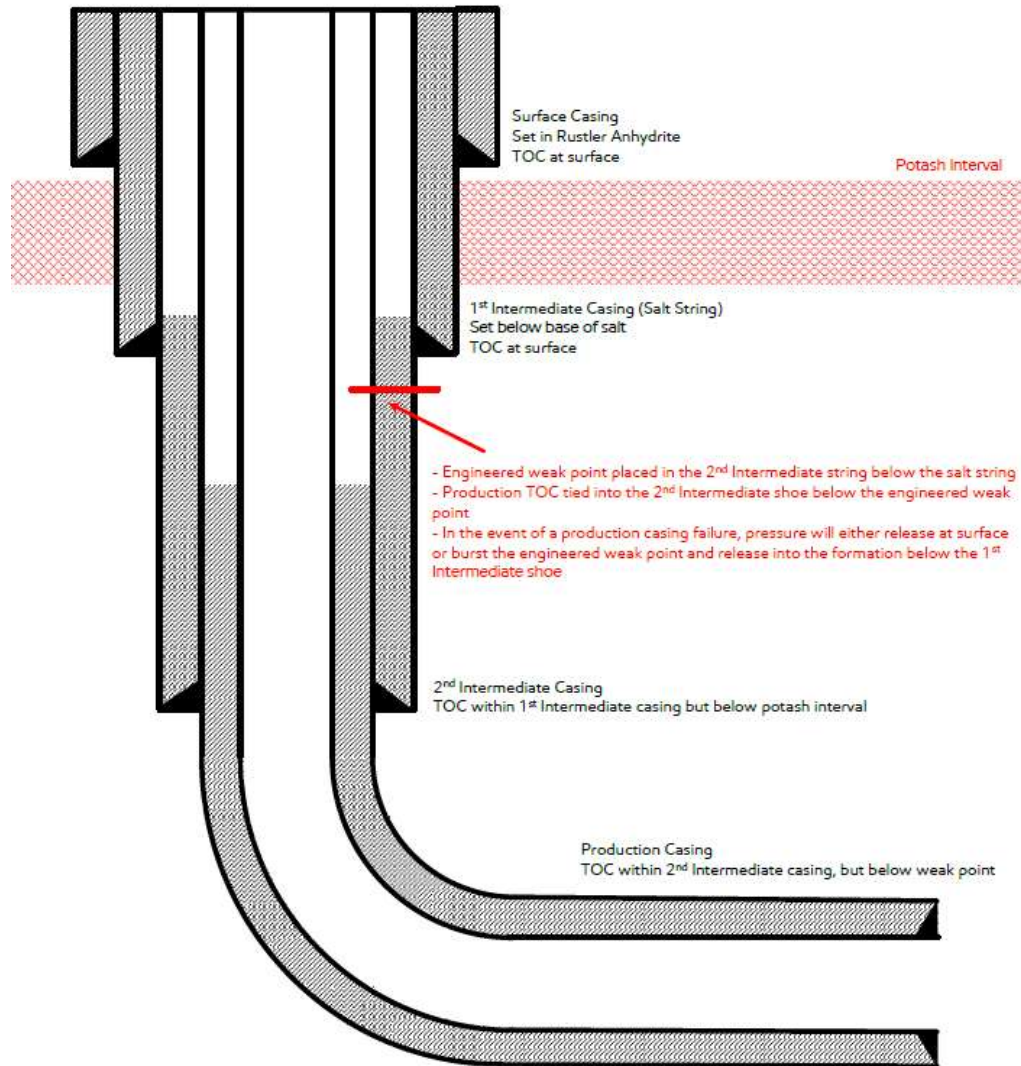
### **D. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be

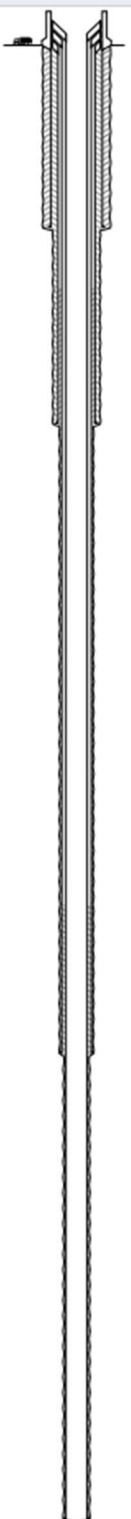
disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**Approved by Zota Stevens on 6/27/2024**  
575-234-5998 / zstevens@blm.gov

## 4-String Design – Engineered Weak Point



## James Ranch Unit DI7 Sawtooth 114H Wellbore Schematic - Example

Run		WBG	Formation Tops	Casing	Cement
MD	TVD				
32.5 ft	32.5 ft		RUSTLER: MD / TVD: 258 / 258 ft	13.375" Casing, 54.5 lbm/ft, J-55 BTC OO: 13.375 in ID: 12.615 in Drift: 12.459 in Start MD / TVD: 32.5 / 32.5 ft End MD / TVD: 599 / 599 ft Grade: J55 Weight: 54.5 lbm/ft Connection: BTC	Type: Single Stage  Tail: Class C 14.8 lbm/gal   217.22 bbl   903.4 sack   200 % excess   1.35 ft <sup>3</sup> /sack   Top MD / TVD: 32.5 / 32.5 ft
Drilling run 1 17.5 in Type: Drilling run					
599 ft	599 ft		TOP SALT: MD / TVD: 604 / 604 ft MARKER BED 126: MD / TVD: 1526 / 1526 ft BASE SALT: MD / TVD: 3737.32 / 3712 ft	9.625" Casing 40 lbm/ft J55 BTC OO: 9.625 in ID: 8.835 in Drift: 8.75 in Start MD / TVD: 32.5 / 32.5 ft End MD / TVD: 3864.58 / 3837 ft	Type: Single Stage  Lead: Class C 12.8 lbm/gal   345.13 bbl   1394.07 sack   100 % excess   1.39 ft <sup>3</sup> /sack   Top MD / TVD: 32.5 / 32.5 ft Tail: 35/65 Poz Class C 14.8 lbm/gal   59.19 bbl   246.18 sack   100 % excess   1.35 ft <sup>3</sup> /sack   Top MD / TVD: 3364.58 / 3345.87 ft
599 ft	599 ft		Marker Bed 126 -Base of Potash Interval		
Drilling run 1 12.25 in Type: Drilling run					
3864.58 ft	3837 ft		DELAWARE: MD / TVD: 3973.51 / 3944 ft BELL CANYON: MD / TVD: 4012.2 / 3982 ft CHERRY CANYON: MD / TVD: 5122.91 / 5073 ft BRUSHY CANYON: MD / TVD: 6554.3 / 6479 ft BONE SPRING CARBONATE: MD / TVD: 7859.24 / 7772 ft AVALON: MD / TVD: 7908.24 / 7821 ft AVALON CARBONATE UPPER: MD / TVD: 8093.24 / 8006 ft AVALON SHALE UPPER: MD / TVD: 8210.24 / 8123 ft AVALON CARBONATE MIDDLE: MD / TVD: 8345.24 / 8258 ft AVALON SHALE LOWER: MD / TVD: 8437.24 / 8350 ft 1ST BONE SPRING CARBONATE: MD / TVD: 8729.24 / 8642 ft 1ST BONE SPRING SAND: MD / TVD: 8901.24 / 8814 ft 2ND BONE SPRING CARBONATE: MD / TVD: 9352.24 / 9265 ft 2ND BONE SPRING SAND: MD / TVD: 9741.24 / 9654 ft 3RD BONE SPRING CARBONATE: MD / TVD: 10005.24 / 9918 ft HARKEY SAND: MD / TVD: 10244.24 / 10157 ft 3RD BONE SPRING SHALE: MD / TVD: 10302.24 / 10215 ft	7.625" Casing, 29.7 lbm/ft, P-110 HP USS-Liberty FJM OO: 7.625 in ID: 6.875 in Drift: 6.75 in Start MD / TVD: 32.5 / 32.5 ft End MD / TVD: 4065 / 4033.86 ft Grade: P110 Weight: 29.7 lbm/ft Connection: USS-LIBERTY FJM	Type: Two Stage  Tail: Class C 14.8 lbm/gal   140.08 bbl   591.35 sack   100 % excess   1.33 ft <sup>3</sup> /sack   Top MD / TVD: 1600 / 1600 ft
3864.58 ft	3837 ft			7.625" Casing, 29.7 lbm/ft, L-80 HC USS-Liberty FJM OO: 7.625 in ID: 6.875 in Drift: 6.75 in Start MD / TVD: 4065 / 4033.86 ft End MD / TVD: 10626.24 / 10539 ft Grade: L-80 HC Weight: 29.7 lbm/ft Connection: USS-LIBERTY FJM	Intermediate 2 TOC  Tail: Class H 15.6 lbm/gal   147.8 bbl   697.35 sack   100 % excess   1.19 ft <sup>3</sup> /sack   Top MD / TVD: 6554.4 / 6479.1 ft
Drilling run 1 8.75 in Type: Drilling run					
10626.24 ft	10539 ft		3RD BONE SPRING SAND: MD / TVD: 10729.24 / 10642 ft KOP: MD / TVD: 10776.24 / 10689 ft WOLFCAMP: MD / TVD: 11201.12 / 11076 ft WOLFCAMP X: MD / TVD: 11223.22 / 11092 ft WOLFCAMP Y: MD / TVD: 11320.46 / 11155 ft WOLFCAMP A: MD / TVD: 11485.38 / 11231 ft	5.5" Casing Tenaris TPN 20 lbm/ft P110 ICY OO: 5.5 in ID: 4.778 in Drift: 4.653 in Start MD / TVD: 32.5 / 32.5 ft End MD / TVD: 10526 / 10438.76 ft Grade: P-110 ICY Weight: 20 lbm/ft Connection: TPN	Type: Single Stage  Tail: 50/50 POZ H 13.2 lbm/gal   279.95 bbl   845.05 sack   25 % excess   1.86 ft <sup>3</sup> /sack   Top MD / TVD: 9026 / 8938.76 ft
10626.24 ft	10539 ft			5.5" Casing Hydril Wedge 441 20 lbm/ft P110 ICY OO: 5.5 in ID: 4.778 in Drift: 4.653 in Start MD / TVD: 10526 / 10438.76 ft End MD / TVD: 24207.32 / 11360.11 ft Grade: P-110 ICY Weight: 20 lbm/ft Connection: Wedge 441	Production TOC
Drilling run 1 6.75 in Type: Drilling run Curve					
11687.34 ft	11266.14 ft				
11687.34 ft	11266.14 ft				
Drilling run 2 6.75 in Type: Drilling run Lateral					
24207.32 ft	11360.11 ft				

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

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oed/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 369747

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 369747
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Work was performed without OCD approval.	11/18/2025