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 & 1838FWL to 2439FSL & 1533FWL
Well Stays in the Same Quarter-Quarter as Permitted
Total SHL Move: 4 North & 305 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 04/15/2022

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/536FSL & 50FEL to 330FNL & 50FEL

Casing/Cement design per the attached drilling program.

Attachments:

C102

Drilling Program

Directional Plan

Multibowl Diagram

Location of Well

0. SHL: NWSW / 2435 FSL / 1838 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.348021 / LONG: -103.83698 (TVD: 0 feet, MD: 0 feet)

PPP: SESW / 330 FSL / 2300 FWL / TWSP: 22S / RANGE: 30E / SECTION: 36 / LAT: 32.342232 / LONG: -103.835498 (TVD: 11045 feet, MD: 11700 feet)

BHL: SESE / 330 FSL / 50 FEL / TWSP: 22S / RANGE: 30E / SECTION: 31 / LAT: 32.342225 / LONG: -103.808622 (TVD: 11194 feet, MD: 19911 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
30-015-49447	40295	Los Medanos; Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
	JAMES RANCH UNIT DI 8 EAGLE	705H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,308'

[10] Surface Location

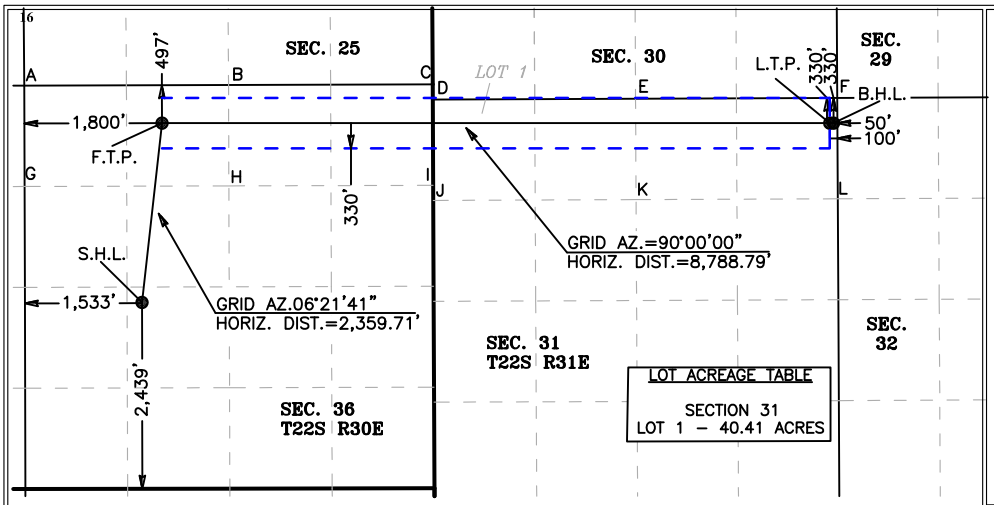
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	36	22S	30E		2,439	SOUTH	1,533	WEST	EDDY

[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
A	31	22S	31E		330	NORTH	50	EAST	EDDY

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
280.41			

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.



SHL (NAD83 NME)		LTP (NAD83 NME)		SHL (NAD27 NME)		LTP (NAD27 NME)	
Y =	490,700.6	Y =	493,045.8	Y =	490,640.3	Y =	492,985.5
X =	694,312.9	X =	703,313.1	X =	653,130.9	X =	662,131.1
LAT. =	32.348034 °N	LAT. =	32.354363 °N	LAT. =	32.347911 °N	LAT. =	32.354240 °N
LONG. =	103.837968 °W	LONG. =	103.808787 °W	LONG. =	103.837475 °W	LONG. =	103.808295 °W
FTP (NAD83 NME)		**BHL (NAD83 NME)**		**FTP (NAD27 NME)**		**BHL (NAD27 NME)**	
Y =	493,045.8	Y =	493,045.8	Y =	492,985.4	Y =	492,985.5
X =	694,574.3	X =	703,363.1	X =	653,392.4	X =	662,181.1
LAT. =	32.354477 °N	LAT. =	32.354362 °N	LAT. =	32.354354 °N	LAT. =	32.354239 °N
LONG. =	103.837086 °W	LONG. =	103.808625 °W	LONG. =	103.836594 °W	LONG. =	103.808134 °W

CORNER COORDINATES (NAD83 NME)				CORNER COORDINATES (NAD27 NME)			
A - Y =	493,536.7 N	X =	692,773.0 E	A - Y =	493,476.3 N	X =	651,591.1 E
B - Y =	493,545.0 N	X =	695,445.0 E	B - Y =	493,484.7 N	X =	654,263.1 E
C - Y =	493,552.3 N	X =	698,117.5 E	C - Y =	493,491.9 N	X =	656,935.6 E
D - Y =	493,355.3 N	X =	698,118.3 E	D - Y =	493,295.0 N	X =	656,936.4 E
E - Y =	493,365.7 N	X =	700,771.4 E	E - Y =	493,305.4 N	X =	659,589.5 E
F - Y =	493,376.0 N	X =	703,411.4 E	F - Y =	493,315.7 N	X =	662,229.5 E
G - Y =	492,216.7 N	X =	692,776.4 E	G - Y =	492,156.4 N	X =	651,594.5 E
H - Y =	492,224.7 N	X =	695,449.4 E	H - Y =	490,640.3 N	X =	653,130.9 E
I - Y =	492,232.2 N	X =	698,122.5 E	I - Y =	490,639.4 N	X =	653,160.9 E
J - Y =	492,034.6 N	X =	698,123.3 E	J - Y =	490,639.2 N	X =	653,190.8 E
K - Y =	492,045.4 N	X =	700,778.3 E	K - Y =	490,638.3 N	X =	653,315.9 E
L - Y =	492,056.1 N	X =	703,418.0 E	L - Y =	490,638.0 N	X =	653,345.8 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.

4-12-2022
Date of Survey

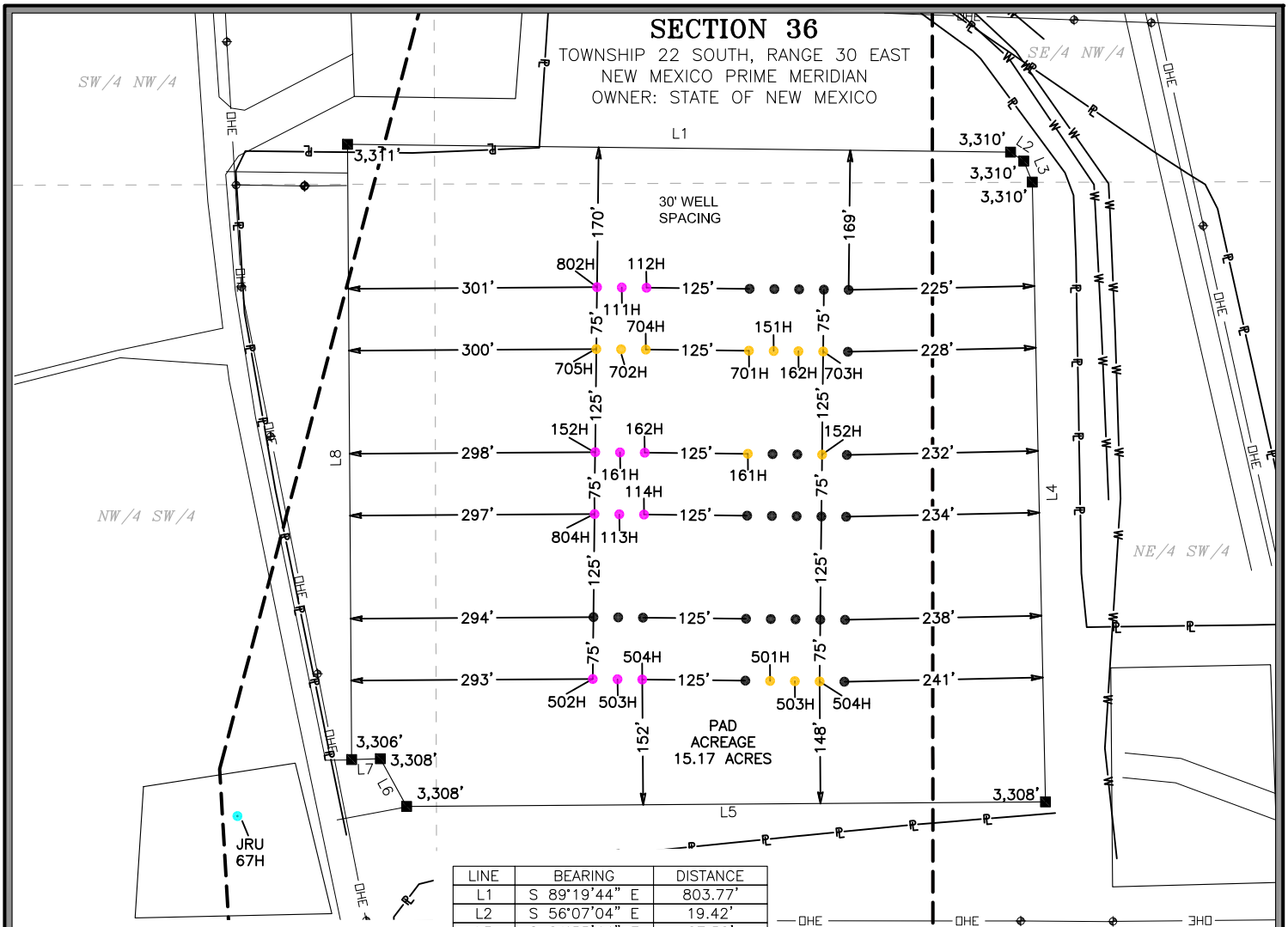
Signatue and Seal of Professional Surveyor:

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number AW 2019072358

SECTION 36

TOWNSHIP 22 SOUTH, RANGE 30 EAST
NEW MEXICO PRIME MERIDIAN
OWNER: STATE OF NEW MEXICO



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'

PROPOSED WEST DRILLING ISLAND
50.82 ACRES

PROPOSED EAST DRILLING ISLAND
47.61 ACRES

WELL NAMES
- EAGLE
- WARBONNET
- TBD

LEGEND
- PROPOSED DRILLING ISLAND
- EXISTING PAD
- EXISTING OVERHEAD ELECTRIC
- EXISTING ROAD
- EXISTING PIPELINE
- EXISTING WATER LINE
- POWER POLE

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.

0 100' 200'
1" = 200 FEET

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 705H
Projected TD: 19311' MD / 10451' TVD
SHL: ' FL & ' FL , Section , T, R
BHL: ' FL & ' FL , Section , T, R
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	289'	Water
Top of Salt	596'	Water
Base of Salt	3588'	Water
Delaware	3831'	Water
Brushy Canyon	6446'	Water/Oil/Gas
Bone Spring	7658'	Water
1st Bone Spring Ss	8699'	Water/Oil/Gas
2nd Bone Spring Ss	9532'	Water/Oil/Gas
3rd Bone Spring Sh	10107'	Water/Oil/Gas
Target/Land Curve	10379'	Water/Oil/Gas

Rows hidden for unused formatior

*** 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 @ 571' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3688' 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 9860' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 19311 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9360 feet) per Potash regulations.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 571'	13.375	54.5	J-55	BTC	New	2.48	4.48	27.41
12.25	0' – 3688'	9.625	40	J-55	BTC	New	1.76	2.29	4.27
8.75	0' – 3788'	7.625	29.7	RY P-110	Flush Joint	New	3.02	3.16	1.91
8.75	3788' – 9860'	7.625	29.7	HC L-80	Flush Joint	New	2.19	3.68	2.25
6.75	0' – 9760'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.19	2.29
6.75	9760' - 19311'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.04	5.91

· 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" SOW 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

Check casing size here

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 571

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 +/- 3688

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 +/- 9860 DV Tool can be hidden
1st Stage
Optional Lead: 160 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)
TOC: 3488
Tail: 310 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
TOC: Brushy Canyon @ 6446
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

Bradenhead squeeze hidden if not applicable

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 (6446') 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 +/- 19311

Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9360 feet
Tail: 650 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10254 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

Temporary wellhead/diverter hidden if not ne

Check casing sizes here

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 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 3135 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, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M 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' - 571'	17.5	FW/Native	8.5-9	35-40	NC
571' - 3688'	12.25	Brine	10-10.5	30-32	NC
3688' to 9860'	8.75	BDE/OBM or FW/Brine	8.6-9.1	30-32	NC
9860' to 19311'	6.75	OBM	10-10.5	50-60	NC - 20

Check properties

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.

Double check casing sizes in this

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 170 to 190 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 5435 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.

edec

statement

Well Plan Report - JRU DI 8 EAGLE 705H

Measured Depth:	19311.10 ft
TVD RKB:	10451.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	490640.60 ft
Easting:	653130.10 ft
RKB:	3339.00 ft
Ground Level:	3309.00 ft
North Reference:	Grid
Convergence Angle:	0.27 Deg
Site:	JRU DI-8
Slot:	SLOT 3

Plan Sections JRU DI 8 EAGLE 705H

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	354.87	0	0	0	0	0	0	
3600	0	354.87	3600	0	0	0	0	0	
4637.06	20.74	7.77	4614.56	183.96	25.09	2	0	2	

10254.21	20.74	7.77	9867.67	2155.02	293.92	0	0	0	
11122.06	89.5	90	10379	2345.1	861.5	7.92	9.48	10	FTP 3
19311.1	89.5	90	10451	2345.22	9050.22	0	0	0	BHL 3

Position Uncertainty JRU DI 8
EAGLE 705H

Measured Depth (ft)	Inclination (°)	Azimuth (°)	TVD RKB (ft)	Highside Error (ft)	Bias (ft)	Lateral Error (ft)	Bias (ft)	Vertical Error (ft)	Bias (ft)	Magnitude of Bias (ft)	Semi-major Error (ft)	Semi-minor Error (ft)	Semi-minor Azimuth (°)	Tool Used
0	0	354.872	0	0	0	0	0	2.297	0	0	0	0	0	XOM_R2OWSG MWD+IFR1+MS
100	0	0	100	0.358	0	0.358	0	2.299	0	0	0.358	0.358	0	XOM_R2OWSG MWD+IFR1+MS
200	0	0	200	0.717	0	0.717	0	2.307	0	0	0.717	0.717	0	XOM_R2OWSG MWD+IFR1+MS
300	0	0	300	1.075	0	1.075	0	2.321	0	0	1.075	1.075	0	XOM_R2OWSG MWD+IFR1+MS
400	0	0	400	1.434	0	1.434	0	2.34	0	0	1.434	1.434	0	XOM_R2OWSG MWD+IFR1+MS
500	0	0	500	1.792	0	1.792	0	2.364	0	0	1.792	1.792	0	XOM_R2OWSG MWD+IFR1+MS
600	0	0	600	2.151	0	2.151	0	2.394	0	0	2.151	2.151	0	XOM_R2OWSG MWD+IFR1+MS
700	0	0	700	2.509	0	2.509	0	2.428	0	0	2.509	2.509	0	XOM_R2OWSG MWD+IFR1+MS

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
900	0	0	900	3.226	0	3.226	0	2.511	0	0	3.226	3.226	0	XOM_R2OW SG MWD+IFR1+MS
1000	0	0	1000	3.585	0	3.585	0	2.56	0	0	3.585	3.585	0	XOM_R2OW SG MWD+IFR1+MS
1100	0	0	1100	3.943	0	3.943	0	2.613	0	0	3.943	3.943	0	XOM_R2OW SG MWD+IFR1+MS
1200	0	0	1200	4.302	0	4.302	0	2.67	0	0	4.302	4.302	0	XOM_R2OW SG MWD+IFR1+MS
1300	0	0	1300	4.66	0	4.66	0	2.731	0	0	4.66	4.66	0	XOM_R2OW SG MWD+IFR1+MS
1400	0	0	1400	5.019	0	5.019	0	2.797	0	0	5.019	5.019	0	XOM_R2OW SG MWD+IFR1+MS
1500	0	0	1500	5.377	0	5.377	0	2.866	0	0	5.377	5.377	0	XOM_R2OW SG MWD+IFR1+MS
1600	0	0	1600	5.736	0	5.736	0	2.939	0	0	5.736	5.736	0	XOM_R2OW SG MWD+IFR1+MS
1700	0	0	1700	6.094	0	6.094	0	3.016	0	0	6.094	6.094	0	XOM_R2OW SG MWD+IFR1+MS
1800	0	0	1800	6.452	0	6.452	0	3.096	0	0	6.452	6.452	0	XOM_R2OW SG MWD+IFR1+MS
1900	0	0	1900	6.811	0	6.811	0	3.179	0	0	6.811	6.811	0	XOM_R2OW SG MWD+IFR1+MS
2000	0	0	2000	7.169	0	7.169	0	3.266	0	0	7.169	7.169	0	XOM_R2OW SG MWD+IFR1+MS

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
2200	0	0	2200	7.886	0	7.886	0	3.448	0	0	7.886	7.886	0	XOM_R2OW SG MWD+IFR1+ MS
2300	0	0	2300	8.245	0	8.245	0	3.544	0	0	8.245	8.245	0	XOM_R2OW SG MWD+IFR1+ MS
2400	0	0	2400	8.603	0	8.603	0	3.643	0	0	8.603	8.603	0	XOM_R2OW SG MWD+IFR1+ MS
2500	0	0	2500	8.962	0	8.962	0	3.745	0	0	8.962	8.962	0	XOM_R2OW SG MWD+IFR1+ MS
2600	0	0	2600	9.32	0	9.32	0	3.849	0	0	9.32	9.32	0	XOM_R2OW SG MWD+IFR1+ MS
2700	0	0	2700	9.679	0	9.679	0	3.956	0	0	9.679	9.679	0	XOM_R2OW SG MWD+IFR1+ MS
2800	0	0	2800	10.037	0	10.037	0	4.066	0	0	10.037	10.037	0	XOM_R2OW SG MWD+IFR1+ MS
2900	0	0	2900	10.396	0	10.396	0	4.179	0	0	10.396	10.396	0	XOM_R2OW SG MWD+IFR1+ MS
3000	0	0	3000	10.754	0	10.754	0	4.295	0	0	10.754	10.754	0	XOM_R2OW SG MWD+IFR1+ MS
3100	0	0	3100	11.113	0	11.113	0	4.413	0	0	11.113	11.113	0	XOM_R2OW SG MWD+IFR1+ MS
3200	0	0	3200	11.471	0	11.471	0	4.534	0	0	11.471	11.471	0	XOM_R2OW SG MWD+IFR1+ MS
3300	0	0	3300	11.83	0	11.83	0	4.657	0	0	11.83	11.83	0	XOM_R2OW 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
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
3600	0	354.872	3600	12.905	0	12.905	0	5.043	0	0	12.905	12.905	0	XOM_R2OW SG MWD+IFR1+ MS
3700	2	7.766	3699.98	13.256	0	13.263	0	5.177	0	0	13.263	13.263	-0.65	XOM_R2OW SG MWD+IFR1+ MS
3800	4	7.766	3799.838	13.593	0	13.622	0	5.312	0	0	13.622	13.621	-2.362	XOM_R2OW SG MWD+IFR1+ MS
3900	6	7.766	3899.452	13.915	0	13.98	0	5.448	0	0	13.98	13.978	-0.024	XOM_R2OW SG MWD+IFR1+ MS
4000	8	7.766	3998.702	14.221	0	14.338	0	5.585	0	0	14.338	14.334	1.693	XOM_R2OW SG MWD+IFR1+ MS
4100	10	7.766	4097.465	14.512	0	14.695	0	5.724	0	0	14.695	14.688	2.812	XOM_R2OW SG MWD+IFR1+ MS
4200	12	7.766	4195.623	14.786	0	15.052	0	5.865	0	0	15.053	15.039	3.574	XOM_R2OW SG MWD+IFR1+ MS
4300	14	7.766	4293.055	15.045	0	15.409	0	6.008	0	0	15.409	15.388	4.121	XOM_R2OW SG MWD+IFR1+ MS
4400	16	7.766	4389.643	15.289	0	15.766	0	6.153	0	0	15.766	15.735	4.533	XOM_R2OW SG MWD+IFR1+ MS
4500	18	7.766	4485.268	15.517	0	16.122	0	6.301	0	0	16.122	16.079	4.855	XOM_R2OW SG MWD+IFR1+ MS
4600	20	7.766	4579.816	15.73	0	16.478	0	6.452	0	0	16.479	16.421	5.115	XOM_R2OW SG MWD+IFR1+ MS

4637.059	20.741	7.766	4614.557	15.805	0	16.61	0	6.506	0	0	16.611	16.548	5.146	XOM_R2OW SG MWD+IFR1+ MS
4700	20.741	7.766	4673.419	16.031	0	16.835	0	6.608	0	0	16.836	16.761	5.32	XOM_R2OW SG MWD+IFR1+ MS
4800	20.741	7.766	4766.938	16.392	0	17.195	0	6.778	0	0	17.195	17.1	5.522	XOM_R2OW SG MWD+IFR1+ MS
4900	20.741	7.766	4860.457	16.758	0	17.557	0	6.952	0	0	17.558	17.443	5.643	XOM_R2OW SG MWD+IFR1+ MS
5000	20.741	7.766	4953.976	17.126	0	17.922	0	7.13	0	0	17.922	17.789	5.72	XOM_R2OW SG MWD+IFR1+ MS
5100	20.741	7.766	5047.495	17.498	0	18.288	0	7.313	0	0	18.289	18.138	5.77	XOM_R2OW SG MWD+IFR1+ MS
5200	20.741	7.766	5141.014	17.873	0	18.657	0	7.501	0	0	18.657	18.489	5.805	XOM_R2OW SG MWD+IFR1+ MS
5300	20.741	7.766	5234.533	18.251	0	19.028	0	7.692	0	0	19.028	18.843	5.827	XOM_R2OW SG MWD+IFR1+ MS
5400	20.741	7.766	5328.052	18.631	0	19.4	0	7.887	0	0	19.4	19.2	5.841	XOM_R2OW SG MWD+IFR1+ MS
5500	20.741	7.766	5421.571	19.014	0	19.774	0	8.086	0	0	19.774	19.559	5.85	XOM_R2OW SG MWD+IFR1+ MS
5600	20.741	7.766	5515.09	19.399	0	20.149	0	8.288	0	0	20.15	19.92	5.853	XOM_R2OW SG MWD+IFR1+ MS
5700	20.741	7.766	5608.609	19.786	0	20.527	0	8.494	0	0	20.527	20.283	5.853	XOM_R2OW SG MWD+IFR1+ MS
5800	20.741	7.766	5702.128	20.175	0	20.905	0	8.703	0	0	20.905	20.648	5.849	XOM_R2OW SG MWD+IFR1+ MS

5900	20.741	7.766	5795.647	20.567	0	21.285	0	8.916	0	0	21.285	21.016	5.843	XOM_R2OW SG MWD+IFR1+ MS
6000	20.741	7.766	5889.166	20.96	0	21.666	0	9.132	0	0	21.667	21.384	5.836	XOM_R2OW SG MWD+IFR1+ MS
6100	20.741	7.766	5982.685	21.354	0	22.049	0	9.351	0	0	22.049	21.755	5.826	XOM_R2OW SG MWD+IFR1+ MS
6200	20.741	7.766	6076.204	21.751	0	22.432	0	9.573	0	0	22.433	22.128	5.814	XOM_R2OW SG MWD+IFR1+ MS
6300	20.741	7.766	6169.723	22.149	0	22.817	0	9.798	0	0	22.817	22.502	5.802	XOM_R2OW SG MWD+IFR1+ MS
6400	20.741	7.766	6263.242	22.548	0	23.202	0	10.025	0	0	23.203	22.877	5.788	XOM_R2OW SG MWD+IFR1+ MS
6500	20.741	7.766	6356.761	22.949	0	23.589	0	10.256	0	0	23.59	23.254	5.772	XOM_R2OW SG MWD+IFR1+ MS
6600	20.741	7.766	6450.28	23.352	0	23.977	0	10.49	0	0	23.977	23.632	5.756	XOM_R2OW SG MWD+IFR1+ MS
6700	20.741	7.766	6543.799	23.755	0	24.365	0	10.726	0	0	24.366	24.012	5.739	XOM_R2OW SG MWD+IFR1+ MS
6800	20.741	7.766	6637.318	24.16	0	24.755	0	10.965	0	0	24.755	24.393	5.72	XOM_R2OW SG MWD+IFR1+ MS
6900	20.741	7.766	6730.837	24.565	0	25.145	0	11.207	0	0	25.145	24.775	5.701	XOM_R2OW SG MWD+IFR1+ MS
7000	20.741	7.766	6824.356	24.972	0	25.536	0	11.451	0	0	25.536	25.158	5.681	XOM_R2OW SG MWD+IFR1+ MS
7100	20.741	7.766	6917.875	25.38	0	25.927	0	11.698	0	0	25.928	25.543	5.66	XOM_R2OW SG MWD+IFR1+ MS

7200	20.741	7.766	7011.394	25.789	0	26.32	0	11.947	0	0	26.32	25.928	5.639	XOM_R2OW SG MWD+IFR1+ MS
7300	20.741	7.766	7104.913	26.199	0	26.713	0	12.199	0	0	26.714	26.315	5.616	XOM_R2OW SG MWD+IFR1+ MS
7400	20.741	7.766	7198.432	26.609	0	27.107	0	12.453	0	0	27.107	26.703	5.592	XOM_R2OW SG MWD+IFR1+ MS
7500	20.741	7.766	7291.951	27.021	0	27.501	0	12.71	0	0	27.502	27.091	5.568	XOM_R2OW SG MWD+IFR1+ MS
7600	20.741	7.766	7385.47	27.433	0	27.896	0	12.97	0	0	27.897	27.481	5.543	XOM_R2OW SG MWD+IFR1+ MS
7700	20.741	7.766	7478.99	27.846	0	28.292	0	13.231	0	0	28.292	27.871	5.517	XOM_R2OW SG MWD+IFR1+ MS
7800	20.741	7.766	7572.509	28.26	0	28.688	0	13.496	0	0	28.688	28.263	5.49	XOM_R2OW SG MWD+IFR1+ MS
7900	20.741	7.766	7666.028	28.675	0	29.084	0	13.762	0	0	29.085	28.655	5.462	XOM_R2OW SG MWD+IFR1+ MS
8000	20.741	7.766	7759.547	29.09	0	29.481	0	14.031	0	0	29.482	29.048	5.434	XOM_R2OW SG MWD+IFR1+ MS
8100	20.741	7.766	7853.066	29.506	0	29.879	0	14.303	0	0	29.88	29.442	5.404	XOM_R2OW SG MWD+IFR1+ MS
8200	20.741	7.766	7946.585	29.922	0	30.277	0	14.576	0	0	30.278	29.836	5.374	XOM_R2OW SG MWD+IFR1+ MS
8300	20.741	7.766	8040.104	30.339	0	30.675	0	14.852	0	0	30.676	30.232	5.342	XOM_R2OW SG MWD+IFR1+ MS
8400	20.741	7.766	8133.623	30.757	0	31.074	0	15.131	0	0	31.075	30.628	5.31	XOM_R2OW SG MWD+IFR1+ MS

8500	20.741	7.766	8227.142	31.175	0	31.474	0	15.412	0	0	31.474	31.025	5.276	XOM_R2OW SG MWD+IFR1+ MS
8600	20.741	7.766	8320.661	31.594	0	31.873	0	15.695	0	0	31.874	31.422	5.241	XOM_R2OW SG MWD+IFR1+ MS
8700	20.741	7.766	8414.18	32.013	0	32.273	0	15.98	0	0	32.274	31.821	5.206	XOM_R2OW SG MWD+IFR1+ MS
8800	20.741	7.766	8507.699	32.433	0	32.674	0	16.268	0	0	32.675	32.22	5.169	XOM_R2OW SG MWD+IFR1+ MS
8900	20.741	7.766	8601.218	32.853	0	33.075	0	16.558	0	0	33.076	32.619	5.13	XOM_R2OW SG MWD+IFR1+ MS
9000	20.741	7.766	8694.737	33.274	0	33.476	0	16.85	0	0	33.477	33.019	5.091	XOM_R2OW SG MWD+IFR1+ MS
9100	20.741	7.766	8788.256	33.695	0	33.877	0	17.144	0	0	33.878	33.42	5.05	XOM_R2OW SG MWD+IFR1+ MS
9200	20.741	7.766	8881.775	34.116	0	34.279	0	17.441	0	0	34.28	33.822	5.008	XOM_R2OW SG MWD+IFR1+ MS
9300	20.741	7.766	8975.294	34.538	0	34.681	0	17.74	0	0	34.682	34.224	4.964	XOM_R2OW SG MWD+IFR1+ MS
9400	20.741	7.766	9068.813	34.961	0	35.084	0	18.042	0	0	35.085	34.626	4.918	XOM_R2OW SG MWD+IFR1+ MS
9500	20.741	7.766	9162.332	35.383	0	35.486	0	18.346	0	0	35.488	35.029	4.871	XOM_R2OW SG MWD+IFR1+ MS
9600	20.741	7.766	9255.851	35.806	0	35.889	0	18.651	0	0	35.891	35.433	4.823	XOM_R2OW SG MWD+IFR1+ MS
9700	20.741	7.766	9349.37	36.23	0	36.293	0	18.96	0	0	36.294	35.837	4.772	XOM_R2OW SG MWD+IFR1+ MS

9800	20.741	7.766	9442.889	36.653	0	36.696	0	19.27	0	0	36.697	36.242	4.72	XOM_R2OW SG MWD+IFR1+ MS
9900	20.741	7.766	9536.408	37.077	0	37.1	0	19.583	0	0	37.101	36.648	4.665	XOM_R2OW SG MWD+IFR1+ MS
10000	20.741	7.766	9629.927	37.502	0	37.504	0	19.898	0	0	37.505	37.054	4.608	XOM_R2OW SG MWD+IFR1+ MS
10100	20.741	7.766	9723.446	37.926	0	37.908	0	20.215	0	0	37.909	37.46	4.549	XOM_R2OW SG MWD+IFR1+ MS
10200	20.741	7.766	9816.965	38.351	0	38.312	0	20.535	0	0	38.314	37.867	4.488	XOM_R2OW SG MWD+IFR1+ MS
10254.21	20.741	7.766	9867.667	38.582	0	38.532	0	20.709	0	0	38.533	38.088	4.453	XOM_R2OW SG MWD+IFR1+ MS
10300	21.765	20.103	9910.364	38.676	0	38.686	0	20.856	0	0	38.718	38.274	4.319	XOM_R2OW SG MWD+IFR1+ MS
10400	26.611	41.661	10001.735	38.324	0	38.95	0	21.178	0	0	39.114	38.672	4.113	XOM_R2OW SG MWD+IFR1+ MS
10500	33.668	55.887	10088.272	37.143	0	39.216	0	21.497	0	0	39.484	39.047	4.259	XOM_R2OW SG MWD+IFR1+ MS
10600	41.827	65.388	10167.344	35.21	0	39.495	0	21.815	0	0	39.814	39.388	5.407	XOM_R2OW SG MWD+IFR1+ MS
10700	50.548	72.195	10236.55	32.705	0	39.766	0	22.132	0	0	40.094	39.687	8.366	XOM_R2OW SG MWD+IFR1+ MS
10800	59.577	77.453	10293.786	29.884	0	40.013	0	22.451	0	0	40.324	39.933	14.195	XOM_R2OW SG MWD+IFR1+ MS
10900	68.78	81.807	10337.313	27.104	0	40.224	0	22.773	0	0	40.517	40.113	23.293	XOM_R2OW SG MWD+IFR1+ MS

11000	78.081	85.644	10365.81	24.836	0	40.391	0	23.099	0	0	40.693	40.21	33.334	XOM_R2OW SG MWD+IFR1+ MS
11100	87.431	89.223	10378.409	23.611	0	40.509	0	23.427	0	0	40.867	40.222	40.924	XOM_R2OW SG MWD+IFR1+ MS
11122.06	89.496	89.999	10379	23.526	0	40.527	0	23.499	0	0	40.908	40.212	42.119	XOM_R2OW SG MWD+IFR1+ MS
11200	89.496	89.999	10379.685	23.788	0	40.624	0	23.761	0	0	41.044	40.18	45.605	XOM_R2OW SG MWD+IFR1+ MS
11300	89.496	89.999	10380.565	24.143	0	40.763	0	24.116	0	0	41.233	40.14	48.818	XOM_R2OW SG MWD+IFR1+ MS
11400	89.496	89.999	10381.444	24.517	0	40.918	0	24.492	0	0	41.435	40.103	51.221	XOM_R2OW SG MWD+IFR1+ MS
11500	89.496	89.999	10382.323	24.911	0	41.088	0	24.886	0	0	41.65	40.069	53.146	XOM_R2OW SG MWD+IFR1+ MS
11600	89.496	89.999	10383.202	25.323	0	41.274	0	25.298	0	0	41.877	40.039	54.763	XOM_R2OW SG MWD+IFR1+ MS
11700	89.496	89.999	10384.082	25.752	0	41.475	0	25.728	0	0	42.116	40.012	56.168	XOM_R2OW SG MWD+IFR1+ MS
11800	89.496	89.999	10384.961	26.198	0	41.691	0	26.174	0	0	42.367	39.988	57.417	XOM_R2OW SG MWD+IFR1+ MS
11900	89.496	89.999	10385.84	26.659	0	41.922	0	26.636	0	0	42.63	39.969	58.547	XOM_R2OW SG MWD+IFR1+ MS
12000	89.496	89.999	10386.72	27.135	0	42.168	0	27.113	0	0	42.905	39.952	59.583	XOM_R2OW SG MWD+IFR1+ MS
12100	89.496	89.999	10387.599	27.626	0	42.427	0	27.604	0	0	43.191	39.938	60.541	XOM_R2OW SG MWD+IFR1+ MS

12200	89.496	89.999	10388.478	28.129	0	42.701	0	28.108	0	0	43.489	39.928	61.434	XOM_R2OW SG MWD+IFR1+ MS
12300	89.496	89.999	10389.357	28.645	0	42.989	0	28.624	0	0	43.799	39.92	62.27	XOM_R2OW SG MWD+IFR1+ MS
12400	89.496	89.999	10390.237	29.174	0	43.29	0	29.153	0	0	44.119	39.915	63.058	XOM_R2OW SG MWD+IFR1+ MS
12500	89.496	89.999	10391.116	29.713	0	43.604	0	29.693	0	0	44.451	39.913	63.801	XOM_R2OW SG MWD+IFR1+ MS
12600	89.496	89.999	10391.995	30.264	0	43.931	0	30.244	0	0	44.794	39.913	64.505	XOM_R2OW SG MWD+IFR1+ MS
12700	89.496	89.999	10392.875	30.824	0	44.27	0	30.805	0	0	45.148	39.915	65.174	XOM_R2OW SG MWD+IFR1+ MS
12800	89.496	89.999	10393.754	31.394	0	44.622	0	31.376	0	0	45.512	39.92	65.809	XOM_R2OW SG MWD+IFR1+ MS
12900	89.496	89.999	10394.633	31.973	0	44.986	0	31.955	0	0	45.887	39.927	66.415	XOM_R2OW SG MWD+IFR1+ MS
13000	89.496	89.999	10395.512	32.561	0	45.362	0	32.543	0	0	46.273	39.936	66.993	XOM_R2OW SG MWD+IFR1+ MS
13100	89.496	89.999	10396.392	33.157	0	45.75	0	33.14	0	0	46.668	39.947	67.546	XOM_R2OW SG MWD+IFR1+ MS
13200	89.496	89.999	10397.271	33.761	0	46.148	0	33.744	0	0	47.074	39.961	68.074	XOM_R2OW SG MWD+IFR1+ MS
13300	89.496	89.999	10398.15	34.372	0	46.557	0	34.355	0	0	47.489	39.976	68.58	XOM_R2OW SG MWD+IFR1+ MS
13400	89.496	89.999	10399.03	34.99	0	46.977	0	34.973	0	0	47.914	39.992	69.065	XOM_R2OW SG MWD+IFR1+ MS

13500	89.496	89.999	10399.909	35.614	0	47.407	0	35.598	0	0	48.348	40.011	69.53	XOM_R2OW SG MWD+IFR1+ MS
13600	89.496	89.999	10400.788	36.245	0	47.848	0	36.229	0	0	48.792	40.031	69.977	XOM_R2OW SG MWD+IFR1+ MS
13700	89.496	89.999	10401.667	36.882	0	48.298	0	36.866	0	0	49.244	40.053	70.406	XOM_R2OW SG MWD+IFR1+ MS
13800	89.496	89.999	10402.547	37.524	0	48.757	0	37.509	0	0	49.705	40.077	70.818	XOM_R2OW SG MWD+IFR1+ MS
13900	89.496	89.999	10403.426	38.171	0	49.226	0	38.157	0	0	50.175	40.102	71.215	XOM_R2OW SG MWD+IFR1+ MS
14000	89.496	89.999	10404.305	38.824	0	49.704	0	38.81	0	0	50.653	40.128	71.597	XOM_R2OW SG MWD+IFR1+ MS
14100	89.496	89.999	10405.185	39.482	0	50.19	0	39.468	0	0	51.139	40.156	71.964	XOM_R2OW SG MWD+IFR1+ MS
14200	89.496	89.999	10406.064	40.144	0	50.685	0	40.13	0	0	51.633	40.186	72.319	XOM_R2OW SG MWD+IFR1+ MS
14300	89.496	89.999	10406.943	40.81	0	51.188	0	40.797	0	0	52.135	40.217	72.661	XOM_R2OW SG MWD+IFR1+ MS
14400	89.496	89.999	10407.822	41.481	0	51.7	0	41.467	0	0	52.644	40.249	72.991	XOM_R2OW SG MWD+IFR1+ MS
14500	89.496	89.999	10408.702	42.155	0	52.218	0	42.142	0	0	53.16	40.283	73.309	XOM_R2OW SG MWD+IFR1+ MS
14600	89.496	89.999	10409.581	42.833	0	52.745	0	42.821	0	0	53.684	40.318	73.616	XOM_R2OW SG MWD+IFR1+ MS
14700	89.496	89.999	10410.46	43.515	0	53.279	0	43.503	0	0	54.215	40.354	73.913	XOM_R2OW SG MWD+IFR1+ MS

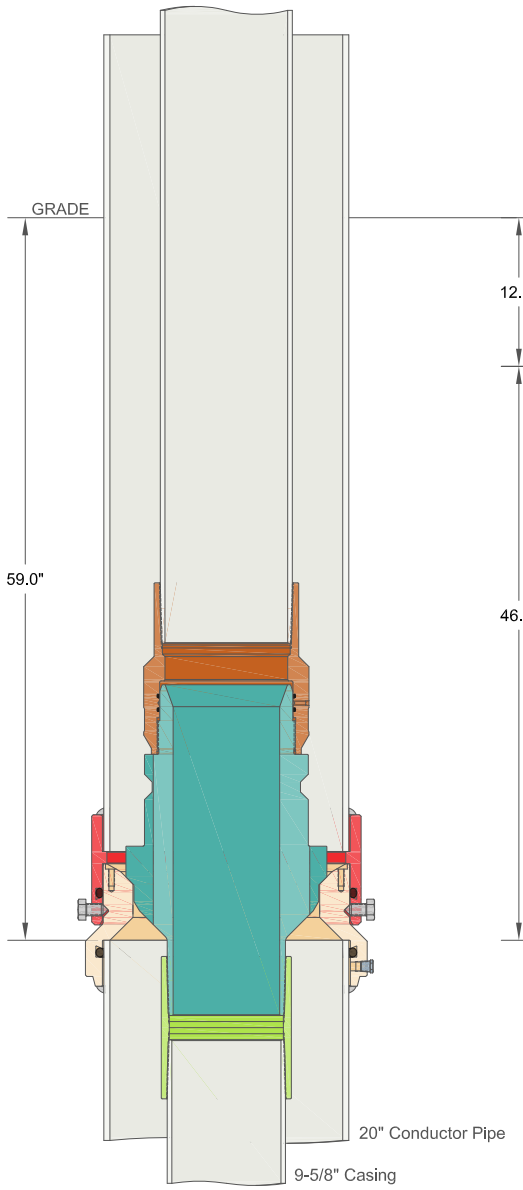
14800	89.496	89.999	10411.34	44.2	0	53.819	0	44.188	0	0	54.752	40.392	74.201	XOM_R2OW SG MWD+IFR1+ MS
14900	89.496	89.999	10412.219	44.889	0	54.367	0	44.877	0	0	55.296	40.431	74.478	XOM_R2OW SG MWD+IFR1+ MS
15000	89.496	89.999	10413.098	45.58	0	54.921	0	45.569	0	0	55.846	40.471	74.747	XOM_R2OW SG MWD+IFR1+ MS
15100	89.496	89.999	10413.977	46.275	0	55.482	0	46.263	0	0	56.403	40.512	75.007	XOM_R2OW SG MWD+IFR1+ MS
15200	89.496	89.999	10414.857	46.972	0	56.049	0	46.961	0	0	56.966	40.554	75.259	XOM_R2OW SG MWD+IFR1+ MS
15300	89.496	89.999	10415.736	47.672	0	56.622	0	47.661	0	0	57.534	40.598	75.504	XOM_R2OW SG MWD+IFR1+ MS
15400	89.496	89.999	10416.615	48.375	0	57.201	0	48.364	0	0	58.109	40.643	75.74	XOM_R2OW SG MWD+IFR1+ MS
15500	89.496	89.999	10417.495	49.08	0	57.786	0	49.07	0	0	58.688	40.689	75.97	XOM_R2OW SG MWD+IFR1+ MS
15600	89.496	89.999	10418.374	49.788	0	58.376	0	49.777	0	0	59.274	40.736	76.192	XOM_R2OW SG MWD+IFR1+ MS
15700	89.496	89.999	10419.253	50.498	0	58.972	0	50.487	0	0	59.864	40.784	76.408	XOM_R2OW SG MWD+IFR1+ MS
15800	89.496	89.999	10420.132	51.21	0	59.573	0	51.2	0	0	60.46	40.833	76.618	XOM_R2OW SG MWD+IFR1+ MS
15900	89.496	89.999	10421.012	51.924	0	60.178	0	51.914	0	0	61.06	40.883	76.822	XOM_R2OW SG MWD+IFR1+ MS
16000	89.496	89.999	10421.891	52.64	0	60.789	0	52.63	0	0	61.666	40.935	77.019	XOM_R2OW SG MWD+IFR1+ MS

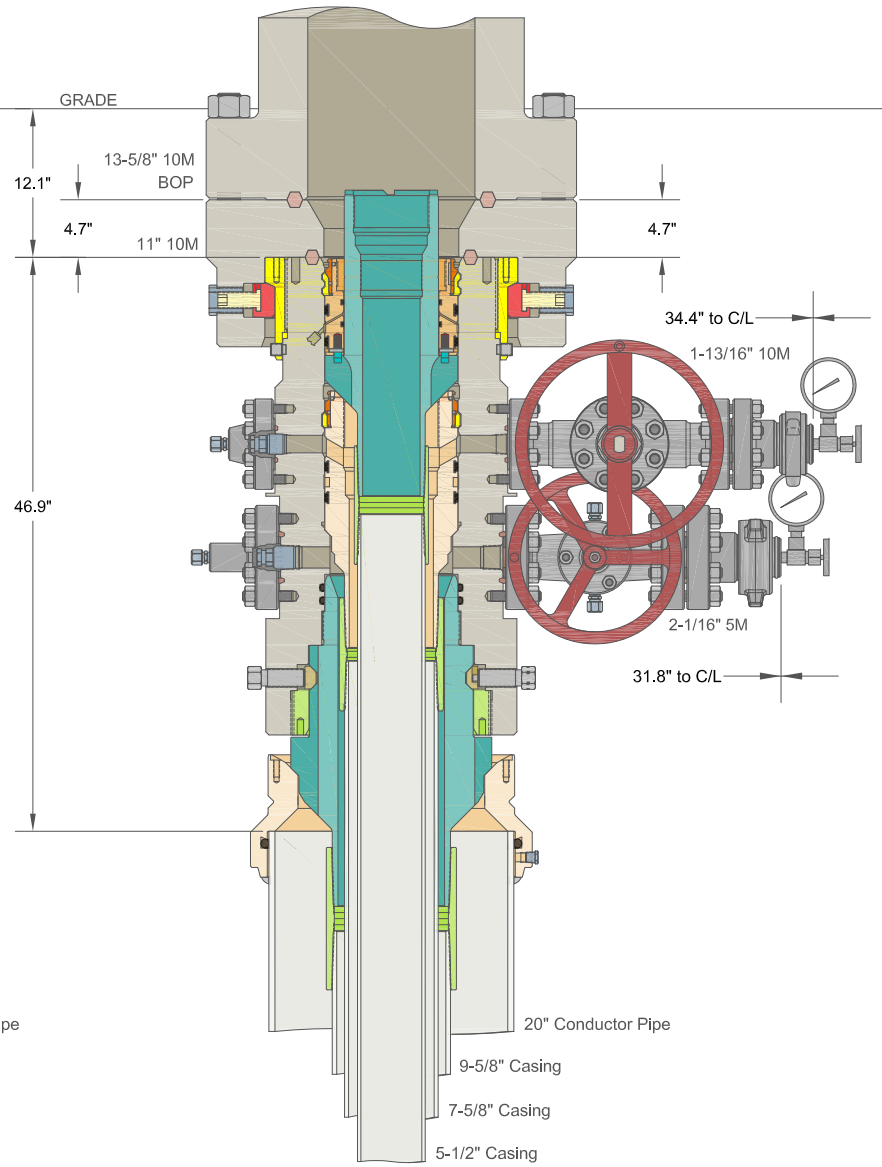
16100	89.496	89.999	10422.77	53.358	0	61.405	0	53.349	0	0	62.276	40.987	77.212	XOM_R2OW SG MWD+IFR1+ MS
16200	89.496	89.999	10423.65	54.078	0	62.025	0	54.069	0	0	62.89	41.04	77.399	XOM_R2OW SG MWD+IFR1+ MS
16300	89.496	89.999	10424.529	54.8	0	62.65	0	54.791	0	0	63.509	41.095	77.58	XOM_R2OW SG MWD+IFR1+ MS
16400	89.496	89.999	10425.408	55.523	0	63.279	0	55.514	0	0	64.133	41.15	77.757	XOM_R2OW SG MWD+IFR1+ MS
16500	89.496	89.999	10426.287	56.248	0	63.912	0	56.239	0	0	64.76	41.207	77.929	XOM_R2OW SG MWD+IFR1+ MS
16600	89.496	89.999	10427.167	56.975	0	64.549	0	56.966	0	0	65.392	41.264	78.097	XOM_R2OW SG MWD+IFR1+ MS
16700	89.496	89.999	10428.046	57.703	0	65.191	0	57.695	0	0	66.027	41.323	78.26	XOM_R2OW SG MWD+IFR1+ MS
16800	89.496	89.999	10428.925	58.433	0	65.836	0	58.424	0	0	66.667	41.382	78.419	XOM_R2OW SG MWD+IFR1+ MS
16900	89.496	89.999	10429.805	59.164	0	66.485	0	59.155	0	0	67.31	41.443	78.574	XOM_R2OW SG MWD+IFR1+ MS
17000	89.496	89.999	10430.684	59.896	0	67.138	0	59.888	0	0	67.957	41.504	78.724	XOM_R2OW SG MWD+IFR1+ MS
17100	89.496	89.999	10431.563	60.63	0	67.794	0	60.622	0	0	68.607	41.567	78.872	XOM_R2OW SG MWD+IFR1+ MS
17200	89.496	89.999	10432.442	61.365	0	68.453	0	61.357	0	0	69.261	41.63	79.015	XOM_R2OW SG MWD+IFR1+ MS
17300	89.496	89.999	10433.322	62.101	0	69.116	0	62.093	0	0	69.918	41.694	79.155	XOM_R2OW SG MWD+IFR1+ MS

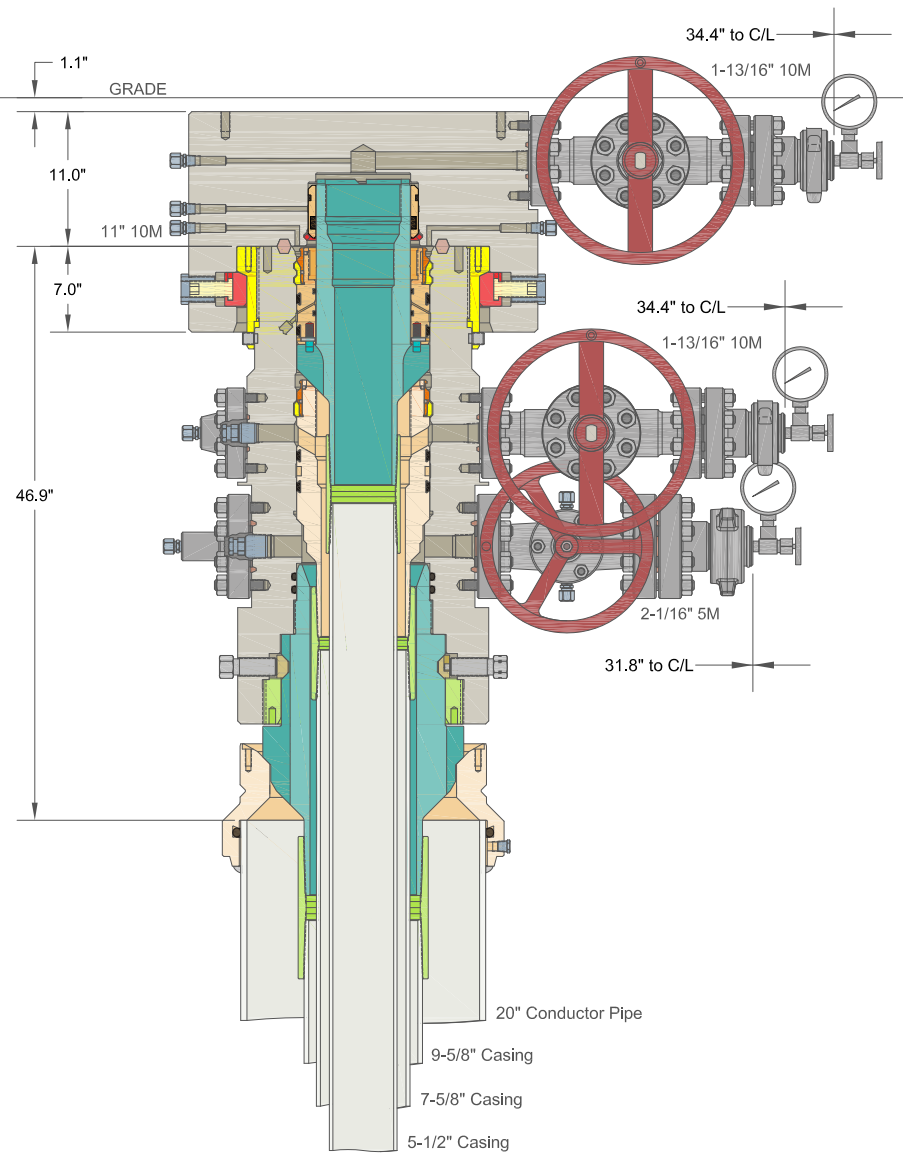
17400	89.496	89.999	10434.201	62.839	0	69.782	0	62.831	0	0	70.579	41.759	79.291	XOM_R2OW SG MWD+IFR1+ MS
17500	89.496	89.999	10435.08	63.577	0	70.452	0	63.569	0	0	71.242	41.825	79.425	XOM_R2OW SG MWD+IFR1+ MS
17600	89.496	89.999	10435.96	64.317	0	71.124	0	64.309	0	0	71.909	41.892	79.555	XOM_R2OW SG MWD+IFR1+ MS
17700	89.496	89.999	10436.839	65.058	0	71.799	0	65.05	0	0	72.578	41.96	79.682	XOM_R2OW SG MWD+IFR1+ MS
17800	89.496	89.999	10437.718	65.799	0	72.478	0	65.792	0	0	73.251	42.029	79.806	XOM_R2OW SG MWD+IFR1+ MS
17900	89.496	89.999	10438.597	66.542	0	73.159	0	66.534	0	0	73.926	42.099	79.927	XOM_R2OW SG MWD+IFR1+ MS
18000	89.496	89.999	10439.477	67.286	0	73.842	0	67.278	0	0	74.605	42.169	80.045	XOM_R2OW SG MWD+IFR1+ MS
18100	89.496	89.999	10440.356	68.03	0	74.529	0	68.023	0	0	75.286	42.24	80.161	XOM_R2OW SG MWD+IFR1+ MS
18200	89.496	89.999	10441.235	68.776	0	75.218	0	68.768	0	0	75.969	42.313	80.274	XOM_R2OW SG MWD+IFR1+ MS
18300	89.496	89.999	10442.115	69.522	0	75.909	0	69.515	0	0	76.655	42.386	80.385	XOM_R2OW SG MWD+IFR1+ MS
18400	89.496	89.999	10442.994	70.269	0	76.603	0	70.262	0	0	77.344	42.46	80.493	XOM_R2OW SG MWD+IFR1+ MS
18500	89.496	89.999	10443.873	71.017	0	77.3	0	71.01	0	0	78.035	42.535	80.599	XOM_R2OW SG MWD+IFR1+ MS
18600	89.496	89.999	10444.752	71.766	0	77.998	0	71.759	0	0	78.728	42.61	80.703	XOM_R2OW SG MWD+IFR1+ MS

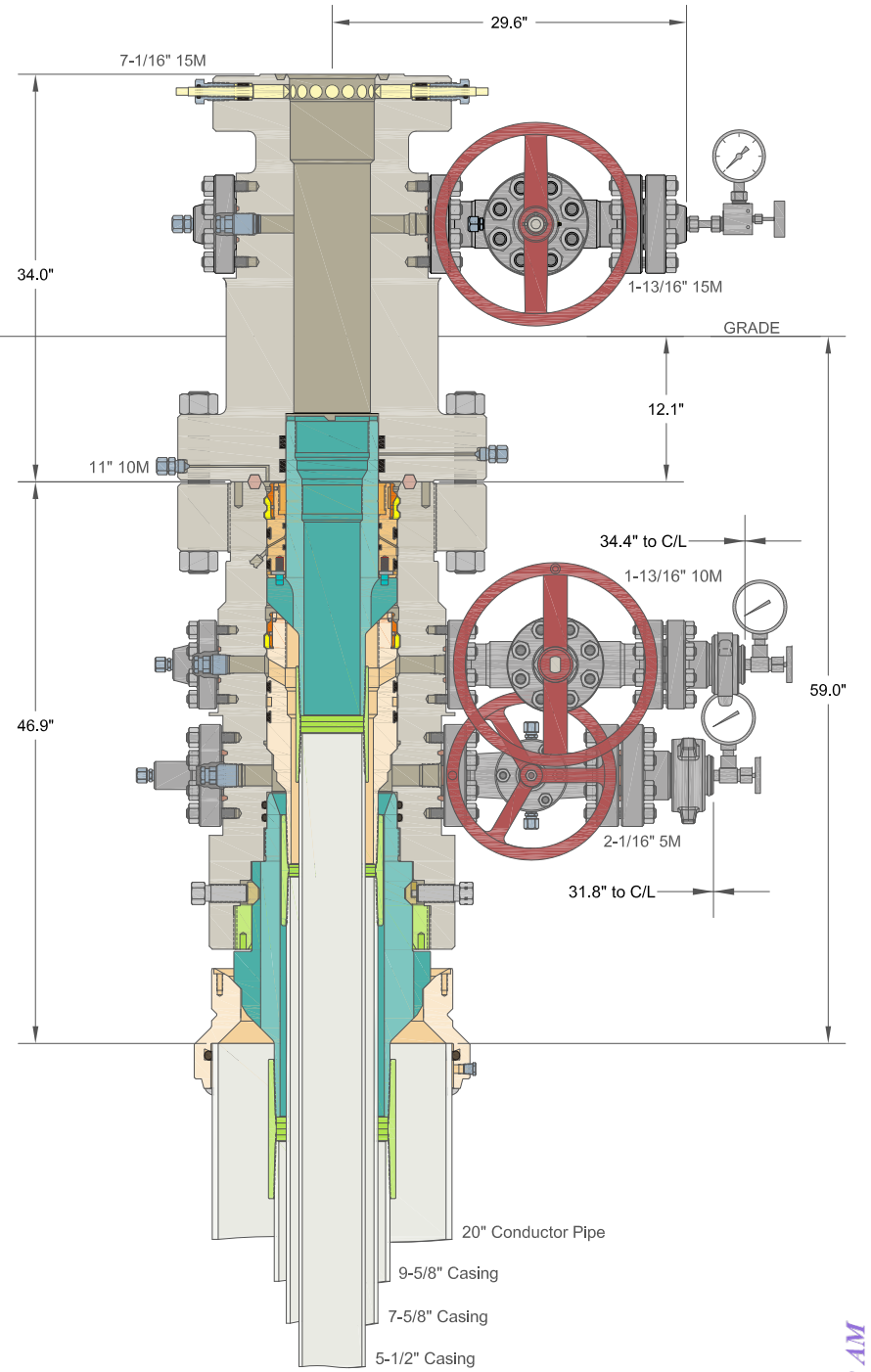
18700	89.496	89.999	10445.632	72.515	0	78.699	0	72.509	0	0	79.424	42.687	80.804	XOM_R2OW SG MWD+IFR1+ MS
18800	89.496	89.999	10446.511	73.266	0	79.402	0	73.259	0	0	80.121	42.764	80.904	XOM_R2OW SG MWD+IFR1+ MS
18900	89.496	89.999	10447.39	74.017	0	80.108	0	74.01	0	0	80.822	42.843	81.001	XOM_R2OW SG MWD+IFR1+ MS
19000	89.496	89.999	10448.27	74.768	0	80.815	0	74.762	0	0	81.524	42.922	81.096	XOM_R2OW SG MWD+IFR1+ MS
19100	89.496	89.999	10449.149	75.521	0	81.524	0	75.514	0	0	82.228	43.001	81.189	XOM_R2OW SG MWD+IFR1+ MS
19200	89.496	89.999	10450.028	76.274	0	82.236	0	76.267	0	0	82.934	43.082	81.281	XOM_R2OW SG MWD+IFR1+ MS
19300	89.496	89.999	10450.907	77.027	0	82.949	0	77.021	0	0	83.642	43.163	81.37	XOM_R2OW SG MWD+IFR1+ MS
19311.1	89.496	89.999	10451	77.111	0	83.028	0	77.104	0	0	83.721	43.172	81.38	XOM_R2OW SG MWD+IFR1+ MS

Plan Targets	JRU DI 8 EAGLE 705H				
Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 3	11122.06	492985.7	653991.6	7040	RECTANGLE
BHL 3	19311.1	492985.82	662180.32	7112	RECTANGLE









ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead
With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head
And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers

XTO ENERGY INC
ICARUS PAD

DRAWN	DLE	18JAN21
APPRV		
DRAWING NO.	HBE0000479	

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating
WELL NAME & NO.:	James Ranch Unit DI 8 Eagle 705H
LOCATION:	Sec 36-22S-30E-NMP
COUNTY:	Eddy County, NM

Updated COAs per Sundry 2667194 *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
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 276729

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 276729
	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