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.

SUBMIT IN TRIPLICATE *- Other instructions on page 2*

5. Lease Serial No. NMNM002953C

6. If Indian, Allottee or Tribe Name

7. If Unit of CA/Agreement, Name and/or No. JAMES RANCH/NMNM070965X

1. Type of Well
☑ Oil Well ☐ Gas Well ☐ 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 7970

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			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☑ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

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

**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/2435FSL & 1807FWL to 2438FSL & 1593FWL
Well Stays in the Same Quarter-Quarter as Permitted
Total SHL Move: 3 North & 214FWL
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 OFICE USE

Approved by CHRISTOPHER WALLS / Ph: (575) 234-2234 / Approved

Title Petroleum Engineer

Date 05/11/2022

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 ofthis form to U.S. Department ofthe Interior, Bureau ofLand 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/1635FSL & 50FEL to 1320FSL & 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 / 1807 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.348023 / LONG: -103.837077 (TVD: 0 feet, MD: 0 feet)

PPP: NWSW / 1429 FSL / 2300 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.345253 / LONG: -103.83549 (TVD: 11045 feet, MD: 11500 feet)

BHL: NESE / 1635 FNL / 50 FEL / TWSP: 22S / RANGE: 31E / SECTION: 31 / LAT: 32.345245 / LONG: -103.808623 (TVD: 11194 feet, MD: 19716 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	[2] Pool Code	[3] Pool Name
30-015-49446	40295	Los Medanos; Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
	JAMES RANCH UNIT DI 8 EAGLE	704H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	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	1,593	WEST	EDDY

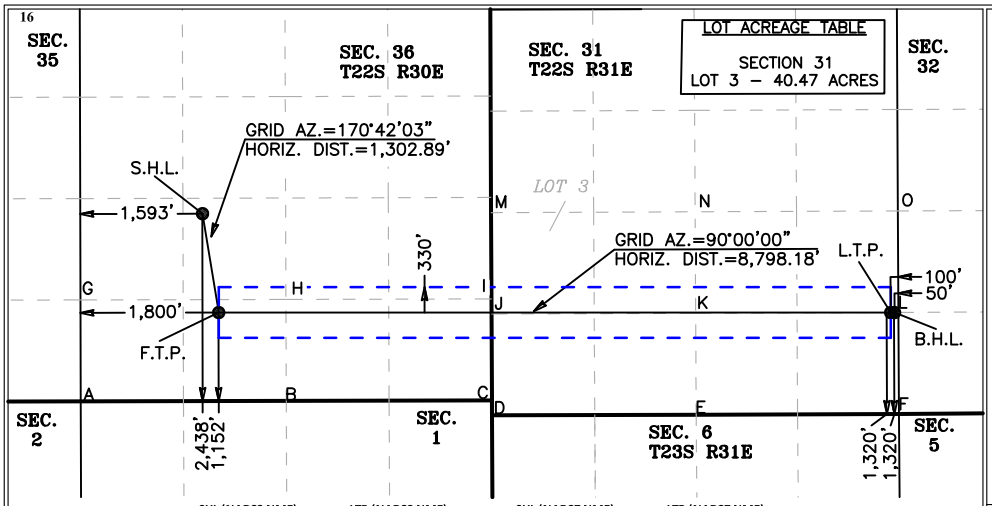
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	31	22S	31E		1,320	SOUTH	50	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
560.47			

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.

[16]



SHL (NAD83 NME)	LTP (NAD83 NME)	SHL (NAD27 NME)	LTP (NAD27 NME)
Y = 490,700.0	Y = 489,414.2	Y = 490,639.7	Y = 489,354.0
X = 694,372.8	X = 703,331.5	X = 653,190.8	X = 662,149.4
LAT. = 32.348032 °N	LAT. = 32.344380 °N	LAT. = 32.347909 °N	LAT. = 32.344257 °N
LONG. = 103.837774 °W	LONG. = 103.808785 °W	LONG. = 103.837281 °W	LONG. = 103.808294 °W
FTP (NAD83 NME)	**BHL (NAD83 NME)**	**FTP (NAD27 NME)**	**BHL (NAD27 NME)**
Y = 489,414.2	Y = 489,414.2	Y = 489,354.0	Y = 489,354.0
X = 694,583.4	X = 703,381.5	X = 653,401.3	X = 662,199.4
LAT. = 32.344495 °N	LAT. = 32.344380 °N	LAT. = 32.344372 °N	LAT. = 32.344257 °N
LONG. = 103.837111 °W	LONG. = 103.808623 °W	LONG. = 103.836619 °W	LONG. = 103.808132 °W

CORNER COORDINATES (NAD83 NME)			CORNER COORDINATES (NAD27 NME)		
A - Y = 488,258.8 N	X = 692,786.1 E		A - Y = 488,198.6 N	X = 651,604.0 E	
B - Y = 488,264.2 N	X = 695,462.6 E		B - Y = 488,204.0 N	X = 654,280.5 E	
C - Y = 488,270.4 N	X = 698,140.1 E		C - Y = 488,210.1 N	X = 656,958.0 E	
D - Y = 488,077.9 N	X = 698,141.0 E		D - Y = 488,017.7 N	X = 656,958.9 E	
E - Y = 488,082.7 N	X = 700,798.9 E		E - Y = 488,022.6 N	X = 659,616.8 E	
F - Y = 488,094.5 N	X = 703,438.4 E		F - Y = 488,034.3 N	X = 662,256.3 E	
G - Y = 489,577.8 N	X = 692,783.0 E		G - Y = 489,517.5 N	X = 651,601.0 E	
H - Y = 489,584.3 N	X = 695,458.2 E		H - Y = 489,524.1 N	X = 654,276.1 E	
I - Y = 489,591.2 N	X = 698,133.8 E		I - Y = 489,531.0 N	X = 656,951.8 E	
J - Y = 489,395.9 N	X = 698,134.8 E		J - Y = 489,335.6 N	X = 656,952.7 E	
K - Y = 489,403.9 N	X = 700,792.0 E		K - Y = 489,343.7 N	X = 659,609.9 E	
L - Y = 489,415.3 N	X = 703,431.5 E		L - Y = 489,355.2 N	X = 662,249.4 E	
M - Y = 490,713.9 N	X = 698,128.5 E		M - Y = 490,653.6 N	X = 656,946.5 E	
N - Y = 490,725.1 N	X = 700,785.2 E		N - Y = 490,664.8 N	X = 659,603.1 E	
O - Y = 490,736.2 N	X = 703,424.6 E		O - Y = 490,676.0 N	X = 662,242.6 E	

[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

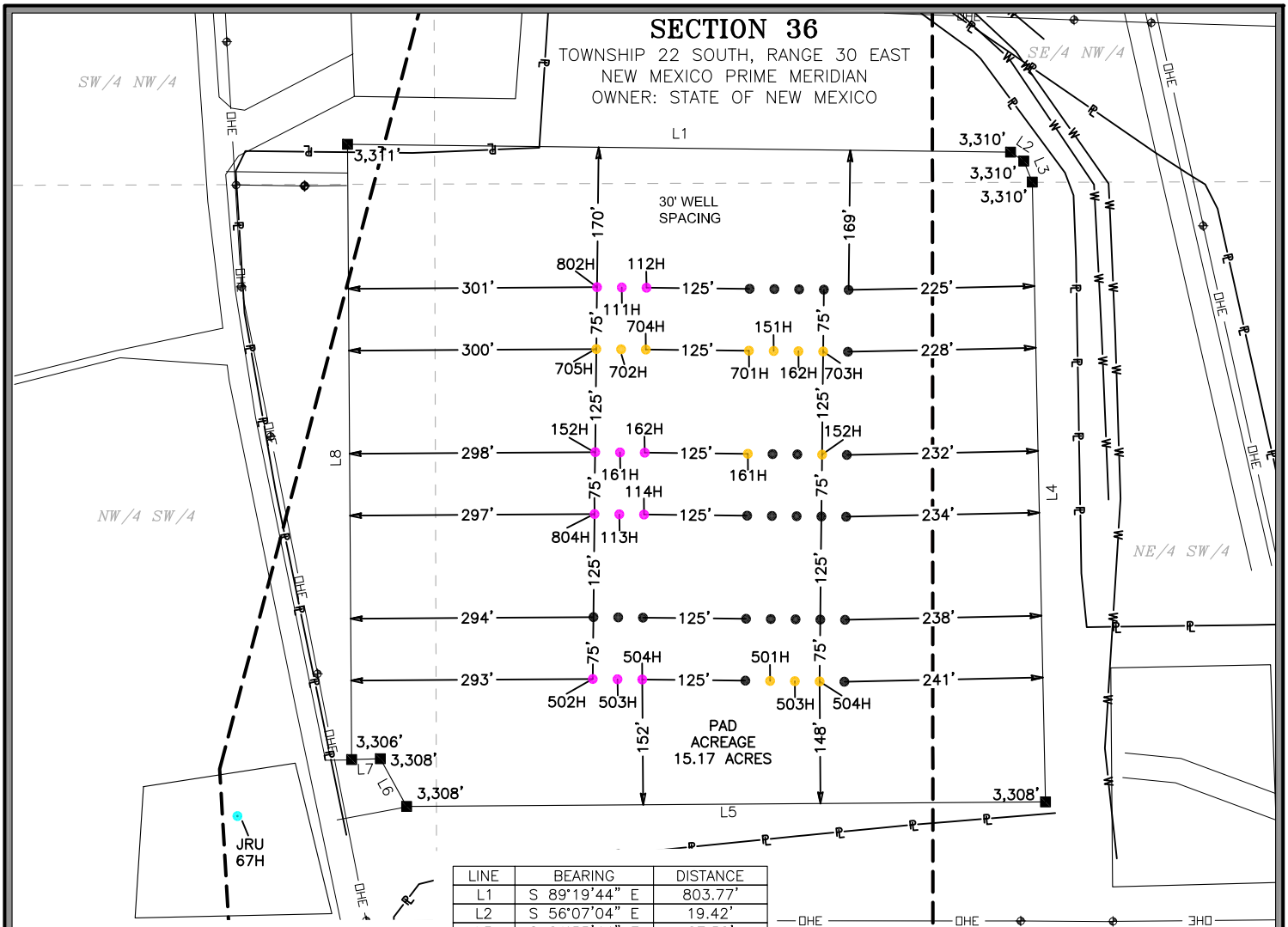
[18] SURVEYOR CERTIFICATION

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

Signatue and Seal of Professional Surveyor:

MARK DILLON HARP 23786
Certificate Number AW 2019072370



LINE	BEARING	DISTANCE
L1	S 89°19'44" E	803.77'
L2	S 56°07'04" E	19.42'
L3	S 21°55'44" E	27.52'
L4	S 01°13'08" E	751.68'
L5	S 89°35'33" W	774.47'
L6	N 28°49'40" W	66.16'
L7	S 88°22'21" W	34.82'
L8	N 00°22'49" W	745.83'

NOTE:

1). SEE "TOPOGRAPHICAL AND ACCESS ROAD MAP" FOR PROPOSED ROAD LOCATION

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF JAL HIGHWAY (STATE HIGHWAY 128) AND WHIPP RD. GO NORTH ON WHIPP RD. APPROX. 0.8 MILES . TURN LEFT (NORTHWEST) ON LEASE ROAD AND GO APPROX. 0.4 MILES. TURN LEFT (SOUTH) ON LEASE ROAD AND GO APPROX 0.1 MILES. TURN RIGHT (WEST) AND GO APPROX. 0.2 MILES. TURN RIGHT (NORTH), DRIVE APPROX 0.8 MILES TO EXISTING PAD, THE PROPOSED LOCATION IS TO THE NORTHEAST.

I, MARK DILLON HARP, NEW MEXICO PROFESSIONAL SURVEYOR NO. 23786, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO, AND THAT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT

MARK DILLON HARP
REGISTERED PROFESSIONAL LAND SURVEYOR
STATE OF NEW MEICO NO. 23786

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

XTO PERMIAN OPERATING, LLC.

PAD LAYOUT

JAMES RANCH UNIT DI 8 MIDDLE PAD
LOCATED 1,651 FEET FROM THE WEST LINE AND 2,285 FEET FROM THE SOUTH LINE OF SECTION 36, TOWNSHIP 22 SOUTH, RANGE 30 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	4-13-2022	PROJECT NO:	2018040969
DRAWN BY:	LM	SCALE:	1" = 200'
CHECKED BY:	AI	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	0

C:\PROJECTS\2018\2018040969 XTO JAMES_RANCH_UNIT_DI_8_MIDDLE_BODY\DWG\EXHIBITS\OVERALL_PAD_LAYOUTS\2018040969-XTO-JAMES_RANCH_UNIT_DI_8_MIDDLE_PAD_LAYOUT_4-13-2022.dwg, Letter

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

XTO Energy Inc.
James Ranch Unit DI 8 Eagle 704H
Projected TD: 18413' MD / 9864' TVD
SHL: 2438' FSL & 1593' FWL , Section 36, T22S, R30E
BHL: 1320' FSL & 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 9148' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 18413 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 8648 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	1.90	2.29	4.27
8.75	0' – 3789'	3789'	7.625	29.7	RY P-110	Flush Joint	New	3.20	3.16	2.05
8.75	3789' – 9148'	9023'	7.625	29.7	HC L-80	Flush Joint	New	2.32	3.96	2.55
6.75	0' – 9048'	8926'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.36	2.45
6.75	9048' - 18413'	9864'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.16	6.19

· Production casing meets the clearance requiremenets 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 +/- 9148'
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: 250 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 +/- 18413'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 8648 feet
Tail: 650 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 9348 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 nippling up on the 13.375, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling 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 9148'	8.75	BDE/OBM or FW/Brine	8.6-9.1	30-32	NC
9148' to 18413'	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. A Kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times.
C. H2S monitors will be on location when drilling below the 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 704H

Measured Depth:	18413.23 ft
TVD RKB:	9864.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	490640.15 ft
Easting:	653190.02 ft
RKB:	3339.00 ft
Ground Level:	3309.00 ft
North Reference:	Grid
Convergence Angle:	0.27 Deg
Site:	JRU DI-8
Slot:	SLOT 5

Plan Sections JRU DI 8 EAGLE 704H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0	0	191.5	0	0	0	0	0	0	
3600	0	191.5	3600	0	0	0	0	0	
4235.48	12.71	168.12	4230.28	-68.69	14.45	2	0	2	

9348.02	12.71	168.12	9217.55	-1169.41	245.96	0	0	0	
10214.41	89.22	90	9752	-1285.75	810.68	8.83	-9.02	10	FTP 7
18413.23	89.22	90	9864	-1285.97	9008.73	0	0	0	BHL 7

Position Uncertainty JRU DI 8
EAGLE 704H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Highside Bias (ft)	Lateral Error (ft)	Lateral Bias (ft)	Vertical Error (ft)	Vertical Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0	0	191.505	0	0	0	0	0	2.297	0	0	0	0	0	XOM_R2OWSG MWD+IFR1+MS
100	0	0	100	0.349	0	0.349	0	2.299	0	0	0.349	0.349	0	XOM_R2OWSG MWD+IFR1+MS
200	0	0	200	0.703	0	0.703	0	2.307	0	0	0.703	0.703	0	XOM_R2OWSG MWD+IFR1+MS
300	0	0	300	1.06	0	1.06	0	2.321	0	0	1.06	1.06	0	XOM_R2OWSG MWD+IFR1+MS
400	0	0	400	1.418	0	1.418	0	2.34	0	0	1.418	1.418	0	XOM_R2OWSG MWD+IFR1+MS
500	0	0	500	1.776	0	1.776	0	2.364	0	0	1.776	1.776	0	XOM_R2OWSG MWD+IFR1+MS
600	0	0	600	2.134	0	2.134	0	2.394	0	0	2.134	2.134	0	XOM_R2OWSG MWD+IFR1+MS
700	0	0	700	2.492	0	2.492	0	2.428	0	0	2.492	2.492	0	XOM_R2OWSG MWD+IFR1+MS

800	0	0	800	2.85	0	2.85	0	2.467	0	0	2.85	2.85	0	XOM_R2OW SG MWD+IFR1+ MS
900	0	0	900	3.209	0	3.209	0	2.511	0	0	3.209	3.209	0	XOM_R2OW SG MWD+IFR1+ MS
1000	0	0	1000	3.567	0	3.567	0	2.56	0	0	3.567	3.567	0	XOM_R2OW SG MWD+IFR1+ MS
1100	0	0	1100	3.926	0	3.926	0	2.613	0	0	3.926	3.926	0	XOM_R2OW SG MWD+IFR1+ MS
1200	0	0	1200	4.284	0	4.284	0	2.67	0	0	4.284	4.284	0	XOM_R2OW SG MWD+IFR1+ MS
1300	0	0	1300	4.642	0	4.642	0	2.731	0	0	4.642	4.642	0	XOM_R2OW SG MWD+IFR1+ MS
1400	0	0	1400	5.001	0	5.001	0	2.797	0	0	5.001	5.001	0	XOM_R2OW SG MWD+IFR1+ MS
1500	0	0	1500	5.359	0	5.359	0	2.866	0	0	5.359	5.359	0	XOM_R2OW SG MWD+IFR1+ MS
1600	0	0	1600	5.718	0	5.718	0	2.939	0	0	5.718	5.718	0	XOM_R2OW SG MWD+IFR1+ MS
1700	0	0	1700	6.076	0	6.076	0	3.016	0	0	6.076	6.076	0	XOM_R2OW SG MWD+IFR1+ MS
1800	0	0	1800	6.435	0	6.435	0	3.096	0	0	6.435	6.435	0	XOM_R2OW SG MWD+IFR1+ MS
1900	0	0	1900	6.793	0	6.793	0	3.179	0	0	6.793	6.793	0	XOM_R2OW SG MWD+IFR1+ MS
2000	0	0	2000	7.151	0	7.151	0	3.266	0	0	7.151	7.151	0	XOM_R2OW SG MWD+IFR1+ MS

2100	0	0	2100	7.51	0	7.51	0	3.355	0	0	7.51	7.51	0	XOM_R2OW SG MWD+IFR1+ MS
2200	0	0	2200	7.868	0	7.868	0	3.448	0	0	7.868	7.868	0	XOM_R2OW SG MWD+IFR1+ MS
2300	0	0	2300	8.227	0	8.227	0	3.544	0	0	8.227	8.227	0	XOM_R2OW SG MWD+IFR1+ MS
2400	0	0	2400	8.585	0	8.585	0	3.643	0	0	8.585	8.585	0	XOM_R2OW SG MWD+IFR1+ MS
2500	0	0	2500	8.944	0	8.944	0	3.745	0	0	8.944	8.944	0	XOM_R2OW SG MWD+IFR1+ MS
2600	0	0	2600	9.302	0	9.302	0	3.849	0	0	9.302	9.302	0	XOM_R2OW SG MWD+IFR1+ MS
2700	0	0	2700	9.661	0	9.661	0	3.956	0	0	9.661	9.661	0	XOM_R2OW SG MWD+IFR1+ MS
2800	0	0	2800	10.019	0	10.019	0	4.066	0	0	10.019	10.019	0	XOM_R2OW SG MWD+IFR1+ MS
2900	0	0	2900	10.378	0	10.378	0	4.179	0	0	10.378	10.378	0	XOM_R2OW SG MWD+IFR1+ MS
3000	0	0	3000	10.736	0	10.736	0	4.295	0	0	10.736	10.736	0	XOM_R2OW SG MWD+IFR1+ MS
3100	0	0	3100	11.095	0	11.095	0	4.413	0	0	11.095	11.095	0	XOM_R2OW SG MWD+IFR1+ MS
3200	0	0	3200	11.453	0	11.453	0	4.534	0	0	11.453	11.453	0	XOM_R2OW SG MWD+IFR1+ MS
3300	0	0	3300	11.811	0	11.811	0	4.657	0	0	11.811	11.811	0	XOM_R2OW SG MWD+IFR1+ MS

3400	0	0	3400	12.17	0	12.17	0	4.783	0	0	12.17	12.17	0	XOM_R2OW SG MWD+IFR1+ MS
3500	0	0	3500	12.528	0	12.528	0	4.912	0	0	12.528	12.528	0	XOM_R2OW SG MWD+IFR1+ MS
3600	0	191.505	3600	12.869	0	12.869	0	5.043	0	0	12.869	12.869	0	XOM_R2OW SG MWD+IFR1+ MS
3700	2	168.122	3699.98	13.187	0	13.194	0	5.177	0	0	13.194	13.194	1.267	XOM_R2OW SG MWD+IFR1+ MS
3800	4	168.122	3799.838	13.492	0	13.52	0	5.312	0	0	13.52	13.52	5.808	XOM_R2OW SG MWD+IFR1+ MS
3900	6	168.122	3899.452	13.783	0	13.848	0	5.448	0	0	13.848	13.846	1.472	XOM_R2OW SG MWD+IFR1+ MS
4000	8	168.122	3998.702	14.061	0	14.176	0	5.585	0	0	14.176	14.173	-2.032	XOM_R2OW SG MWD+IFR1+ MS
4100	10	168.122	4097.465	14.325	0	14.506	0	5.724	0	0	14.506	14.5	-4.326	XOM_R2OW SG MWD+IFR1+ MS
4200	12	168.122	4195.623	14.576	0	14.836	0	5.865	0	0	14.836	14.826	-5.868	XOM_R2OW SG MWD+IFR1+ MS
4235.475	12.71	168.122	4230.277	14.661	0	14.953	0	5.914	0	0	14.953	14.943	-5.817	XOM_R2OW SG MWD+IFR1+ MS
4300	12.71	168.122	4293.221	14.875	0	15.167	0	6.009	0	0	15.167	15.152	-6.927	XOM_R2OW SG MWD+IFR1+ MS
4400	12.71	168.122	4390.771	15.208	0	15.5	0	6.162	0	0	15.5	15.478	-7.869	XOM_R2OW SG MWD+IFR1+ MS
4500	12.71	168.122	4488.321	15.545	0	15.835	0	6.317	0	0	15.835	15.807	-8.323	XOM_R2OW SG MWD+IFR1+ MS

4600	12.71	168.122	4585.87	15.883	0	16.172	0	6.477	0	0	16.173	16.138	-8.591	XOM_R2OW SG MWD+IFR1+ MS
4700	12.71	168.122	4683.42	16.225	0	16.511	0	6.639	0	0	16.511	16.471	-8.768	XOM_R2OW SG MWD+IFR1+ MS
4800	12.71	168.122	4780.97	16.568	0	16.852	0	6.805	0	0	16.852	16.807	-8.894	XOM_R2OW SG MWD+IFR1+ MS
4900	12.71	168.122	4878.52	16.913	0	17.194	0	6.973	0	0	17.194	17.144	-8.989	XOM_R2OW SG MWD+IFR1+ MS
5000	12.71	168.122	4976.07	17.261	0	17.537	0	7.145	0	0	17.537	17.484	-9.062	XOM_R2OW SG MWD+IFR1+ MS
5100	12.71	168.122	5073.619	17.61	0	17.882	0	7.32	0	0	17.882	17.825	-9.121	XOM_R2OW SG MWD+IFR1+ MS
5200	12.71	168.122	5171.169	17.961	0	18.228	0	7.498	0	0	18.228	18.168	-9.168	XOM_R2OW SG MWD+IFR1+ MS
5300	12.71	168.122	5268.719	18.314	0	18.575	0	7.679	0	0	18.575	18.513	-9.208	XOM_R2OW SG MWD+IFR1+ MS
5400	12.71	168.122	5366.269	18.668	0	18.923	0	7.862	0	0	18.923	18.859	-9.241	XOM_R2OW SG MWD+IFR1+ MS
5500	12.71	168.122	5463.819	19.023	0	19.273	0	8.049	0	0	19.273	19.206	-9.27	XOM_R2OW SG MWD+IFR1+ MS
5600	12.71	168.122	5561.369	19.38	0	19.623	0	8.238	0	0	19.623	19.555	-9.293	XOM_R2OW SG MWD+IFR1+ MS
5700	12.71	168.122	5658.918	19.738	0	19.975	0	8.431	0	0	19.975	19.905	-9.314	XOM_R2OW SG MWD+IFR1+ MS
5800	12.71	168.122	5756.468	20.098	0	20.327	0	8.626	0	0	20.327	20.257	-9.331	XOM_R2OW SG MWD+IFR1+ MS

5900	12.71	168.122	5854.018	20.458	0	20.68	0	8.824	0	0	20.68	20.609	-9.345	XOM_R2OW SG MWD+IFR1+ MS
6000	12.71	168.122	5951.568	20.82	0	21.034	0	9.024	0	0	21.034	20.963	-9.357	XOM_R2OW SG MWD+IFR1+ MS
6100	12.71	168.122	6049.118	21.183	0	21.389	0	9.228	0	0	21.389	21.318	-9.367	XOM_R2OW SG MWD+IFR1+ MS
6200	12.71	168.122	6146.667	21.547	0	21.745	0	9.434	0	0	21.745	21.674	-9.374	XOM_R2OW SG MWD+IFR1+ MS
6300	12.71	168.122	6244.217	21.911	0	22.101	0	9.643	0	0	22.101	22.031	-9.379	XOM_R2OW SG MWD+IFR1+ MS
6400	12.71	168.122	6341.767	22.277	0	22.458	0	9.855	0	0	22.458	22.389	-9.381	XOM_R2OW SG MWD+IFR1+ MS
6500	12.71	168.122	6439.317	22.643	0	22.816	0	10.069	0	0	22.816	22.747	-9.382	XOM_R2OW SG MWD+IFR1+ MS
6600	12.71	168.122	6536.867	23.01	0	23.174	0	10.286	0	0	23.174	23.107	-9.379	XOM_R2OW SG MWD+IFR1+ MS
6700	12.71	168.122	6634.416	23.378	0	23.533	0	10.506	0	0	23.533	23.467	-9.375	XOM_R2OW SG MWD+IFR1+ MS
6800	12.71	168.122	6731.966	23.747	0	23.892	0	10.728	0	0	23.892	23.829	-9.367	XOM_R2OW SG MWD+IFR1+ MS
6900	12.71	168.122	6829.516	24.117	0	24.252	0	10.953	0	0	24.252	24.191	-9.356	XOM_R2OW SG MWD+IFR1+ MS
7000	12.71	168.122	6927.066	24.487	0	24.613	0	11.181	0	0	24.613	24.553	-9.341	XOM_R2OW SG MWD+IFR1+ MS
7100	12.71	168.122	7024.616	24.857	0	24.974	0	11.411	0	0	24.974	24.917	-9.322	XOM_R2OW SG MWD+IFR1+ MS

7200	12.71	168.122	7122.165	25.229	0	25.335	0	11.644	0	0	25.335	25.281	-9.297	XOM_R2OW SG MWD+IFR1+ MS
7300	12.71	168.122	7219.715	25.601	0	25.697	0	11.88	0	0	25.697	25.645	-9.267	XOM_R2OW SG MWD+IFR1+ MS
7400	12.71	168.122	7317.265	25.973	0	26.059	0	12.118	0	0	26.059	26.011	-9.228	XOM_R2OW SG MWD+IFR1+ MS
7500	12.71	168.122	7414.815	26.346	0	26.422	0	12.359	0	0	26.422	26.377	-9.18	XOM_R2OW SG MWD+IFR1+ MS
7600	12.71	168.122	7512.365	26.72	0	26.785	0	12.603	0	0	26.785	26.743	-9.119	XOM_R2OW SG MWD+IFR1+ MS
7700	12.71	168.122	7609.914	27.094	0	27.148	0	12.849	0	0	27.149	27.11	-9.04	XOM_R2OW SG MWD+IFR1+ MS
7800	12.71	168.122	7707.464	27.468	0	27.512	0	13.098	0	0	27.512	27.478	-8.939	XOM_R2OW SG MWD+IFR1+ MS
7900	12.71	168.122	7805.014	27.843	0	27.877	0	13.35	0	0	27.877	27.846	-8.803	XOM_R2OW SG MWD+IFR1+ MS
8000	12.71	168.122	7902.564	28.219	0	28.241	0	13.604	0	0	28.241	28.215	-8.616	XOM_R2OW SG MWD+IFR1+ MS
8100	12.71	168.122	8000.114	28.595	0	28.606	0	13.861	0	0	28.606	28.584	-8.345	XOM_R2OW SG MWD+IFR1+ MS
8200	12.71	168.122	8097.664	28.971	0	28.971	0	14.12	0	0	28.971	28.953	-7.924	XOM_R2OW SG MWD+IFR1+ MS
8300	12.71	168.122	8195.213	29.347	0	29.337	0	14.383	0	0	29.337	29.323	-7.19	XOM_R2OW SG MWD+IFR1+ MS
8400	12.71	168.122	8292.763	29.724	0	29.702	0	14.647	0	0	29.703	29.694	-5.617	XOM_R2OW SG MWD+IFR1+ MS

8500	12.71	168.122	8390.313	30.102	0	30.069	0	14.915	0	0	30.069	30.065	-0.083	XOM_R2OW SG MWD+IFR1+ MS
8600	12.71	168.122	8487.863	30.479	0	30.435	0	15.185	0	0	30.437	30.435	56.673	XOM_R2OW SG MWD+IFR1+ MS
8700	12.71	168.122	8585.413	30.857	0	30.801	0	15.458	0	0	30.808	30.801	73.91	XOM_R2OW SG MWD+IFR1+ MS
8800	12.71	168.122	8682.962	31.236	0	31.168	0	15.733	0	0	31.18	31.168	76.551	XOM_R2OW SG MWD+IFR1+ MS
8900	12.71	168.122	8780.512	31.614	0	31.535	0	16.011	0	0	31.553	31.535	77.581	XOM_R2OW SG MWD+IFR1+ MS
9000	12.71	168.122	8878.062	31.993	0	31.903	0	16.292	0	0	31.926	31.903	78.125	XOM_R2OW SG MWD+IFR1+ MS
9100	12.71	168.122	8975.612	32.373	0	32.27	0	16.575	0	0	32.299	32.27	78.459	XOM_R2OW SG MWD+IFR1+ MS
9200	12.71	168.122	9073.162	32.752	0	32.638	0	16.861	0	0	32.673	32.638	78.684	XOM_R2OW SG MWD+IFR1+ MS
9300	12.71	168.122	9170.711	33.132	0	33.006	0	17.15	0	0	33.047	33.006	78.843	XOM_R2OW SG MWD+IFR1+ MS
9348.018	12.71	168.122	9217.552	33.314	0	33.183	0	17.29	0	0	33.226	33.183	78.904	XOM_R2OW SG MWD+IFR1+ MS
9400	14.639	147.55	9268.088	33.365	0	33.38	0	17.44	0	0	33.421	33.374	77.897	XOM_R2OW SG MWD+IFR1+ MS
9500	21.573	123.785	9363.204	32.899	0	33.761	0	17.725	0	0	33.792	33.735	75.875	XOM_R2OW SG MWD+IFR1+ MS
9600	30.219	112.11	9453.136	31.737	0	34.123	0	17.997	0	0	34.148	34.076	76.097	XOM_R2OW SG MWD+IFR1+ MS

9700	39.465	105.388	9535.15	29.958	0	34.462	0	18.254	0	0	34.48	34.38	80.139	XOM_R2OW SG MWD+IFR1+ MS
9800	48.969	100.909	9606.756	27.701	0	34.772	0	18.496	0	0	34.782	34.636	86.079	XOM_R2OW SG MWD+IFR1+ MS
9900	58.603	97.575	9665.777	25.175	0	35.05	0	18.726	0	0	35.052	34.833	91.84	XOM_R2OW SG MWD+IFR1+ MS
10000	68.307	94.869	9710.421	22.684	0	35.291	0	18.951	0	0	35.292	34.967	96.589	XOM_R2OW SG MWD+IFR1+ MS
10100	78.049	92.508	9739.329	20.645	0	35.492	0	19.176	0	0	35.501	35.039	100.414	XOM_R2OW SG MWD+IFR1+ MS
10200	87.809	90.312	9751.626	19.534	0	35.647	0	19.403	0	0	35.68	35.057	103.687	XOM_R2OW SG MWD+IFR1+ MS
10214.41	89.217	90.001	9752	19.475	0	35.665	0	19.436	0	0	35.704	35.056	104.256	XOM_R2OW SG MWD+IFR1+ MS
10300	89.217	90.001	9753.169	19.683	0	35.786	0	19.644	0	0	35.847	35.044	106.067	XOM_R2OW SG MWD+IFR1+ MS
10400	89.217	90.001	9754.536	19.951	0	35.945	0	19.913	0	0	36.031	35.031	107.162	XOM_R2OW SG MWD+IFR1+ MS
10500	89.217	90.001	9755.902	20.247	0	36.121	0	20.209	0	0	36.231	35.02	107.648	XOM_R2OW SG MWD+IFR1+ MS
10600	89.217	90.001	9757.268	20.568	0	36.315	0	20.531	0	0	36.446	35.012	107.781	XOM_R2OW SG MWD+IFR1+ MS
10700	89.217	90.001	9758.634	20.914	0	36.526	0	20.877	0	0	36.678	35.007	107.701	XOM_R2OW SG MWD+IFR1+ MS
10800	89.217	90.001	9760	21.283	0	36.754	0	21.247	0	0	36.924	35.004	107.491	XOM_R2OW SG MWD+IFR1+ MS

10900	89.217	90.001	9761.367	21.674	0	36.999	0	21.638	0	0	37.184	35.003	107.199	XOM_R2OW SG MWD+IFR1+ MS
11000	89.217	90.001	9762.733	22.086	0	37.26	0	22.051	0	0	37.46	35.005	106.858	XOM_R2OW SG MWD+IFR1+ MS
11100	89.217	90.001	9764.099	22.518	0	37.537	0	22.484	0	0	37.75	35.01	106.488	XOM_R2OW SG MWD+IFR1+ MS
11200	89.217	90.001	9765.465	22.968	0	37.829	0	22.935	0	0	38.054	35.017	106.103	XOM_R2OW SG MWD+IFR1+ MS
11300	89.217	90.001	9766.831	23.437	0	38.137	0	23.404	0	0	38.372	35.025	105.712	XOM_R2OW SG MWD+IFR1+ MS
11400	89.217	90.001	9768.198	23.921	0	38.459	0	23.889	0	0	38.704	35.036	105.322	XOM_R2OW SG MWD+IFR1+ MS
11500	89.217	90.001	9769.564	24.422	0	38.796	0	24.39	0	0	39.049	35.049	104.936	XOM_R2OW SG MWD+IFR1+ MS
11600	89.217	90.001	9770.93	24.937	0	39.147	0	24.906	0	0	39.407	35.063	104.558	XOM_R2OW SG MWD+IFR1+ MS
11700	89.217	90.001	9772.296	25.466	0	39.512	0	25.435	0	0	39.778	35.08	104.19	XOM_R2OW SG MWD+IFR1+ MS
11800	89.217	90.001	9773.662	26.007	0	39.89	0	25.978	0	0	40.162	35.097	103.832	XOM_R2OW SG MWD+IFR1+ MS
11900	89.217	90.001	9775.029	26.561	0	40.281	0	26.532	0	0	40.558	35.117	103.486	XOM_R2OW SG MWD+IFR1+ MS
12000	89.217	90.001	9776.395	27.127	0	40.685	0	27.098	0	0	40.966	35.138	103.151	XOM_R2OW SG MWD+IFR1+ MS
12100	89.217	90.001	9777.761	27.702	0	41.101	0	27.675	0	0	41.385	35.161	102.828	XOM_R2OW SG MWD+IFR1+ MS

12200	89.217	90.001	9779.127	28.289	0	41.528	0	28.261	0	0	41.816	35.185	102.517	XOM_R2OW SG MWD+IFR1+MS
12300	89.217	90.001	9780.493	28.884	0	41.968	0	28.857	0	0	42.258	35.211	102.218	XOM_R2OW SG MWD+IFR1+MS
12400	89.217	90.001	9781.86	29.488	0	42.418	0	29.462	0	0	42.71	35.238	101.93	XOM_R2OW SG MWD+IFR1+MS
12500	89.217	90.001	9783.226	30.101	0	42.879	0	30.075	0	0	43.173	35.266	101.653	XOM_R2OW SG MWD+IFR1+MS
12600	89.217	90.001	9784.592	30.721	0	43.351	0	30.696	0	0	43.646	35.296	101.387	XOM_R2OW SG MWD+IFR1+MS
12700	89.217	90.001	9785.958	31.349	0	43.833	0	31.324	0	0	44.129	35.327	101.13	XOM_R2OW SG MWD+IFR1+MS
12800	89.217	90.001	9787.324	31.984	0	44.324	0	31.959	0	0	44.621	35.359	100.884	XOM_R2OW SG MWD+IFR1+MS
12900	89.217	90.001	9788.691	32.625	0	44.825	0	32.601	0	0	45.122	35.392	100.647	XOM_R2OW SG MWD+IFR1+MS
13000	89.217	90.001	9790.057	33.273	0	45.335	0	33.249	0	0	45.633	35.427	100.418	XOM_R2OW SG MWD+IFR1+MS
13100	89.217	90.001	9791.423	33.926	0	45.854	0	33.903	0	0	46.151	35.463	100.199	XOM_R2OW SG MWD+IFR1+MS
13200	89.217	90.001	9792.789	34.585	0	46.382	0	34.562	0	0	46.679	35.5	99.987	XOM_R2OW SG MWD+IFR1+MS
13300	89.217	90.001	9794.155	35.249	0	46.918	0	35.226	0	0	47.214	35.538	99.783	XOM_R2OW SG MWD+IFR1+MS
13400	89.217	90.001	9795.522	35.917	0	47.461	0	35.895	0	0	47.757	35.578	99.587	XOM_R2OW SG MWD+IFR1+MS

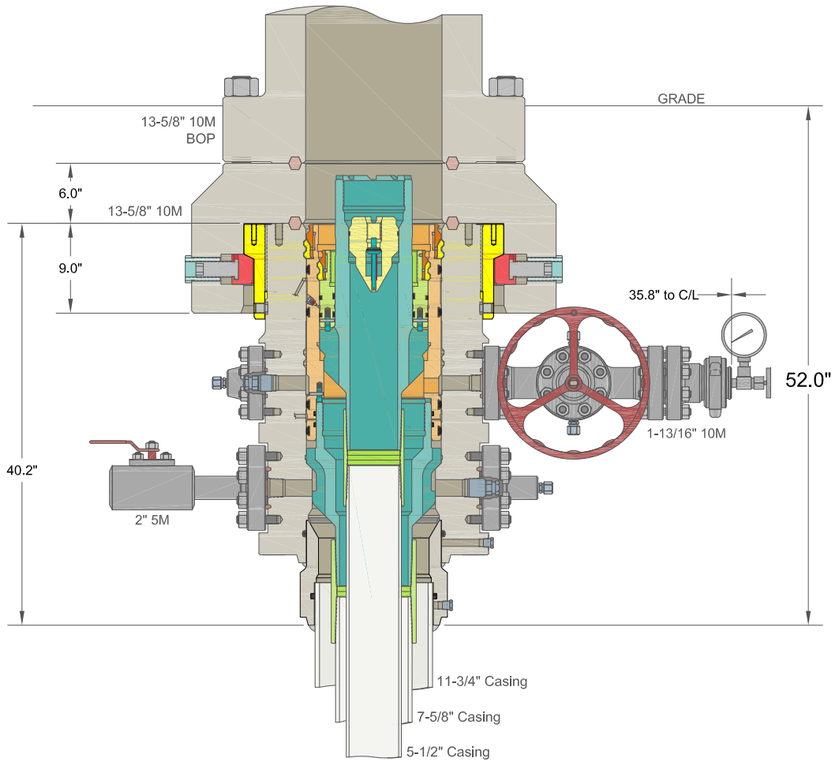
13500	89.217	90.001	9796.888	36.591	0	48.013	0	36.569	0	0	48.308	35.618	99.398	XOM_R2OW SG MWD+IFR1+ MS
13600	89.217	90.001	9798.254	37.268	0	48.572	0	37.247	0	0	48.865	35.66	99.215	XOM_R2OW SG MWD+IFR1+ MS
13700	89.217	90.001	9799.62	37.95	0	49.138	0	37.929	0	0	49.43	35.703	99.039	XOM_R2OW SG MWD+IFR1+ MS
13800	89.217	90.001	9800.986	38.636	0	49.711	0	38.615	0	0	50.002	35.747	98.869	XOM_R2OW SG MWD+IFR1+ MS
13900	89.217	90.001	9802.353	39.325	0	50.291	0	39.305	0	0	50.581	35.792	98.705	XOM_R2OW SG MWD+IFR1+ MS
14000	89.217	90.001	9803.719	40.018	0	50.877	0	39.998	0	0	51.165	35.838	98.547	XOM_R2OW SG MWD+IFR1+ MS
14100	89.217	90.001	9805.085	40.715	0	51.469	0	40.694	0	0	51.756	35.885	98.393	XOM_R2OW SG MWD+IFR1+ MS
14200	89.217	90.001	9806.451	41.414	0	52.068	0	41.394	0	0	52.353	35.933	98.245	XOM_R2OW SG MWD+IFR1+ MS
14300	89.217	90.001	9807.817	42.116	0	52.672	0	42.097	0	0	52.956	35.982	98.102	XOM_R2OW SG MWD+IFR1+ MS
14400	89.217	90.001	9809.184	42.822	0	53.282	0	42.802	0	0	53.564	36.032	97.963	XOM_R2OW SG MWD+IFR1+ MS
14500	89.217	90.001	9810.55	43.53	0	53.898	0	43.51	0	0	54.178	36.084	97.829	XOM_R2OW SG MWD+IFR1+ MS
14600	89.217	90.001	9811.916	44.24	0	54.518	0	44.221	0	0	54.797	36.136	97.699	XOM_R2OW SG MWD+IFR1+ MS
14700	89.217	90.001	9813.282	44.953	0	55.144	0	44.935	0	0	55.421	36.189	97.573	XOM_R2OW SG MWD+IFR1+ MS

14800	89.217	90.001	9814.648	45.669	0	55.775	0	45.65	0	0	56.049	36.243	97.451	XOM_R2OW SG MWD+IFR1+ MS
14900	89.217	90.001	9816.015	46.387	0	56.41	0	46.368	0	0	56.683	36.299	97.333	XOM_R2OW SG MWD+IFR1+ MS
15000	89.217	90.001	9817.381	47.106	0	57.05	0	47.088	0	0	57.321	36.355	97.218	XOM_R2OW SG MWD+IFR1+ MS
15100	89.217	90.001	9818.747	47.828	0	57.695	0	47.81	0	0	57.964	36.412	97.107	XOM_R2OW SG MWD+IFR1+ MS
15200	89.217	90.001	9820.113	48.552	0	58.343	0	48.534	0	0	58.61	36.47	96.999	XOM_R2OW SG MWD+IFR1+ MS
15300	89.217	90.001	9821.479	49.278	0	58.996	0	49.26	0	0	59.261	36.529	96.894	XOM_R2OW SG MWD+IFR1+ MS
15400	89.217	90.001	9822.846	50.005	0	59.653	0	49.988	0	0	59.916	36.59	96.791	XOM_R2OW SG MWD+IFR1+ MS
15500	89.217	90.001	9824.212	50.734	0	60.314	0	50.717	0	0	60.575	36.651	96.692	XOM_R2OW SG MWD+IFR1+ MS
15600	89.217	90.001	9825.578	51.465	0	60.978	0	51.448	0	0	61.238	36.713	96.596	XOM_R2OW SG MWD+IFR1+ MS
15700	89.217	90.001	9826.944	52.197	0	61.647	0	52.18	0	0	61.904	36.776	96.502	XOM_R2OW SG MWD+IFR1+ MS
15800	89.217	90.001	9828.31	52.931	0	62.318	0	52.914	0	0	62.574	36.839	96.411	XOM_R2OW SG MWD+IFR1+ MS
15900	89.217	90.001	9829.677	53.667	0	62.993	0	53.65	0	0	63.247	36.904	96.322	XOM_R2OW SG MWD+IFR1+ MS
16000	89.217	90.001	9831.043	54.403	0	63.672	0	54.387	0	0	63.923	36.97	96.236	XOM_R2OW SG MWD+IFR1+ MS

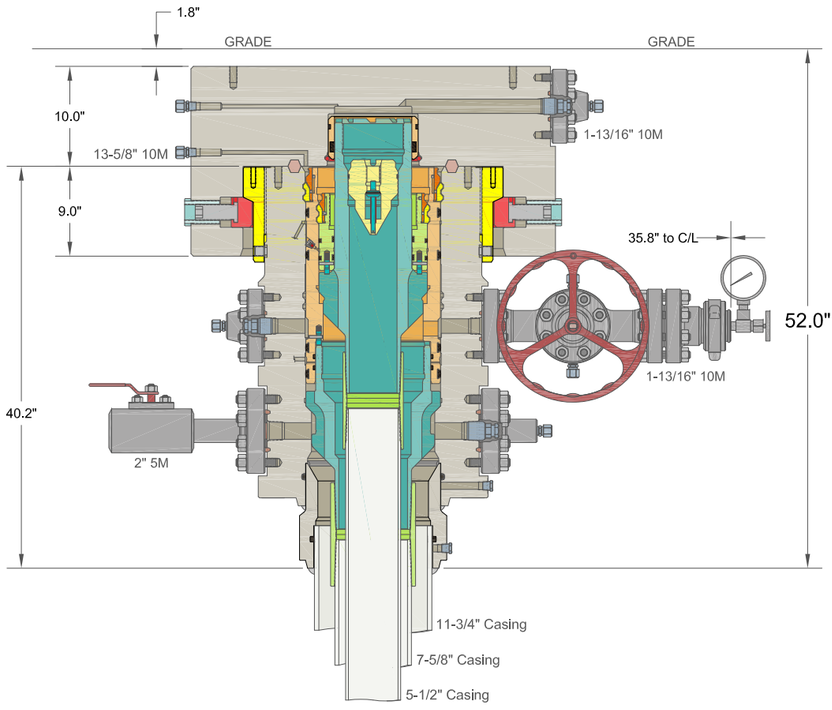
16100	89.217	90.001	9832.409	55.141	0	64.353	0	55.125	0	0	64.603	37.036	96.152	XOM_R2OW SG MWD+IFR1+ MS
16200	89.217	90.001	9833.775	55.881	0	65.038	0	55.864	0	0	65.285	37.104	96.07	XOM_R2OW SG MWD+IFR1+ MS
16300	89.217	90.001	9835.141	56.621	0	65.726	0	56.605	0	0	65.971	37.172	95.99	XOM_R2OW SG MWD+IFR1+ MS
16400	89.217	90.001	9836.508	57.363	0	66.416	0	57.346	0	0	66.66	37.242	95.912	XOM_R2OW SG MWD+IFR1+ MS
16500	89.217	90.001	9837.874	58.106	0	67.11	0	58.089	0	0	67.351	37.312	95.836	XOM_R2OW SG MWD+IFR1+ MS
16600	89.217	90.001	9839.24	58.849	0	67.806	0	58.833	0	0	68.045	37.383	95.762	XOM_R2OW SG MWD+IFR1+ MS
16700	89.217	90.001	9840.606	59.594	0	68.504	0	59.578	0	0	68.742	37.455	95.69	XOM_R2OW SG MWD+IFR1+ MS
16800	89.217	90.001	9841.972	60.34	0	69.206	0	60.324	0	0	69.442	37.528	95.619	XOM_R2OW SG MWD+IFR1+ MS
16900	89.217	90.001	9843.339	61.087	0	69.91	0	61.071	0	0	70.144	37.601	95.551	XOM_R2OW SG MWD+IFR1+ MS
17000	89.217	90.001	9844.705	61.835	0	70.616	0	61.819	0	0	70.848	37.676	95.483	XOM_R2OW SG MWD+IFR1+ MS
17100	89.217	90.001	9846.071	62.584	0	71.324	0	62.568	0	0	71.555	37.751	95.418	XOM_R2OW SG MWD+IFR1+ MS
17200	89.217	90.001	9847.437	63.333	0	72.035	0	63.318	0	0	72.264	37.827	95.354	XOM_R2OW SG MWD+IFR1+ MS
17300	89.217	90.001	9848.803	64.084	0	72.748	0	64.069	0	0	72.975	37.904	95.291	XOM_R2OW SG MWD+IFR1+ MS

17400	89.217	90.001	9850.17	64.835	0	73.463	0	64.82	0	0	73.688	37.982	95.23	XOM_R2OW SG MWD+IFR1+ MS
17500	89.217	90.001	9851.536	65.587	0	74.18	0	65.572	0	0	74.404	38.061	95.17	XOM_R2OW SG MWD+IFR1+ MS
17600	89.217	90.001	9852.902	66.34	0	74.9	0	66.325	0	0	75.121	38.14	95.112	XOM_R2OW SG MWD+IFR1+ MS
17700	89.217	90.001	9854.268	67.094	0	75.621	0	67.079	0	0	75.841	38.221	95.054	XOM_R2OW SG MWD+IFR1+ MS
17800	89.217	90.001	9855.634	67.848	0	76.344	0	67.833	0	0	76.562	38.302	94.998	XOM_R2OW SG MWD+IFR1+ MS
17900	89.217	90.001	9857.001	68.603	0	77.069	0	68.588	0	0	77.285	38.384	94.944	XOM_R2OW SG MWD+IFR1+ MS
18000	89.217	90.001	9858.367	69.359	0	77.796	0	69.344	0	0	78.01	38.467	94.89	XOM_R2OW SG MWD+IFR1+ MS
18100	89.217	90.001	9859.733	70.115	0	78.524	0	70.1	0	0	78.737	38.55	94.838	XOM_R2OW SG MWD+IFR1+ MS
18200	89.217	90.001	9861.099	70.872	0	79.254	0	70.857	0	0	79.466	38.635	94.786	XOM_R2OW SG MWD+IFR1+ MS
18300	89.217	90.001	9862.465	71.629	0	79.986	0	71.614	0	0	80.196	38.72	94.736	XOM_R2OW SG MWD+IFR1+ MS
18400	89.217	90.001	9863.832	72.387	0	80.72	0	72.372	0	0	80.928	38.806	94.687	XOM_R2OW SG MWD+IFR1+ MS
18413.23	89.217	90.001	9864	72.487	0	80.817	0	72.473	0	0	81.025	38.817	94.68	XOM_R2OW SG MWD+IFR1+ MS

Plan Targets	JRU DI 8 EAGLE 704H				
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP_7	10214.42	489354.4	654000.7	6413	RECTANGLE
BHL_7	18413.23	489354.18	662198.75	6525	RECTANGLE



DRILLING



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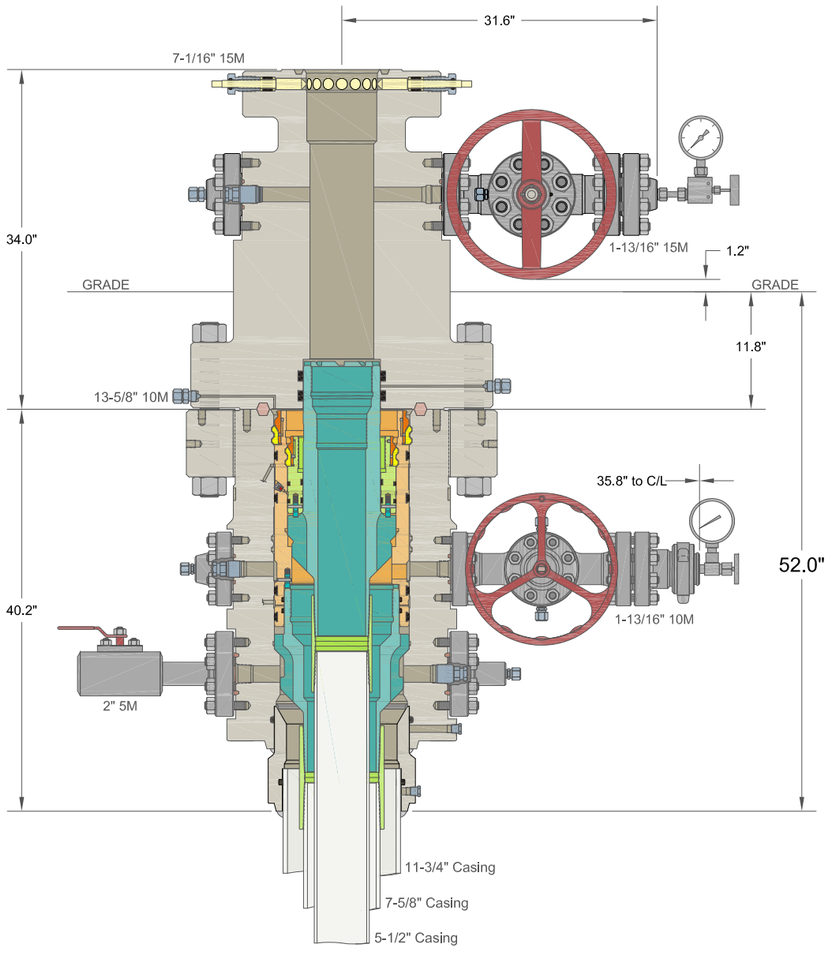

COMPLETION

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC	XTO ENERGY INC POKER LAKE, NM		
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	DRAWN	DLE	09DEC19
	APPRV		
	DRAWING NO.	ODE0003261	

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating
WELL NAME & NO.:	James Ranch Unit DI 8 Eagle 704H
LOCATION:	Sec 36-22S-30E-NMP
COUNTY:	Eddy County, NM

Updated COAs per Sundry 2667193 *approved through engineering on 05/10/2022.*

COA

H2S	◉ Yes	○ No	
Potash	○ None	○ Secretary	◉ R-111-P
Cave/Karst Potential	○ Low	◉ Medium	○ High
Cave/Karst Potential	○ Critical		
Variance	○ None	◉ Flex Hose	○ Other
Wellhead	○ Conventional	◉ Multibowl	○ Both
Other	☐ 4 String Area	☐ Capitan Reef	☐ WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	☐ COM	☑ 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 intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity 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
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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 276728

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 276728
	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