

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. **NMNM002953C**
6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 2		7. If Unit of CA/Agreement, Name and/or No. JAMES RANCH/NMNM070965X
1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		8. Well Name and No. JAMES RANCH UNIT DI 8 EAGLE/7
2. Name of Operator XTO PERMIAN OPERATING LLC		9. API Well No.
3a. Address 6401 Holiday Hill Road, Bldg 5, Midland, TX 79701	3b. Phone No. (include area code) (432) 682-8873	10. Field and Pool or Exploratory Area Los Medanos; Wolfcamp, South
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SEC 36/T22S/R30E/NMP		11. Country or Parish, State EDDY/NM

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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or 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 recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

****Pool Change, SHL Change, Spacing, Casing/Cement, Drilling Variance Changes**

XTO Permian Operating, LLC requests permission to make the following changes to the original APD:

Change Pool from: Los Medanos; Wolfcamp (South) to Los Medanos; Bone Spring

No Additional Surface Disturbance

Change SHL fr/2438FSL & 1563FWL to 2436FSL & 1747FWL

Well Stays in the Same Quarter-Quarter as Permitted

Total SHL Move: 2 North & 184 East

SHL change requested to optimize well pad layout, drilling efficiencies, and for safety purposes.

Continued on page 3 additional information

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) STEPHANIE RABADUE / Ph: (432) 620-6714	Title Regulatory Coordinator
Signature	Date 05/06/2022

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved	Title Petroleum Engineer	Date 05/19/2022
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 CARLSBAD	

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

Additional Remarks

Change BHL fr/1435FNL & 50FEL to 1540FNL & 50FEL
Casing/Cement design per the attached drilling program.

Attachments:

C102

Drilling Program

Directional Plan

Multibowl Diagram

Location of Well

0. SHL: NWSW / 2436 FSL / 1747 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.348025 / LONG: -103.837272 (TVD: 0 feet, MD: 0 feet)

PPP: SENW / 1635 FNL / 2300 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.351345 / LONG: -103.835474 (TVD: 10045 feet, MD: 11500 feet)

BHL: SENE / 1435 FNL / 50 FEL / TWSP: 22S / RANGE: 31E / SECTION: 31 / LAT: 32.351325 / LONG: -103.808325 (TVD: 11194 feet, MD: 19735 feet)

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30 - 0 15 - 4 94 4 4	² Pool Code 4 0 2 9 5	³ Pool Name Los Medanos; Bone Spring
⁴ Property Code	⁵ Property Name JAMES RANCH UNIT DI 8 EAGLE	⁶ Well Number 702H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,308'

¹⁰ Surface Location

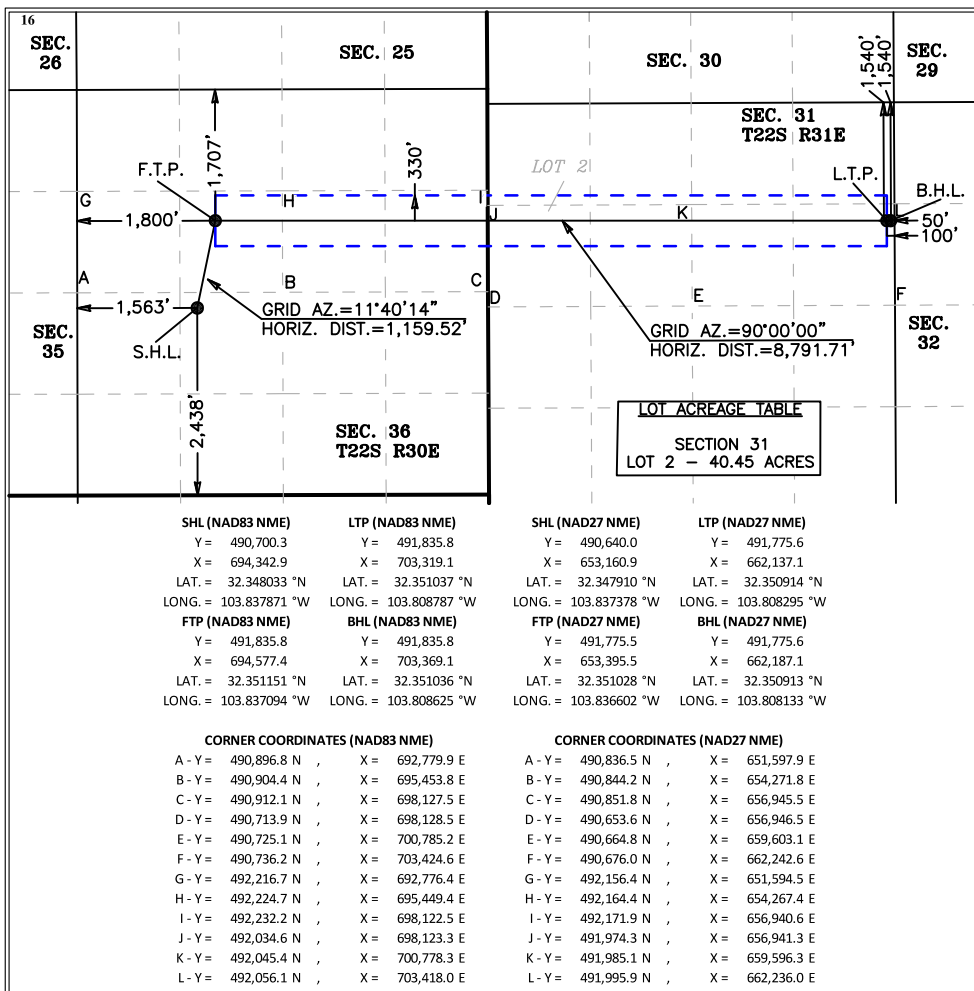
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	36	22S	30E		2,438	SOUTH	1,563	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	31	22S	31E		1,540	NORTH	50	EAST	EDDY

¹² Dedicated Acres 440.45	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

¹⁷ OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Stephanie Rabadue 04/14/2022
Signature Date

Stephanie Rabadue
Printed Name

stephanie.rabadue@exxonmobil.com
E-mail Address

¹⁸ SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

03-25-2022

Date of Survey

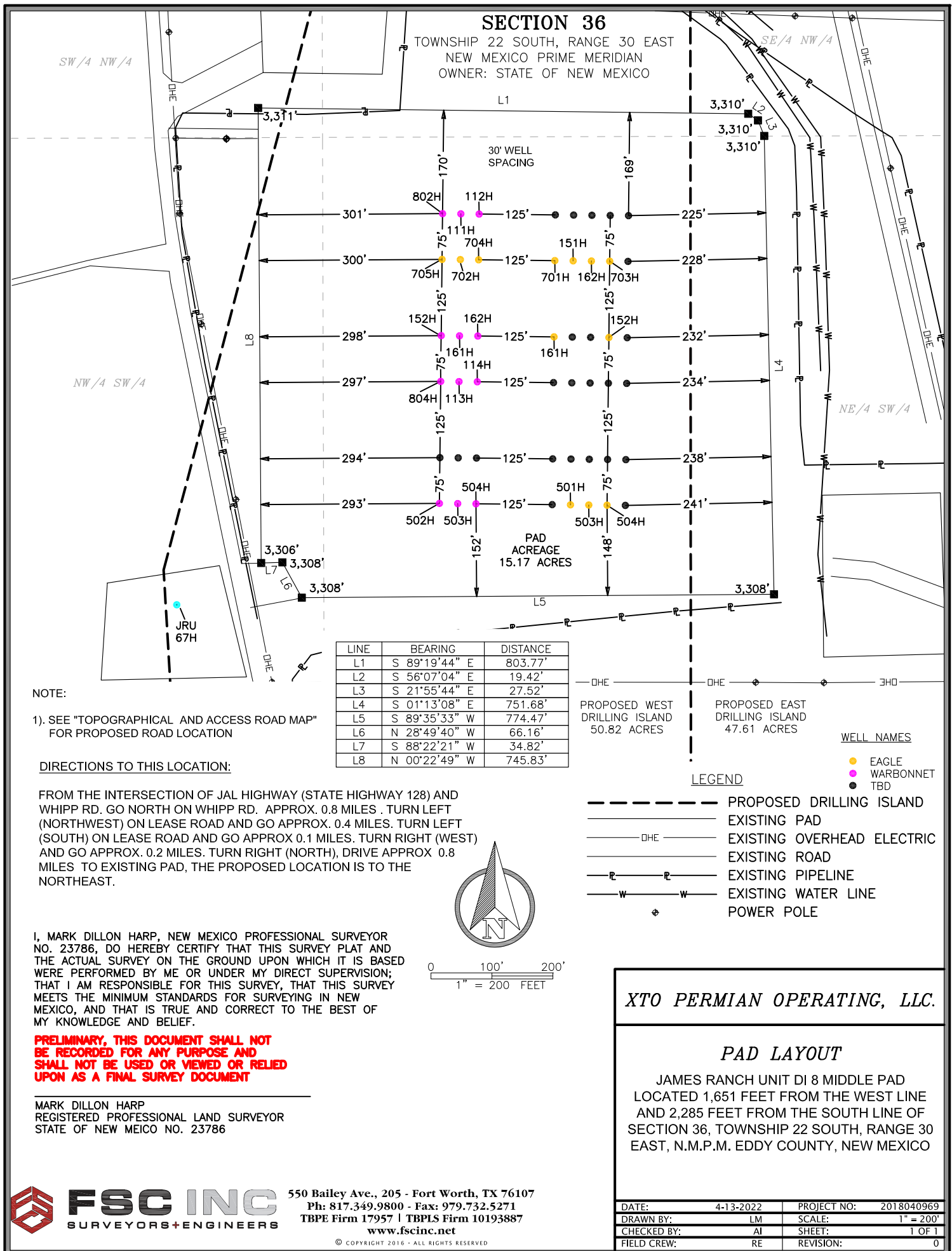
Signature and Seal of
Professional Surveyor:

MARK DILLON HARP 23786
Certificate Number



AW

2019072367



FSC INC
SURVEYORS+ENGINEERS

550 Bailey Ave., 205 - Fort Worth, TX 76107
Ph: 817.349.9800 - Fax: 979.732.5271
TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

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

XTO Energy Inc.
James Ranch Unit DI 8 Eagle 702H
Projected TD: 18474' MD / 9864' TVD
SHL: 2438' FSL & 1563' FWL , Section 36, T22S, R30E
BHL: 1540' FNL & 50' FEL , Section 31, T22S, R31E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	290'	Water
Top of Salt	597'	Water
Base of Salt	3589'	Water
Delaware	3832'	Water
Brushy Canyon	6447'	Water/Oil/Gas
Bone Spring	7659'	Water
1st Bone Spring Ss	8700'	Water/Oil/Gas
2nd Bone Spring Ss	9533'	Water/Oil/Gas
Target/Land Curve	9752'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 572' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3689' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 9107' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 18474 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 8607 feet) per Potash regulations.

3. Casing Design

Hole Size	MD	TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 572'	572'	13.375	54.5	J-55	BTC	New	2.48	4.47	27.36
12.25	0' – 3689'	3689'	9.625	40	J-55	BTC	New	1.91	2.29	4.27
8.75	0' – 3789'	3589'	7.625	29.7	RY P-110	Flush Joint	New	3.20	3.16	2.06
8.75	3789' – 9107'	9011'	7.625	29.7	HC L-80	Flush Joint	New	2.32	3.98	2.57
6.75	0' – 9007'	8912'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.37	2.45
6.75	9007' - 18474'	9864'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.16	6.13

· Production casing meets the clearance requirements as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

· XTO requests to not utilize centralizers in the curve and lateral

· 9.625 Collapse analyzed using 50% evacuation based on regional experience.

· 7.625 Collapse analyzed using 50% evacuation based on regional experience.

· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

· Test on 2M annular & Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less

· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 13-3/8" bottom

B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 7-5/8" casing per BLM Onshore Order 2
- Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 572'

Lead: 200 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
 Tail: 300 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
 Top of Cement: Surface
 Compressives: 12-hr = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3689'

Lead: 1520 sxs Class C (mixed at 12.9 ppg, 1.39 ft3/sx, 10.13 gal/sx water)
 Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
 Top of Cement: Surface
 Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9107'

1st Stage

Optional Lead: 160 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
 TOC: 3489
 Tail: 240 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
 TOC: Brushy Canyon @ 6447
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water)
 Tail: 390 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
 Top of Cement: 0
 Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6447') 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 to surface. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

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

Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 18474'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8607 feet
 Tail: 650 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9307 feet
 Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

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

5. Pressure Control Equipment

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2959 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13.375, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nipping up on the 7.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

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

A variance is requested to **ONLY** test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to **ONLY** retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 572'	17.5	FW/Native	8.5-9	35-40	NC
572' - 3689'	12.25	Brine	10-10.5	30-32	NC
3689' to 9107'	8.75	BDE/OBM or FW/Brine	8.6-9.1	30-32	NC
9107' to 18474'	6.75	OBM	10-10.5	50-60	NC - 20

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

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 10.0 ppg -10.5 ppg brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
- H2S monitors will be on location when drilling below the 13.375 casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 165 to 185 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5129 psi.

10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

Well Plan Report - JRU DI 8 EAGLE 702H

Measured
Depth: 18473.65 ft

TVD RKB: 9864.00 ft

Location

Geographic New Mexico
Reference East - NAD
System: 27

Northing: 490640.38 ft

Easting: 653160.06 ft

RKB: 3339.00 ft

Ground
Level: 3309.00 ft

North
Reference: Grid

Convergence
Angle: 0.27 Deg

Site: JRU DI-8

Slot: SLOT 4

Plan Sections		JRU DI 8 EAGLE 702H							
Measured			TVD				Build	Turn	Dogleg
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset		Rate	Rate	Rate
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)	Target
0	0	351.11	0	-0.01	0	0	0	0	0
3600	0	351.11	3600	-0.01	0	0	0	0	0
4154.89	11.1	9.34	4151.43	52.85	8.7	2	0	2	

800	0	0	800	2.868	0	2.868	0	2.467	0	0	2.868	2.868	0	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
900	0	0	900	3.226	0	3.226	0	2.511	0	0	3.226	3.226	0	SG MWD+IFR1+ MS XOM_R2OW
1000	0	0	1000	3.585	0	3.585	0	2.56	0	0	3.585	3.585	0	SG MWD+IFR1+ MS XOM_R2OW
1100	0	0	1100	3.943	0	3.943	0	2.613	0	0	3.943	3.943	0	SG MWD+IFR1+ MS XOM_R2OW
1200	0	0	1200	4.302	0	4.302	0	2.67	0	0	4.302	4.302	0	SG MWD+IFR1+ MS XOM_R2OW
1300	0	0	1300	4.66	0	4.66	0	2.731	0	0	4.66	4.66	0	SG MWD+IFR1+ MS XOM_R2OW
1400	0	0	1400	5.018	0	5.018	0	2.797	0	0	5.018	5.018	0	SG MWD+IFR1+ MS XOM_R2OW
1500	0	0	1500	5.377	0	5.377	0	2.866	0	0	5.377	5.377	0	SG MWD+IFR1+ MS XOM_R2OW
1600	0	0	1600	5.735	0	5.735	0	2.939	0	0	5.735	5.735	0	SG MWD+IFR1+ MS XOM_R2OW
1700	0	0	1700	6.094	0	6.094	0	3.016	0	0	6.094	6.094	0	SG MWD+IFR1+ MS XOM_R2OW
1800	0	0	1800	6.452	0	6.452	0	3.096	0	0	6.452	6.452	0	SG MWD+IFR1+ MS XOM_R2OW
1900	0	0	1900	6.811	0	6.811	0	3.179	0	0	6.811	6.811	0	SG MWD+IFR1+ MS XOM_R2OW
2000	0	0	2000	7.169	0	7.169	0	3.266	0	0	7.169	7.169	0	SG MWD+IFR1+ MS

Released to Imaging: 12/3/2024 10:52:56 AM	2100	0	0	2100	7.528	0	7.528	0	3.355	0	0	7.528	7.528	0	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
	2200	0	0	2200	7.886	0	7.886	0	3.448	0	0	7.886	7.886	0	SG MWD+IFR1+ MS XOM_R2OW
	2300	0	0	2300	8.245	0	8.245	0	3.544	0	0	8.245	8.245	0	SG MWD+IFR1+ MS XOM_R2OW
	2400	0	0	2400	8.603	0	8.603	0	3.643	0	0	8.603	8.603	0	SG MWD+IFR1+ MS XOM_R2OW
	2500	0	0	2500	8.962	0	8.962	0	3.745	0	0	8.962	8.962	0	SG MWD+IFR1+ MS XOM_R2OW
	2600	0	0	2600	9.32	0	9.32	0	3.849	0	0	9.32	9.32	0	SG MWD+IFR1+ MS XOM_R2OW
	2700	0	0	2700	9.679	0	9.679	0	3.956	0	0	9.679	9.679	0	SG MWD+IFR1+ MS XOM_R2OW
	2800	0	0	2800	10.037	0	10.037	0	4.066	0	0	10.037	10.037	0	SG MWD+IFR1+ MS XOM_R2OW
	2900	0	0	2900	10.396	0	10.396	0	4.179	0	0	10.396	10.396	0	SG MWD+IFR1+ MS XOM_R2OW
	3000	0	0	3000	10.754	0	10.754	0	4.295	0	0	10.754	10.754	0	SG MWD+IFR1+ MS XOM_R2OW
	3100	0	0	3100	11.113	0	11.113	0	4.413	0	0	11.113	11.113	0	SG MWD+IFR1+ MS XOM_R2OW
	3200	0	0	3200	11.471	0	11.471	0	4.534	0	0	11.471	11.471	90	SG MWD+IFR1+ MS XOM_R2OW
	3300	0	0	3300	11.829	0	11.829	0	4.657	0	0	11.829	11.829	0	SG MWD+IFR1+ MS

3400	0	0	3400	12.188	0	12.188	0	4.783	0	0	12.188	12.188	0	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
3500	0	0	3500	12.546	0	12.546	0	4.912	0	0	12.546	12.546	0	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
3600	0	351.105	3600	12.905	0	12.905	0	5.043	0	0	12.905	12.905	0	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
3700	2	9.342	3699.98	13.256	0	13.263	0	5.177	0	0	13.263	13.263	-0.836	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
3800	4	9.342	3799.838	13.593	0	13.621	0	5.312	0	0	13.621	13.621	-2.879	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
3900	6	9.342	3899.452	13.914	0	13.98	0	5.448	0	0	13.98	13.978	-0.082	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4000	8	9.342	3998.702	14.221	0	14.337	0	5.585	0	0	14.337	14.333	1.991	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4100	10	9.342	4097.465	14.511	0	14.695	0	5.724	0	0	14.695	14.687	3.346	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4154.888	11.098	9.342	4151.425	14.664	0	14.891	0	5.8	0	0	14.891	14.881	3.59	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4200	11.098	9.342	4195.693	14.824	0	15.052	0	5.865	0	0	15.052	15.039	4.127	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4300	11.098	9.342	4293.823	15.181	0	15.41	0	6.014	0	0	15.41	15.389	5.051	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4400	11.098	9.342	4391.954	15.538	0	15.768	0	6.167	0	0	15.769	15.741	5.439	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
4500	11.098	9.342	4490.084	15.897	0	16.128	0	6.323	0	0	16.128	16.094	5.64	XOM_R2OW SG MWD+IFR1+ MS

4600	11.098	9.342	4588.214	16.257	0	16.488	0	6.482	0	0	16.489	16.448	5.753	XOM_R2OW SG MWD+IFR1+ MS
4700	11.098	9.342	4686.344	16.618	0	16.849	0	6.643	0	0	16.85	16.803	5.818	XOM_R2OW SG MWD+IFR1+ MS
4800	11.098	9.342	4784.474	16.981	0	17.211	0	6.808	0	0	17.211	17.159	5.854	XOM_R2OW SG MWD+IFR1+ MS
4900	11.098	9.342	4882.604	17.344	0	17.574	0	6.976	0	0	17.574	17.516	5.87	XOM_R2OW SG MWD+IFR1+ MS
5000	11.098	9.342	4980.734	17.707	0	17.937	0	7.147	0	0	17.937	17.874	5.872	XOM_R2OW SG MWD+IFR1+ MS
5100	11.098	9.342	5078.864	18.072	0	18.3	0	7.321	0	0	18.3	18.232	5.865	XOM_R2OW SG MWD+IFR1+ MS
5200	11.098	9.342	5176.994	18.438	0	18.664	0	7.497	0	0	18.665	18.592	5.849	XOM_R2OW SG MWD+IFR1+ MS
5300	11.098	9.342	5275.124	18.804	0	19.029	0	7.677	0	0	19.029	18.952	5.828	XOM_R2OW SG MWD+IFR1+ MS
5400	11.098	9.342	5373.254	19.171	0	19.394	0	7.859	0	0	19.394	19.313	5.802	XOM_R2OW SG MWD+IFR1+ MS
5500	11.098	9.342	5471.384	19.538	0	19.759	0	8.044	0	0	19.76	19.675	5.771	XOM_R2OW SG MWD+IFR1+ MS
5600	11.098	9.342	5569.514	19.906	0	20.125	0	8.232	0	0	20.126	20.037	5.737	XOM_R2OW SG MWD+IFR1+ MS
5700	11.098	9.342	5667.644	20.275	0	20.492	0	8.423	0	0	20.492	20.4	5.699	XOM_R2OW SG MWD+IFR1+ MS
5800	11.098	9.342	5765.774	20.644	0	20.858	0	8.616	0	0	20.859	20.763	5.659	XOM_R2OW SG MWD+IFR1+ MS

5900	11.098	9.342	5863.904	21.014	0	21.226	0	8.812	0	0	21.226	21.127	5.616	XOM_R2OW SG MWD+IFR1+ MS
6000	11.098	9.342	5962.034	21.384	0	21.593	0	9.011	0	0	21.593	21.491	5.571	XOM_R2OW SG MWD+IFR1+ MS
6100	11.098	9.342	6060.164	21.755	0	21.961	0	9.213	0	0	21.961	21.856	5.524	XOM_R2OW SG MWD+IFR1+ MS
6200	11.098	9.342	6158.294	22.126	0	22.329	0	9.417	0	0	22.329	22.222	5.474	XOM_R2OW SG MWD+IFR1+ MS
6300	11.098	9.342	6256.424	22.498	0	22.697	0	9.624	0	0	22.698	22.588	5.422	XOM_R2OW SG MWD+IFR1+ MS
6400	11.098	9.342	6354.554	22.87	0	23.066	0	9.834	0	0	23.066	22.954	5.368	XOM_R2OW SG MWD+IFR1+ MS
6500	11.098	9.342	6452.684	23.242	0	23.435	0	10.047	0	0	23.435	23.321	5.312	XOM_R2OW SG MWD+IFR1+ MS
6600	11.098	9.342	6550.814	23.615	0	23.804	0	10.262	0	0	23.804	23.688	5.253	XOM_R2OW SG MWD+IFR1+ MS
6700	11.098	9.342	6648.944	23.988	0	24.173	0	10.48	0	0	24.174	24.055	5.193	XOM_R2OW SG MWD+IFR1+ MS
6800	11.098	9.342	6747.074	24.361	0	24.543	0	10.701	0	0	24.543	24.423	5.13	XOM_R2OW SG MWD+IFR1+ MS
6900	11.098	9.342	6845.204	24.735	0	24.912	0	10.924	0	0	24.913	24.792	5.066	XOM_R2OW SG MWD+IFR1+ MS
7000	11.098	9.342	6943.335	25.109	0	25.282	0	11.15	0	0	25.283	25.16	4.999	XOM_R2OW SG MWD+IFR1+ MS
7100	11.098	9.342	7041.465	25.483	0	25.653	0	11.379	0	0	25.653	25.529	4.93	XOM_R2OW SG MWD+IFR1+ MS

7200	11.098	9.342	7139.595	25.858	0	26.023	0	11.61	0	0	26.024	25.898	4.858	XOM_R2OW SG MWD+IFR1+ MS
7300	11.098	9.342	7237.725	26.233	0	26.394	0	11.844	0	0	26.395	26.268	4.784	XOM_R2OW SG MWD+IFR1+ MS
7400	11.098	9.342	7335.855	26.608	0	26.765	0	12.081	0	0	26.765	26.638	4.707	XOM_R2OW SG MWD+IFR1+ MS
7500	11.098	9.342	7433.985	26.983	0	27.135	0	12.32	0	0	27.136	27.008	4.628	XOM_R2OW SG MWD+IFR1+ MS
7600	11.098	9.342	7532.115	27.359	0	27.507	0	12.562	0	0	27.507	27.378	4.546	XOM_R2OW SG MWD+IFR1+ MS
7700	11.098	9.342	7630.245	27.735	0	27.878	0	12.807	0	0	27.879	27.749	4.461	XOM_R2OW SG MWD+IFR1+ MS
7800	11.098	9.342	7728.375	28.111	0	28.249	0	13.055	0	0	28.25	28.12	4.373	XOM_R2OW SG MWD+IFR1+ MS
7900	11.098	9.342	7826.505	28.487	0	28.621	0	13.305	0	0	28.622	28.491	4.282	XOM_R2OW SG MWD+IFR1+ MS
8000	11.098	9.342	7924.635	28.863	0	28.993	0	13.558	0	0	28.994	28.863	4.188	XOM_R2OW SG MWD+IFR1+ MS
8100	11.098	9.342	8022.765	29.24	0	29.364	0	13.813	0	0	29.365	29.234	4.09	XOM_R2OW SG MWD+IFR1+ MS
8200	11.098	9.342	8120.895	29.616	0	29.736	0	14.072	0	0	29.737	29.606	3.989	XOM_R2OW SG MWD+IFR1+ MS
8300	11.098	9.342	8219.025	29.993	0	30.108	0	14.333	0	0	30.11	29.979	3.883	XOM_R2OW SG MWD+IFR1+ MS
8400	11.098	9.342	8317.155	30.37	0	30.481	0	14.596	0	0	30.482	30.351	3.774	XOM_R2OW SG MWD+IFR1+ MS

8500	11.098	9.342	8415.285	30.748	0	30.853	0	14.863	0	0	30.854	30.724	3.66	XOM_R2OW SG MWD+IFR1+ MS
8600	11.098	9.342	8513.415	31.125	0	31.225	0	15.132	0	0	31.227	31.097	3.541	XOM_R2OW SG MWD+IFR1+ MS
8700	11.098	9.342	8611.545	31.503	0	31.598	0	15.404	0	0	31.599	31.47	3.418	XOM_R2OW SG MWD+IFR1+ MS
8800	11.098	9.342	8709.675	31.88	0	31.971	0	15.678	0	0	31.972	31.843	3.289	XOM_R2OW SG MWD+IFR1+ MS
8900	11.098	9.342	8807.805	32.258	0	32.343	0	15.955	0	0	32.345	32.216	3.155	XOM_R2OW SG MWD+IFR1+ MS
9000	11.098	9.342	8905.935	32.636	0	32.716	0	16.235	0	0	32.718	32.59	3.015	XOM_R2OW SG MWD+IFR1+ MS
9100	11.098	9.342	9004.065	33.014	0	33.089	0	16.518	0	0	33.091	32.964	2.868	XOM_R2OW SG MWD+IFR1+ MS
9200	11.098	9.342	9102.195	33.393	0	33.462	0	16.803	0	0	33.464	33.338	2.715	XOM_R2OW SG MWD+IFR1+ MS
9306.638	11.098	9.342	9206.841	33.796	0	33.86	0	17.111	0	0	33.862	33.737	2.544	XOM_R2OW SG MWD+IFR1+ MS
9400	15.548	46.048	9297.823	33.81	0	34.146	0	17.378	0	0	34.206	34.082	1.858	XOM_R2OW SG MWD+IFR1+ MS
9500	23.659	63.92	9392.03	33.063	0	34.462	0	17.655	0	0	34.558	34.437	0.783	XOM_R2OW SG MWD+IFR1+ MS
9600	32.789	72.657	9480.085	31.582	0	34.78	0	17.916	0	0	34.878	34.769	0.606	XOM_R2OW SG MWD+IFR1+ MS
9700	42.282	77.855	9559.311	29.491	0	35.078	0	18.157	0	0	35.153	35.072	3.604	XOM_R2OW SG MWD+IFR1+ MS

9800	51.936	81.428	9627.303	26.963	0	35.349	0	18.381	0	0	35.382	35.337	22.827	XOM_R2OW SG MWD+IFR1+ MS
9900	61.674	84.158	9681.993	24.255	0	35.588	0	18.593	0	0	35.603	35.519	58.906	XOM_R2OW SG MWD+IFR1+ MS
10000	71.456	86.425	9721.721	21.731	0	35.791	0	18.8	0	0	35.814	35.621	66.598	XOM_R2OW SG MWD+IFR1+ MS
10100	81.262	88.444	9745.278	19.874	0	35.957	0	19.008	0	0	35.997	35.664	67.927	XOM_R2OW SG MWD+IFR1+ MS
10181.13	89.226	89.999	9752	19.211	0	36.06	0	19.179	0	0	36.127	35.665	67.58	XOM_R2OW SG MWD+IFR1+ MS
10200	89.226	89.999	9752.255	19.251	0	36.083	0	19.219	0	0	36.155	35.662	67.38	XOM_R2OW SG MWD+IFR1+ MS
10300	89.226	89.999	9753.606	19.484	0	36.216	0	19.453	0	0	36.312	35.649	67.485	XOM_R2OW SG MWD+IFR1+ MS
10400	89.226	89.999	9754.956	19.746	0	36.367	0	19.715	0	0	36.485	35.638	67.964	XOM_R2OW SG MWD+IFR1+ MS
10500	89.226	89.999	9756.307	20.034	0	36.535	0	20.004	0	0	36.672	35.631	68.602	XOM_R2OW SG MWD+IFR1+ MS
10600	89.226	89.999	9757.658	20.349	0	36.721	0	20.32	0	0	36.875	35.628	69.304	XOM_R2OW SG MWD+IFR1+ MS
10700	89.226	89.999	9759.008	20.689	0	36.924	0	20.66	0	0	37.093	35.626	70.023	XOM_R2OW SG MWD+IFR1+ MS
10800	89.226	89.999	9760.359	21.053	0	37.144	0	21.025	0	0	37.325	35.628	70.736	XOM_R2OW SG MWD+IFR1+ MS
10900	89.226	89.999	9761.71	21.439	0	37.381	0	21.412	0	0	37.573	35.632	71.428	XOM_R2OW SG MWD+IFR1+ MS

11000	89.226	89.999	9763.06	21.846	0	37.633	0	21.82	0	0	37.835	35.638	72.095	XOM_R2OW SG MWD+IFR1+ MS
11100	89.226	89.999	9764.411	22.274	0	37.902	0	22.248	0	0	38.113	35.646	72.732	XOM_R2OW SG MWD+IFR1+ MS
11200	89.226	89.999	9765.762	22.721	0	38.186	0	22.696	0	0	38.404	35.656	73.337	XOM_R2OW SG MWD+IFR1+ MS
11300	89.226	89.999	9767.112	23.186	0	38.485	0	23.162	0	0	38.71	35.668	73.912	XOM_R2OW SG MWD+IFR1+ MS
11400	89.226	89.999	9768.463	23.667	0	38.799	0	23.644	0	0	39.03	35.682	74.456	XOM_R2OW SG MWD+IFR1+ MS
11500	89.226	89.999	9769.814	24.165	0	39.127	0	24.142	0	0	39.363	35.698	74.972	XOM_R2OW SG MWD+IFR1+ MS
11600	89.226	89.999	9771.164	24.677	0	39.47	0	24.655	0	0	39.71	35.715	75.459	XOM_R2OW SG MWD+IFR1+ MS
11700	89.226	89.999	9772.515	25.204	0	39.827	0	25.182	0	0	40.07	35.733	75.921	XOM_R2OW SG MWD+IFR1+ MS
11800	89.226	89.999	9773.866	25.744	0	40.196	0	25.723	0	0	40.443	35.753	76.358	XOM_R2OW SG MWD+IFR1+ MS
11900	89.226	89.999	9775.216	26.296	0	40.579	0	26.275	0	0	40.828	35.775	76.772	XOM_R2OW SG MWD+IFR1+ MS
12000	89.226	89.999	9776.567	26.859	0	40.975	0	26.84	0	0	41.226	35.798	77.164	XOM_R2OW SG MWD+IFR1+ MS
12100	89.226	89.999	9777.918	27.434	0	41.383	0	27.415	0	0	41.635	35.822	77.535	XOM_R2OW SG MWD+IFR1+ MS
12200	89.226	89.999	9779.268	28.018	0	41.802	0	28	0	0	42.056	35.847	77.888	XOM_R2OW SG MWD+IFR1+ MS

12300	89.226	89.999	9780.619	28.612	0	42.234	0	28.595	0	0	42.489	35.874	78.223	XOM_R2OW SG MWD+IFR1+ MS
12400	89.226	89.999	9781.97	29.216	0	42.676	0	29.198	0	0	42.932	35.902	78.542	XOM_R2OW SG MWD+IFR1+ MS
12500	89.226	89.999	9783.32	29.827	0	43.13	0	29.81	0	0	43.386	35.931	78.844	XOM_R2OW SG MWD+IFR1+ MS
12600	89.226	89.999	9784.671	30.447	0	43.594	0	30.431	0	0	43.85	35.961	79.133	XOM_R2OW SG MWD+IFR1+ MS
12700	89.226	89.999	9786.022	31.074	0	44.068	0	31.058	0	0	44.324	35.993	79.408	XOM_R2OW SG MWD+IFR1+ MS
12800	89.226	89.999	9787.372	31.708	0	44.552	0	31.693	0	0	44.808	36.026	79.67	XOM_R2OW SG MWD+IFR1+ MS
12900	89.226	89.999	9788.723	32.349	0	45.046	0	32.334	0	0	45.301	36.059	79.92	XOM_R2OW SG MWD+IFR1+ MS
13000	89.226	89.999	9790.074	32.996	0	45.549	0	32.981	0	0	45.803	36.094	80.159	XOM_R2OW SG MWD+IFR1+ MS
13100	89.226	89.999	9791.424	33.649	0	46.061	0	33.634	0	0	46.314	36.13	80.387	XOM_R2OW SG MWD+IFR1+ MS
13200	89.226	89.999	9792.775	34.307	0	46.581	0	34.293	0	0	46.834	36.167	80.606	XOM_R2OW SG MWD+IFR1+ MS
13300	89.226	89.999	9794.126	34.97	0	47.11	0	34.957	0	0	47.362	36.206	80.815	XOM_R2OW SG MWD+IFR1+ MS
13400	89.226	89.999	9795.476	35.639	0	47.648	0	35.626	0	0	47.898	36.245	81.016	XOM_R2OW SG MWD+IFR1+ MS
13500	89.226	89.999	9796.827	36.312	0	48.192	0	36.299	0	0	48.441	36.285	81.208	XOM_R2OW SG MWD+IFR1+ MS

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	13700	89.226	89.999	9799.528	37.671	0	49.305	0	37.659	0	0	49.551	36.369	81.57	XOM_R2OW SG MWD+IFR1+ MS
	13800	89.226	89.999	9800.879	38.357	0	49.871	0	38.345	0	0	50.116	36.412	81.74	XOM_R2OW SG MWD+IFR1+ MS
	13900	89.226	89.999	9802.23	39.046	0	50.445	0	39.034	0	0	50.688	36.457	81.904	XOM_R2OW SG MWD+IFR1+ MS
	14000	89.226	89.999	9803.58	39.739	0	51.025	0	39.728	0	0	51.267	36.502	82.062	XOM_R2OW SG MWD+IFR1+ MS
	14100	89.226	89.999	9804.931	40.435	0	51.612	0	40.424	0	0	51.852	36.549	82.214	XOM_R2OW SG MWD+IFR1+ MS
	14200	89.226	89.999	9806.282	41.135	0	52.205	0	41.124	0	0	52.443	36.596	82.36	XOM_R2OW SG MWD+IFR1+ MS
	14300	89.226	89.999	9807.632	41.837	0	52.804	0	41.827	0	0	53.04	36.645	82.501	XOM_R2OW SG MWD+IFR1+ MS
	14400	89.226	89.999	9808.983	42.543	0	53.408	0	42.532	0	0	53.643	36.694	82.638	XOM_R2OW SG MWD+IFR1+ MS
	14500	89.226	89.999	9810.334	43.251	0	54.018	0	43.24	0	0	54.251	36.745	82.769	XOM_R2OW SG MWD+IFR1+ MS
	14600	89.226	89.999	9811.684	43.961	0	54.633	0	43.951	0	0	54.865	36.796	82.896	XOM_R2OW SG MWD+IFR1+ MS
	14700	89.226	89.999	9813.035	44.674	0	55.254	0	44.665	0	0	55.484	36.848	83.019	XOM_R2OW SG MWD+IFR1+ MS
	14800	89.226	89.999	9814.386	45.39	0	55.88	0	45.38	0	0	56.107	36.902	83.137	XOM_R2OW SG MWD+IFR1+ MS

Released to Imaging: 12/3/2024 10:52:56 AM	14900	89.226	89.999	9815.736	46.108	0	56.51	0	46.098	0	0	56.736	36.956	83.252	XOM_R2OW SG MWD+IFR1+ MS
	15000	89.226	89.999	9817.087	46.828	0	57.145	0	46.818	0	0	57.369	37.011	83.363	XOM_R2OW SG MWD+IFR1+ MS
	15100	89.226	89.999	9818.438	47.55	0	57.785	0	47.54	0	0	58.007	37.067	83.47	XOM_R2OW SG MWD+IFR1+ MS
	15200	89.226	89.999	9819.788	48.274	0	58.429	0	48.265	0	0	58.65	37.124	83.575	XOM_R2OW SG MWD+IFR1+ MS
	15300	89.226	89.999	9821.139	48.999	0	59.077	0	48.991	0	0	59.296	37.182	83.676	XOM_R2OW SG MWD+IFR1+ MS
	15400	89.226	89.999	9822.49	49.727	0	59.73	0	49.718	0	0	59.947	37.241	83.773	XOM_R2OW SG MWD+IFR1+ MS
	15500	89.226	89.999	9823.84	50.456	0	60.386	0	50.448	0	0	60.601	37.301	83.868	XOM_R2OW SG MWD+IFR1+ MS
	15600	89.226	89.999	9825.191	51.187	0	61.047	0	51.179	0	0	61.26	37.362	83.961	XOM_R2OW SG MWD+IFR1+ MS
	15700	89.226	89.999	9826.542	51.92	0	61.71	0	51.911	0	0	61.922	37.423	84.05	XOM_R2OW SG MWD+IFR1+ MS
	15800	89.226	89.999	9827.892	52.654	0	62.378	0	52.646	0	0	62.588	37.486	84.137	XOM_R2OW SG MWD+IFR1+ MS
	15900	89.226	89.999	9829.243	53.389	0	63.049	0	53.381	0	0	63.257	37.549	84.221	XOM_R2OW SG MWD+IFR1+ MS
	16000	89.226	89.999	9830.594	54.126	0	63.724	0	54.118	0	0	63.93	37.613	84.303	XOM_R2OW SG MWD+IFR1+ MS
	16100	89.226	89.999	9831.944	54.864	0	64.401	0	54.856	0	0	64.606	37.679	84.383	XOM_R2OW SG MWD+IFR1+ MS

16200	89.226	89.999	9833.295	55.604	0	65.082	0	55.596	0	0	65.285	37.745	84.461	XOM_R2OW SG MWD+IFR1+ MS
16300	89.226	89.999	9834.646	56.344	0	65.766	0	56.337	0	0	65.967	37.811	84.536	XOM_R2OW SG MWD+IFR1+ MS
16400	89.226	89.999	9835.996	57.086	0	66.453	0	57.079	0	0	66.652	37.879	84.61	XOM_R2OW SG MWD+IFR1+ MS
16500	89.226	89.999	9837.347	57.829	0	67.143	0	57.822	0	0	67.34	37.948	84.682	XOM_R2OW SG MWD+IFR1+ MS
16600	89.226	89.999	9838.698	58.573	0	67.835	0	58.566	0	0	68.031	38.017	84.751	XOM_R2OW SG MWD+IFR1+ MS
16700	89.226	89.999	9840.048	59.318	0	68.531	0	59.311	0	0	68.725	38.088	84.819	XOM_R2OW SG MWD+IFR1+ MS
16800	89.226	89.999	9841.399	60.064	0	69.229	0	60.057	0	0	69.421	38.159	84.886	XOM_R2OW SG MWD+IFR1+ MS
16900	89.226	89.999	9842.75	60.811	0	69.929	0	60.805	0	0	70.12	38.231	84.95	XOM_R2OW SG MWD+IFR1+ MS
17000	89.226	89.999	9844.1	61.56	0	70.632	0	61.553	0	0	70.822	38.304	85.013	XOM_R2OW SG MWD+IFR1+ MS
17100	89.226	89.999	9845.451	62.308	0	71.338	0	62.302	0	0	71.525	38.378	85.075	XOM_R2OW SG MWD+IFR1+ MS
17200	89.226	89.999	9846.802	63.058	0	72.045	0	63.052	0	0	72.232	38.452	85.135	XOM_R2OW SG MWD+IFR1+ MS
17300	89.226	89.999	9848.152	63.809	0	72.755	0	63.802	0	0	72.94	38.528	85.193	XOM_R2OW SG MWD+IFR1+ MS
17400	89.226	89.999	9849.503	64.56	0	73.467	0	64.554	0	0	73.651	38.604	85.25	XOM_R2OW SG MWD+IFR1+ MS

17500	89.226	89.999	9850.854	65.313	0	74.182	0	65.306	0	0	74.364	38.681	85.306	XOM_R2OW SG MWD+IFR1+ MS
17600	89.226	89.999	9852.204	66.066	0	74.898	0	66.059	0	0	75.078	38.759	85.361	XOM_R2OW SG MWD+IFR1+ MS
17700	89.226	89.999	9853.555	66.819	0	75.617	0	66.813	0	0	75.795	38.837	85.414	XOM_R2OW SG MWD+IFR1+ MS
17800	89.226	89.999	9854.906	67.574	0	76.337	0	67.567	0	0	76.514	38.917	85.466	XOM_R2OW SG MWD+IFR1+ MS
17900	89.226	89.999	9856.256	68.329	0	77.059	0	68.323	0	0	77.235	38.997	85.517	XOM_R2OW SG MWD+IFR1+ MS
18000	89.226	89.999	9857.607	69.085	0	77.783	0	69.078	0	0	77.958	39.078	85.567	XOM_R2OW SG MWD+IFR1+ MS
18100	89.226	89.999	9858.958	69.841	0	78.509	0	69.835	0	0	78.682	39.16	85.616	XOM_R2OW SG MWD+IFR1+ MS
18200	89.226	89.999	9860.308	70.598	0	79.237	0	70.592	0	0	79.408	39.242	85.664	XOM_R2OW SG MWD+IFR1+ MS
18300	89.226	89.999	9861.659	71.356	0	79.966	0	71.35	0	0	80.136	39.326	85.71	XOM_R2OW SG MWD+IFR1+ MS
18400	89.226	89.999	9863.01	72.114	0	80.697	0	72.108	0	0	80.866	39.41	85.756	XOM_R2OW SG MWD+IFR1+ MS
18473.65	89.226	89.999	9864	72.673	0	81.236	0	72.667	0	0	81.404	39.472	85.789	XOM_R2OW SG MWD+IFR1+ MS

Target Name	Measured Depth	Grid Northing	Grid Easting	TVD MSL	Target Shape
	(ft)	(ft)	(ft)	(ft)	
FT 2	10181.07	491775.8	653894.8	6413	RECTANGLE
Bl 2	18473.65	491775.88	662186.56	6525	RECTANGLE



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<h1 style="text-align: center;">CACTUS WELLHEAD LLC</h1>	<h2 style="text-align: center;">XTO ENERGY INC POKER LAKE, NM</h2>		
<p>30" x 11-3/4" x 7-5/8" x 5-1/2" MBU-3T-SF SOW Wellhead System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And 7-5/8" & 5-1/2" Fluted Mandrel Casing Hangers</p>	DRAWN	DLE	09DEC19
	APPRV		
	<p>DRAWING NO. ODE0003261</p>		

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating
WELL NAME & NO.:	James Ranch Unit DI 8 Eagle 702H
LOCATION:	Sec 36-22S-30E-NMP
COUNTY:	Eddy County, NM

Updated COAs per Sundry 2667190 approved through engineering on 05/10/2022.

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input type="radio"/> Low	<input checked="" type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Salado** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

1. The **13-3/8** inch surface casing shall be set at approximately **525** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface. *Adjustment due to BLM geologist and protecting usable water zone.*
 - 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 **24 hours in the Potash Area** 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 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.
 - ❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
 - ❖ In R111 Potash Areas if cement does not circulate to surface on the first two salt protection casing strings, the cement on the 3rd casing string must come to surface.
3. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

 - a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
 - b. Second stage above DV tool:
 - Cement should tie back at least **500 feet** into the previous casing string. Operator should provide method of verification. 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.
4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. 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 OOGO2.III.A.2.i 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.

GENERAL REQUIREMENTS

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

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

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

☒ Lea County

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

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

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

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing 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-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as

possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except

the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

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.

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 276726

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 276726
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Prior to the submission of this C-104, there was a C-103 NOI submitted for approval. The C-103 NOI was not approved or rejected; however, the work requested in the C-103 NOI was performed and completed without NMOCD approval. This action is currently under review from our legal department.	12/3/2024