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

Sundry Print Report

09/06/2022

Well Name: BIG EDDY UNIT BB HUX	**Well Location:** T20S / R32E / SEC 22 / SWSW /	**County or Parish/State:**
Well Number: 200H	**Type of Well:** OIL WELL	**Allottee or Tribe Name:**
Lease Number: NMNM033955	**Unit or CA Name:** BIG EDDY	**Unit or CA Number:** NMNM68294X
US Well Number:	**Well Status:** Approved Application for Permit to Drill	**Operator:** XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2686813

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/11/2022

Time Sundry Submitted: 01:29

Date proposed operation will begin: 08/20/2022

Procedure Description: **Surface Location Move, Casing/Cement, Drilling Variance Changes XTO Permian Operating, LLC requests permission to make the following changes to the original APD: No Additional Surface Disturbance Change SHL fr/1350’FSL & 520’FWL to 290’FSL & 670’FWL. Well Moved Quarter-Quarter as Permitted But is Located on the Same Drill Island Well Moved into Slot Included on Original EA Well List: Originally permitted in Slot A1, Now in Slot O5 Total SHL Move: 1060’ South & 150’ East SHL change requested to optimize well pad layout, drilling efficiencies, and for safety purposes. Bottom Hole/Take Point Changes fr/1980’FNL & 50’FWL to 660’FSL & 50’FWL Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan Multibowl Diagram

NOI Attachments

Procedure Description

Hux_200H_Attachments_20220811132907.pdf

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Conditions of Approval

Additional

Sec_22_20S_32E_NMP_268613_Big_Eddy_Unit_BB_Hux_200H_Eddy_NMNM33955_XTO_13_22_44804_Allison_Morency_20220831130520.pdf

Sec_22_20S_32E_NMP_268613_Big_Eddy_Unit_BB_Hux_200H_Eddy_NMNM33955_XTO_COAs_20220831130520.pdf

Operator

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

Operator Electronic Signature: STEPHANIE RABADUE **Signed on:** AUG 11, 2022 01:29 PM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Coordinator

Street Address: 500 W. Illinois St, Ste 100

City: Midland **State:** TX

Phone: (432) 620-6714

Email address: STEPHANIE.RABADUE@EXXONMOBIL.COM

Field

Representative Name:

Street Address:

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

Phone:

Email address:

BLM Point of Contact

BLM POC Name: CHRISTOPHER WALLS **BLM POC Title:** Petroleum Engineer

BLM POC Phone: 5752342234 **BLM POC Email Address:** cwalls@blm.gov

Disposition: Approved **Disposition Date:** 09/02/2022

Signature: Chris Walls

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
30-025-50439	53560	Salt Lake; Bone Spring

[4] Property Code	[5] Property Name	[6] Well Number
	Big Eddy Unit DI BB Hux	200H

[7] OGRID No.	[8] Operator Name	[9] Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,529'

[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
M	22	20 S	32 E		290	SOUTH	670	WEST	LEA

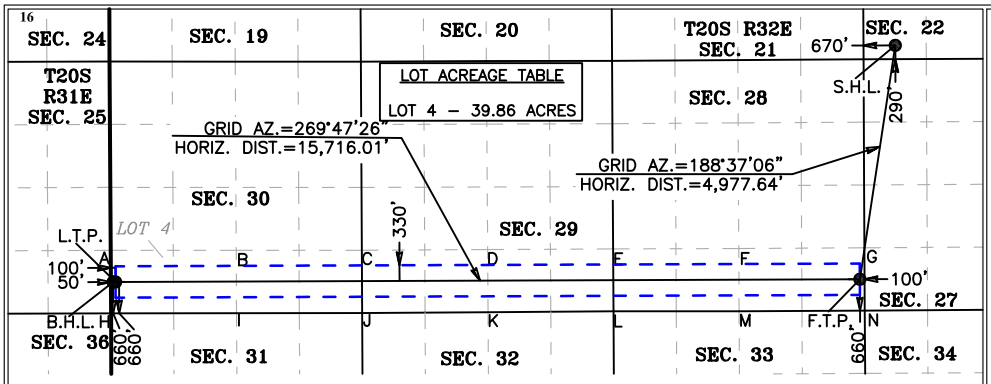
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	30	20 S	32 E		660	SOUTH	50	WEST	LEA

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
479.86			

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 = 565,115.9	Y = 560,137.1	Y = 565,054.3	Y = 560,075.4
X = 717,843.1	X = 701,431.3	X = 676,663.3	X = 660,251.5
LAT. = 32.552255 °N	LAT. = 32.538802 °N	LAT. = 32.552135 °N	LAT. = 32.538681 °N
LONG. = 103.760482 °W	LONG. = 103.813824 °W	LONG. = 103.759984 °W	LONG. = 103.813324 °W
FTP (NAD83 NME)	**BHL (NAD83 NME)**	**FTP (NAD27 NME)**	**BHL (NAD27 NME)**
Y = 560,194.5	Y = 560,137.0	Y = 560,132.9	Y = 560,075.3
X = 717,097.2	X = 701,381.3	X = 675,917.2	X = 660,201.5
LAT. = 32.538739 °N	LAT. = 32.538802 °N	LAT. = 32.538618 °N	LAT. = 32.538681 °N
LONG. = 103.762989 °W	LONG. = 103.813986 °W	LONG. = 103.762491 °W	LONG. = 103.813486 °W

CORNER COORDINATES (NAD83 NME)		CORNER COORDINATES (NAD27 NME)	
A - Y = 560,802.6 N ,	X = 701,327.2 E	A - Y = 560,741.0 N ,	X = 660,147.5 E
B - Y = 560,804.0 N ,	X = 703,969.9 E	B - Y = 560,742.3 N ,	X = 662,790.2 E
C - Y = 560,804.7 N ,	X = 706,614.0 E	C - Y = 560,743.1 N ,	X = 665,434.2 E
D - Y = 560,818.6 N ,	X = 709,262.4 E	D - Y = 560,756.9 N ,	X = 668,082.6 E
E - Y = 560,832.9 N ,	X = 711,904.1 E	E - Y = 560,771.3 N ,	X = 670,724.2 E
F - Y = 560,841.0 N ,	X = 714,548.4 E	F - Y = 560,779.5 N ,	X = 673,368.5 E
G - Y = 560,856.6 N ,	X = 717,193.9 E	G - Y = 560,795.0 N ,	X = 676,014.0 E
H - Y = 559,476.9 N ,	X = 701,335.3 E	H - Y = 559,415.3 N ,	X = 660,155.5 E
I - Y = 559,480.6 N ,	X = 703,976.8 E	I - Y = 559,418.9 N ,	X = 662,797.0 E
J - Y = 559,483.1 N ,	X = 706,620.5 E	J - Y = 559,421.5 N ,	X = 665,440.7 E
K - Y = 559,501.3 N ,	X = 709,271.4 E	K - Y = 559,439.7 N ,	X = 668,091.5 E
L - Y = 559,520.6 N ,	X = 711,911.8 E	L - Y = 559,459.0 N ,	X = 670,731.9 E
M - Y = 559,520.4 N ,	X = 714,555.1 E	M - Y = 559,458.8 N ,	X = 673,375.1 E
N - Y = 559,535.0 N ,	X = 717,200.4 E	N - Y = 559,473.5 N ,	X = 676,020.4 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 05/15/2022
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.

3-9-2022
Date of Survey

Signatue and Seal of Professional Surveyor:

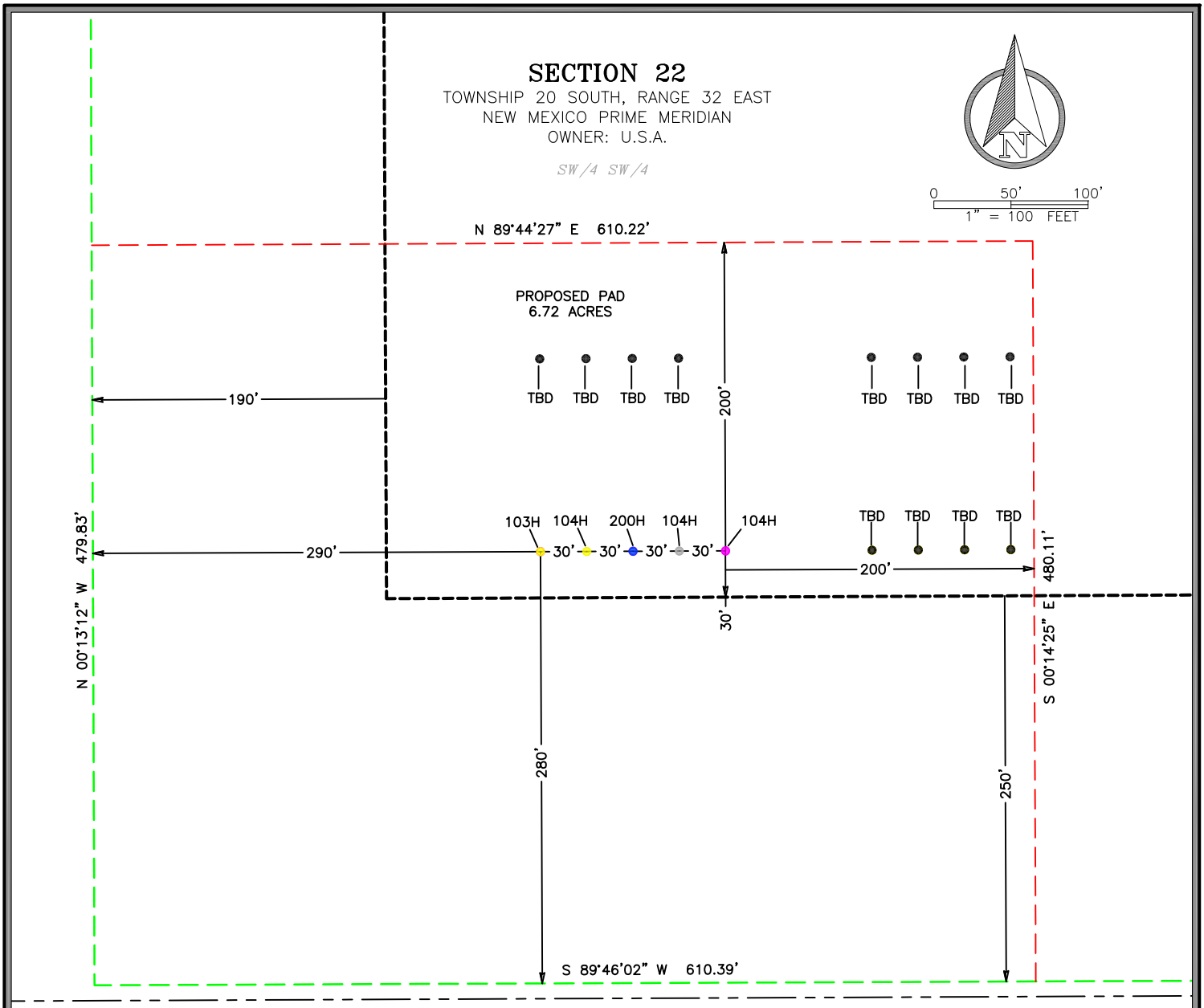
MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

MARK DILLON HARP 23786
Certificate Number AW 2019061791

SECTION 22

TOWNSHIP 20 SOUTH, RANGE 32 EAST
NEW MEXICO PRIME MERIDIAN
OWNER: U.S.A.

SW/4 SW/4



NOTE:

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

DIRECTIONS TO THIS LOCATION:

FROM THE INTERSECTION OF HOBBS HIGHWAY (U.S. HWY 62) AND N.M. 243 HEAD SOUTHWEST ON HOBBS HIGHWAY. GO APPROX. 1.5 MILES AND TURN RIGHT (NORTHWEST) ON A GRAVEL RD. GO APPROX. 0.9 MILES, THE LOCATION IS TO THE NORTH.

LEGEND

- PROPOSED PAD
- PROPOSED DRILLING ISLAND
- PROPOSED PAD FALL OFF
- SECTION LINE

WELL NAMES

- JABBA
- EMPIRE
- GRIEVOUS
- HUX
- FUTURE WELL

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.

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

MARK DILLON HARP NEW MEXICO 23786 PROFESSIONAL SURVEYOR

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

BIG EDDY UNIT BB PROPOSED PAD
LOCATED 625 FEET FROM THE WEST LINE
AND 250 FEET FROM THE SOUTH LINE OF
SECTION 22, TOWNSHIP 20 SOUTH, RANGE 32
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

DATE:	07-05-2022	PROJECT NO:	2017111944
DRAWN BY:	LM	SCALE:	1" = 100'
CHECKED BY:	DH	SHEET:	1 OF 1
FIELD CREW:	RE	REVISION:	0

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

XTO Energy Inc.
Big Eddy Unit Blue Bird Hux 200H
Projected TD: 27609' MD / 9805' TVD
SHL: 290' FSL & 670' FWL , Section 22, T20S, R32E
BHL: 660' FSL & 50' FWL , Section 30, T20S, R32E
Lea 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	966'	Water
Top of Salt	1338'	Water
Base of Salt	2669'	Water
Capitan Reef	3003'	Water
Delaware	4985'	Water
Brushy Canyon	6126'	Water/Oil/Gas
Bone Spring	7732'	Water
1st Bone Spring Ss	8812'	Water/Oil/Gas
2nd Bone Spring Ss	9451'	Water/Oil/Gas
Target/Land Curve	9805'	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 18.625 inch casing @ 1066' (272' above the salt) and circulating cement back to surface. The salt will be isolated by setting 13.375 inch casing at 2769' and circulating cement to surface. The second intermediate will isolate the Capitan Reef from the salt down to the next casing seat by setting 9.625 inch casing at 5035' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 27609 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 2928 feet; >50' above the Capitan Reef) per Potash regulations.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
24	0' – 1066'	18.625	87.5	J-55	BTC	New	2.71	1.31	14.25
17.5	0' – 2769'	13.375	54.5	J-55	BTC	New	2.19	1.34	5.65
12.25	0' – 2869'	9.625	40	HC P-110	BTC	New	2.94	3.15	6.26
12.25	2869' – 5035'	9.625	40	HC L-80	BTC	New	2.14	3.05	10.57
8.5	0' – 4935'	5.5	20	RY P-110	Semi-Premium	New	1.05	4.55	1.84
8.5	4935' - 27609'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.29	2.01

· 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
· 13.375 Collapse analyzed using 50% evacuation based on regional experience.
· 9.625 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 18-5/8" 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 9-5/8" casing per BLM Onshore Order 2

· Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 18.625, 87.5 New BTC, J-55 casing to be set at +/- 1066'

Lead: 1340 sxs Class C (mixed at 12.8 ppg, 1.95 ft3/sx, 10.93 gal/sx water)
Tail: 550 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: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 2769'

Lead: 1750 sxs Class C (mixed at 12.9 ppg, 1.95 ft3/sx, 10.93 gal/sx water)
Tail: 310 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: Surface
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 9.625, 40 New casing to be set at +/- 5035'
1st Stage
Optional Lead: 1250 sxs Class C (mixed at 10.5 ppg, 2.37 ft3/sx, 12.78 gal/sx water)
TOC: 0
Tail: 140 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
TOC: 4735
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage Bradenhead (if needed)
Optional Tail: 1220 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 the option to pump a two stage cement job on the 9-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Capitan Reef (3003') and the second stage performed as a bradenhead squeeze with planned cement from the Capitan Reef 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 surface, 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 +/- 27609'

1st Stage

Lead: 470 sxs 50/50 POZ/Class C (mixed at 11.5 ppg, 2.6 ft3/sx, 14.84 gal/sx water) Top of Cement: 6126 feet
Tail: 2930 sxs 50/50 POZ/Class H (mixed at 13.2 ppg, 1.51 ft3/sx, 7.21 gal/sx water) Top of Cement: 10771 feet
Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

2nd Stage Bradenhead (if needed)

Optional Tail: 1100 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)
Top of Cement: 2928
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests the option to pump a two stage cement job on the 5-1/2" production casing string with the first stage being pumped conventionally with the calculated top of cement at the Brushy Canyon (4985') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to a depth dictated by the COA or current regulations.
A freshwater spacer will be pumped behind the cement to displace to the desired depth. A bradenhead squeeze will reduce channeling and allow for a more accurate placement of cement, while leaving an un-cemented portion of the annulus for pressure monitoring during completions operations.

XTO requests the ability to conduct the bradenhead squeeze offline.

XTO requests to pump an Optional Lead & Tail, if well conditions dictate, in an attempt to bring top of cement as dictated by the COA or current regulations. If cement reaches this depth, the BLM will be notified and the second stage bradenhead squeeze will be negated.

Lead: 1570 sxs 50/50 POZ/Class C (mixed at 11.5 ppg, 2.6 ft3/sx, 14.84 gal/sx water) Top of Cement: 2928 feet
Tail: 2930 sxs 50/50 POZ/Class H (mixed at 13.2 ppg, 1.51 ft3/sx, 7.21 gal/sx water) Top of Cement: 10771 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 18.625 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 0 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 18.625, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling up on the 13.375, 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' - 1066'	24	FW/Native	8.7-9.2	35-40	NC
1066' - 2769'	17.5	Brine	10-10.5	30-32	NC
2769' to 5035'	12.25	FW / Cut Brine	9-9.5	30-32	NC
5035' to 27609'	8.5	OBM	9.5-10	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 18-5/8" surface casing with brine solution. A 10 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 18.625 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 4844 psi.

10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after Remuda 25 State drilling is completed and BLM approval. Move in operations and drilling is expected to take 40 days.

Well Plan Report - BEU BB HUX 200H

Measured Depth:	27609.00 ft
TVD RKB:	9805.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	565055.42 ft
Easting:	676645.46 ft
RKB:	3543.00 ft
Ground Level:	3513.00 ft
North Reference:	Grid
Convergence Angle:	0.31 Deg
Site:	BlueBird
Slot:	BEU BB HUX 200H

Plan Sections BEU BB HUX 200H

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	0	0	0	0	0	0	0	

2750	0	0	2750	0	0	0	0	0	
4712.51	39.25	180.38	4562.57	-646.3	-4.36	2	0	2	
10770.79	39.25	180.38	9254.06	-4479.34	-30.18	0	0	0	
11891.03	90	269.78	9805	-4932.15	-744.65	4.53	7.98	8	FTP 1
27609.12	90	269.78	9805	-4991.46	-16462.63	0	0	0	BHL 1

Position Uncertainty	BEU BB Jabba 105/HUX 200H

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	0	0	0	0	0	0	2.297	0	0	0	0	0	XOM_R2OW SG MWD+IFR1+ MS
100	0	0	100	0.358	0	0.358	0	2.299	0	0	0.358	0.358	0	XOM_R2OW SG MWD+IFR1+ MS
200	0	0	200	0.717	0	0.717	0	2.307	0	0	0.717	0.717	0	XOM_R2OW SG MWD+IFR1+ MS
300	0	0	300	1.075	0	1.075	0	2.321	0	0	1.075	1.075	0	XOM_R2OW SG MWD+IFR1+ MS
400	0	0	400	1.434	0	1.434	0	2.34	0	0	1.434	1.434	0	XOM_R2OW SG MWD+IFR1+ MS
500	0	0	500	1.792	0	1.792	0	2.364	0	0	1.792	1.792	0	XOM_R2OW SG MWD+IFR1+ MS
600	0	0	600	2.151	0	2.151	0	2.393	0	0	2.151	2.151	0	XOM_R2OW SG MWD+IFR1+ MS

700	0	0	700	2.509	0	2.509	0	2.428	0	0	2.509	2.509	0	XOM_R2OW SG 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	3.225	0	3.225	0	2.511	0	0	3.225	3.225	0	XOM_R2OW SG MWD+IFR1+ MS
1000	0	0	1000	3.585	0	3.585	0	2.559	0	0	3.585	3.585	0	XOM_R2OW SG MWD+IFR1+ MS
1100	0	0	1100	3.942	0	3.942	0	2.613	0	0	3.942	3.942	0	XOM_R2OW SG MWD+IFR1+ MS
1200	0	0	1200	4.301	0	4.301	0	2.67	0	0	4.301	4.301	0	XOM_R2OW SG MWD+IFR1+ MS
1300	0	0	1300	4.659	0	4.659	0	2.731	0	0	4.659	4.659	0	XOM_R2OW SG MWD+IFR1+ MS
1400	0	0	1400	5.018	0	5.018	0	2.797	0	0	5.018	5.018	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	5.735	0	5.735	0	2.939	0	0	5.735	5.735	0	XOM_R2OW SG MWD+IFR1+ MS
1700	0	0	1700	6.093	0	6.093	0	3.015	0	0	6.093	6.093	0	XOM_R2OW SG MWD+IFR1+ MS
1800	0	0	1800	6.452	0	6.452	0	3.095	0	0	6.452	6.452	0	XOM_R2OW SG MWD+IFR1+ MS

1900	0	0	1900	6.81	0	6.81	0	3.178	0	0	6.81	6.81	0	XOM_R2OWSG MWD+IFR1+MS
2000	0	0	2000	7.169	0	7.169	0	3.265	0	0	7.169	7.169	0	XOM_R2OWSG MWD+IFR1+MS
2100	0	0	2100	7.527	0	7.527	0	3.354	0	0	7.527	7.527	0	XOM_R2OWSG MWD+IFR1+MS
2200	0	0	2200	7.886	0	7.886	0	3.447	0	0	7.886	7.886	0	XOM_R2OWSG MWD+IFR1+MS
2300	0	0	2300	8.244	0	8.244	0	3.544	0	0	8.244	8.244	0	XOM_R2OWSG MWD+IFR1+MS
2400	0	0	2400	8.603	0	8.603	0	3.643	0	0	8.603	8.603	0	XOM_R2OWSG MWD+IFR1+MS
2500	0	0	2500	8.962	0	8.962	0	3.744	0	0	8.962	8.962	0	XOM_R2OWSG MWD+IFR1+MS
2600	0	0	2600	9.32	0	9.32	0	3.848	0	0	9.32	9.32	0	XOM_R2OWSG MWD+IFR1+MS
2700	0	0	2700	9.678	0	9.678	0	3.956	0	0	9.678	9.678	0	XOM_R2OWSG MWD+IFR1+MS
2750	0	0	2750	9.857	0	9.857	0	4.01	0	0	9.857	9.857	0	XOM_R2OWSG MWD+IFR1+MS
2800	1	180.3	2799.997	10.024	0	10.025	0	4.066	0	0	10.025	10.025	0	XOM_R2OWSG MWD+IFR1+MS
2900	3	180.3	2899.931	10.337	0	10.349	0	4.177	0	0	10.349	10.349	0	XOM_R2OWSG MWD+IFR1+MS

3000	4.999	180.3	2999.683	10.638	0	10.672	0	4.291	0	0	10.672	10.672	0	XOM_R2OW SG MWD+IFR1+ MS
3100	7	180.3	3099.13	10.932	0	11	0	4.406	0	0	11	11	0	XOM_R2OW SG MWD+IFR1+ MS
3200	9	180.3	3198.152	11.215	0	11.331	0	4.521	0	0	11.331	11.327	0	XOM_R2OW SG MWD+IFR1+ MS
3300	11	180.3	3296.628	11.491	0	11.662	0	4.639	0	0	11.662	11.658	0	XOM_R2OW SG MWD+IFR1+ MS
3400	13	180.3	3394.437	11.752	0	11.992	0	4.758	0	0	11.992	11.983	0	XOM_R2OW SG MWD+IFR1+ MS
3500	15	180.3	3491.462	12.006	0	12.325	0	4.881	0	0	12.325	12.313	0.241	XOM_R2OW SG MWD+IFR1+ MS
3600	16.99	180.3	3587.583	12.246	0	12.661	0	5.007	0	0	12.661	12.637	0.213	XOM_R2OW SG MWD+IFR1+ MS
3700	19	180.3	3682.684	12.48	0	12.996	0	5.137	0	0	12.996	12.965	0.255	XOM_R2OW SG MWD+IFR1+ MS
3800	21	180.3	3776.649	12.704	0	13.334	0	5.272	0	0	13.334	13.293	0.279	XOM_R2OW SG MWD+IFR1+ MS
3900	22.99	180.3	3869.362	12.921	0	13.675	0	5.412	0	0	13.675	13.62	0.292	XOM_R2OW SG MWD+IFR1+ MS
4000	25	180.3	3960.712	13.128	0	14.018	0	5.56	0	0	14.018	13.946	0.303	XOM_R2OW SG MWD+IFR1+ MS
4100	27	180.3	4050.587	13.329	0	14.363	0	5.716	0	0	14.363	14.272	0.314	XOM_R2OW SG MWD+IFR1+ MS

4200	28.99	180.3	4138.877	13.525	0	14.711	0	5.881	0	0	14.711	14.598	0.326	XOM_R2OW SG MWD+IFR1+ MS
4300	30.99	180.3	4225.475	13.715	0	15.06	0	6.058	0	0	15.06	14.923	0.34	XOM_R2OW SG MWD+IFR1+ MS
4400	33	180.3	4310.276	13.9	0	15.418	0	6.247	0	0	15.418	15.248	0.342	XOM_R2OW SG MWD+IFR1+ MS
4500	35	180.3	4393.175	14.082	0	15.773	0	6.451	0	0	15.773	15.572	0.356	XOM_R2OW SG MWD+IFR1+ MS
4600	37	180.3	4474.073	14.261	0	16.137	0	6.67	0	0	16.137	15.893	0.358	XOM_R2OW SG MWD+IFR1+ MS
4700	39	180.3	4552.87	14.438	0	16.502	0	6.907	0	0	16.502	16.211	0.364	XOM_R2OW SG MWD+IFR1+ MS
4712.5	39.25	180.3	4562.572	14.46	0	16.55	0	6.932	0	0	16.55	16.254	0.362	XOM_R2OW SG MWD+IFR1+ MS
4800	39.25	180.3	4630.326	14.828	0	16.873	0	7.163	0	0	16.873	16.529	0.367	XOM_R2OW SG MWD+IFR1+ MS
4900	39.25	180.3	4707.766	15.258	0	17.251	0	7.44	0	0	17.251	16.849	0.37	XOM_R2OW SG MWD+IFR1+ MS
5000	39.25	180.3	4785.205	15.698	0	17.638	0	7.727	0	0	17.638	17.178	0.372	XOM_R2OW SG MWD+IFR1+ MS
5100	39.25	180.3	4862.644	16.145	0	18.028	0	8.022	0	0	18.028	17.51	0.373	XOM_R2OW SG MWD+IFR1+ MS
5200	39.25	180.3	4940.083	16.601	0	18.423	0	8.326	0	0	18.423	17.849	0.375	XOM_R2OW SG MWD+IFR1+ MS

5300	39.25	180.3	5017.522	17.063	0	18.823	0	8.638	0	0	18.823	18.193	0.377	XOM_R2OW SG MWD+IFR1+ MS
5400	39.25	180.3	5094.961	17.532	0	19.228	0	8.956	0	0	19.228	18.542	0.379	XOM_R2OW SG MWD+IFR1+ MS
5500	39.25	180.3	5172.4	18.007	0	19.637	0	9.281	0	0	19.637	18.894	0.38	XOM_R2OW SG MWD+IFR1+ MS
5600	39.25	180.3	5249.84	18.487	0	20.05	0	9.61	0	0	20.05	19.254	0.381	XOM_R2OW SG MWD+IFR1+ MS
5700	39.25	180.3	5327.279	18.973	0	20.467	0	9.945	0	0	20.467	19.616	0.383	XOM_R2OW SG MWD+IFR1+ MS
5800	39.25	180.3	5404.718	19.463	0	20.888	0	10.281	0	0	20.888	19.982	0.384	XOM_R2OW SG MWD+IFR1+ MS
5900	39.25	180.3	5482.157	19.956	0	21.314	0	10.625	0	0	21.314	20.352	0.383	XOM_R2OW SG MWD+IFR1+ MS
6000	39.25	180.3	5559.596	20.455	0	21.742	0	10.973	0	0	21.742	20.727	0.385	XOM_R2OW SG MWD+IFR1+ MS
6100	39.25	180.3	5637.035	20.959	0	22.172	0	11.327	0	0	22.172	21.104	0.385	XOM_R2OW SG MWD+IFR1+ MS
6200	39.25	180.3	5714.474	21.463	0	22.605	0	11.679	0	0	22.605	21.485	0.386	XOM_R2OW SG MWD+IFR1+ MS
6300	39.25	180.3	5791.914	21.973	0	23.041	0	12.037	0	0	23.041	21.87	0.387	XOM_R2OW SG MWD+IFR1+ MS
6400	39.25	180.3	5869.353	22.486	0	23.48	0	12.398	0	0	23.48	22.258	0.388	XOM_R2OW SG MWD+IFR1+ MS

6500	39.25	180.3	5946.792	23.001	0	23.923	0	12.759	0	0	23.923	22.647	0.388	XOM_R2OW SG MWD+IFR1+ MS
6600	39.25	180.3	6024.231	23.518	0	24.366	0	13.126	0	0	24.366	23.039	0.388	XOM_R2OW SG MWD+IFR1+ MS
6700	39.25	180.3	6101.67	24.038	0	24.811	0	13.494	0	0	24.811	23.435	0.389	XOM_R2OW SG MWD+IFR1+ MS
6800	39.25	180.3	6179.109	24.561	0	25.259	0	13.864	0	0	25.259	23.833	0.39	XOM_R2OW SG MWD+IFR1+ MS
6900	39.25	180.3	6256.548	25.086	0	25.708	0	14.237	0	0	25.708	24.234	0.391	XOM_R2OW SG MWD+IFR1+ MS
7000	39.25	180.3	6333.987	25.613	0	26.159	0	14.612	0	0	26.159	24.637	0.391	XOM_R2OW SG MWD+IFR1+ MS
7100	39.25	180.3	6411.427	26.142	0	26.614	0	14.987	0	0	26.614	25.042	0.391	XOM_R2OW SG MWD+IFR1+ MS
7200	39.25	180.3	6488.866	26.673	0	27.069	0	15.366	0	0	27.069	25.45	0.392	XOM_R2OW SG MWD+IFR1+ MS
7300	39.25	180.3	6566.305	27.205	0	27.525	0	15.745	0	0	27.525	25.859	0.392	XOM_R2OW SG MWD+IFR1+ MS
7400	39.25	180.3	6643.744	27.738	0	27.982	0	16.128	0	0	27.982	26.27	0.393	XOM_R2OW SG MWD+IFR1+ MS
7500	39.25	180.3	6721.183	28.274	0	28.441	0	16.511	0	0	28.441	26.683	0.393	XOM_R2OW SG MWD+IFR1+ MS
7600	39.25	180.3	6798.622	28.812	0	28.903	0	16.894	0	0	28.903	27.1	0.394	XOM_R2OW SG MWD+IFR1+ MS

7700	39.25	180.3	6876.061	29.349	0	29.365	0	17.28	0	0	29.365	27.515	0.394	XOM_R2OW SG MWD+IFR1+ MS
7800	39.25	180.3	6953.501	29.89	0	29.828	0	17.669	0	0	29.828	27.936	0.395	XOM_R2OW SG MWD+IFR1+ MS
7900	39.25	180.3	7030.94	30.43	0	30.292	0	18.058	0	0	30.292	28.355	0.395	XOM_R2OW SG MWD+IFR1+ MS
8000	39.25	180.3	7108.379	30.972	0	30.757	0	18.447	0	0	30.757	28.777	0.395	XOM_R2OW SG MWD+IFR1+ MS
8100	39.25	180.3	7185.818	31.515	0	31.225	0	18.839	0	0	31.225	29.201	0.395	XOM_R2OW SG MWD+IFR1+ MS
8200	39.25	180.3	7263.257	32.059	0	31.686	0	19.233	0	0	31.686	29.626	0.397	XOM_R2OW SG MWD+IFR1+ MS
8300	39.25	180.3	7340.696	32.604	0	32.156	0	19.627	0	0	32.156	30.053	0.397	XOM_R2OW SG MWD+IFR1+ MS
8400	39.25	180.3	7418.135	33.148	0	32.619	0	20.02	0	0	32.619	30.481	0.399	XOM_R2OW SG MWD+IFR1+ MS
8500	39.25	180.3	7495.575	33.696	0	33.091	0	20.418	0	0	33.091	30.911	0.399	XOM_R2OW SG MWD+IFR1+ MS
8600	39.25	180.3	7573.014	34.244	0	33.571	0	20.816	0	0	33.571	31.342	0.398	XOM_R2OW SG MWD+IFR1+ MS
8700	39.25	180.3	7650.453	34.787	0	34.044	0	21.213	0	0	34.044	31.765	0.396	XOM_R2OW SG MWD+IFR1+ MS
8800	39.25	180.3	7727.892	35.338	0	34.511	0	21.612	0	0	34.511	32.202	0.398	XOM_R2OW SG MWD+IFR1+ MS

8900	39.25	180.3	7805.331	35.886	0	34.986	0	22.014	0	0	34.986	32.634	0.398	XOM_R2OW SG MWD+IFR1+ MS
9000	39.25	180.3	7882.77	36.44	0	35.454	0	22.417	0	0	35.454	33.076	0.4	XOM_R2OW SG MWD+IFR1+ MS
9100	39.25	180.3	7960.209	36.991	0	35.931	0	22.819	0	0	35.931	33.511	0.4	XOM_R2OW SG MWD+IFR1+ MS
9200	39.25	180.3	8037.648	37.537	0	36.414	0	23.223	0	0	36.414	33.941	0.397	XOM_R2OW SG MWD+IFR1+ MS
9300	39.25	180.3	8115.088	38.089	0	36.892	0	23.628	0	0	36.892	34.38	0.398	XOM_R2OW SG MWD+IFR1+ MS
9400	39.25	180.3	8192.527	38.647	0	37.363	0	24.033	0	0	37.363	34.828	0.4	XOM_R2OW SG MWD+IFR1+ MS
9500	39.25	180.3	8269.966	39.202	0	37.842	0	24.442	0	0	37.842	35.27	0.4	XOM_R2OW SG MWD+IFR1+ MS
9600	39.25	180.3	8347.405	39.752	0	38.315	0	24.85	0	0	38.315	35.707	0.4	XOM_R2OW SG MWD+IFR1+ MS
9700	39.25	180.3	8424.844	40.308	0	38.794	0	25.259	0	0	38.794	36.152	0.4	XOM_R2OW SG MWD+IFR1+ MS
9800	39.25	180.3	8502.283	40.867	0	39.281	0	25.669	0	0	39.281	36.606	0.401	XOM_R2OW SG MWD+IFR1+ MS
9900	39.25	180.3	8579.722	41.424	0	39.762	0	26.081	0	0	39.762	37.054	0.401	XOM_R2OW SG MWD+IFR1+ MS
10000	39.25	180.3	8657.162	41.978	0	40.237	0	26.492	0	0	40.237	37.497	0.402	XOM_R2OW SG MWD+IFR1+ MS

10100	39.25	180.3	8734.601	42.536	0	40.719	0	26.905	0	0	40.719	37.947	0.402	XOM_R2OW SG MWD+IFR1+ MS
10200	39.25	180.3	8812.04	43.09	0	41.207	0	27.318	0	0	41.207	38.393	0.401	XOM_R2OW SG MWD+IFR1+ MS
10300	39.25	180.3	8889.479	43.651	0	41.677	0	27.734	0	0	41.677	38.846	0.403	XOM_R2OW SG MWD+IFR1+ MS
10400	39.25	180.3	8966.918	44.206	0	42.166	0	28.15	0	0	42.166	39.294	0.402	XOM_R2OW SG MWD+IFR1+ MS
10500	39.25	180.3	9044.357	44.767	0	42.65	0	28.567	0	0	42.65	39.749	0.403	XOM_R2OW SG MWD+IFR1+ MS
10600	39.25	180.3	9121.796	45.324	0	43.128	0	28.984	0	0	43.128	40.199	0.404	XOM_R2OW SG MWD+IFR1+ MS
10700	39.25	180.3	9199.235	45.878	0	43.612	0	29.404	0	0	43.612	40.645	0.403	XOM_R2OW SG MWD+IFR1+ MS
10770	39.25	180.3	9254.059	46.278	0	43.955	0	29.7	0	0	43.955	40.975	0.404	XOM_R2OW SG MWD+IFR1+ MS
10800	39.32	184	9276.665	46.426	0	44.091	0	29.823	0	0	44.102	41.109	0.396	XOM_R2OW SG MWD+IFR1+ MS
10900	40.45	196.4	9353.512	46.675	0	44.356	0	30.247	0	0	44.576	41.557	0.479	XOM_R2OW SG MWD+IFR1+ MS
11000	42.82	207.9	9428.351	46.497	0	44.424	0	30.679	0	0	45.045	41.988	0.719	XOM_R2OW SG MWD+IFR1+ MS
11100	46.23	218.2	9499.726	45.841	0	44.382	0	31.127	0	0	45.477	42.39	1.176	XOM_R2OW SG MWD+IFR1+ MS

11200	50.46	227.3	9566.248	44.71	0	44.328	0	31.596	0	0	45.884	42.763	1.879	XOM_R2OW SG MWD+IFR1+ MS
11300	55.32	235.3	9626.621	43.157	0	44.29	0	32.078	0	0	46.235	43.096	2.882	XOM_R2OW SG MWD+IFR1+ MS
11400	60.63	242.4	9679.672	41.336	0	44.28	0	32.604	0	0	46.546	43.376	4.22	XOM_R2OW SG MWD+IFR1+ MS
11500	66.28	248.7	9724.366	39.43	0	44.292	0	33.151	0	0	46.82	43.599	5.915	XOM_R2OW SG MWD+IFR1+ MS
11600	72.17	254.5	9759.834	37.644	0	44.311	0	33.719	0	0	47.03	43.774	8.067	XOM_R2OW SG MWD+IFR1+ MS
11700	78.22	259.9	9785.387	36.244	0	44.323	0	34.307	0	0	47.215	43.895	10.607	XOM_R2OW SG MWD+IFR1+ MS
11800	84.36	265.1	9800.526	35.473	0	44.307	0	34.914	0	0	47.371	43.955	13.499	XOM_R2OW SG MWD+IFR1+ MS
11891	90	269.7	9805	35.468	0	44.271	0	35.468	0	0	47.486	43.967	16.479	XOM_R2OW SG MWD+IFR1+ MS
11900	90	269.7	9805	35.525	0	44.271	0	35.525	0	0	47.506	43.956	16.712	XOM_R2OW SG MWD+IFR1+ MS
12000	90	269.7	9805	36.125	0	44.398	0	36.125	0	0	47.636	43.941	19.898	XOM_R2OW SG MWD+IFR1+ MS
12100	90	269.7	9805	36.742	0	44.523	0	36.742	0	0	47.795	43.905	22.75	XOM_R2OW SG MWD+IFR1+ MS
12200	90	269.7	9805	37.363	0	44.671	0	37.363	0	0	47.973	43.87	25.418	XOM_R2OW SG MWD+IFR1+ MS

12300	90	269.7	9805	38	0	44.841	0	38	0	0	48.171	43.836	27.916	XOM_R2OW SG MWD+IFR1+ MS
12400	90	269.7	9805	38.626	0	45.01	0	38.626	0	0	48.389	43.789	30.079	XOM_R2OW SG MWD+IFR1+ MS
12500	90	269.7	9805	39.268	0	45.201	0	39.268	0	0	48.617	43.742	32.167	XOM_R2OW SG MWD+IFR1+ MS
12600	90	269.7	9805	39.912	0	45.402	0	39.912	0	0	48.857	43.692	34.068	XOM_R2OW SG MWD+IFR1+ MS
12700	90	269.7	9805	40.571	0	45.624	0	40.571	0	0	49.112	43.646	35.861	XOM_R2OW SG MWD+IFR1+ MS
12800	90	269.7	9805	41.219	0	45.855	0	41.219	0	0	49.386	43.601	37.457	XOM_R2OW SG MWD+IFR1+ MS
12900	90	269.7	9805	41.881	0	46.097	0	41.881	0	0	49.663	43.55	38.972	XOM_R2OW SG MWD+IFR1+ MS
13000	90	269.7	9805	42.544	0	46.359	0	42.544	0	0	49.96	43.508	40.372	XOM_R2OW SG MWD+IFR1+ MS
13100	90	269.7	9805	43.22	0	46.63	0	43.22	0	0	50.26	43.462	41.711	XOM_R2OW SG MWD+IFR1+ MS
13200	90	269.7	9805	43.886	0	46.91	0	43.886	0	0	50.576	43.418	42.912	XOM_R2OW SG MWD+IFR1+ MS
13300	90	269.7	9805	44.565	0	47.209	0	44.565	0	0	50.904	43.38	44.071	XOM_R2OW SG MWD+IFR1+ MS
13400	90	269.7	9805	45.244	0	47.517	0	45.244	0	0	51.239	43.343	45.153	XOM_R2OW SG MWD+IFR1+ MS

13500	90	269.7	9805	45.924	0	47.834	0	45.924	0	0	51.582	43.304	46.167	XOM_R2OW SG MWD+IFR1+ MS
13600	90	269.7	9805	46.605	0	48.17	0	46.605	0	0	51.938	43.272	47.155	XOM_R2OW SG MWD+IFR1+ MS
13700	90	269.7	9805	47.297	0	48.513	0	47.297	0	0	52.301	43.239	48.083	XOM_R2OW SG MWD+IFR1+ MS
13800	90	269.7	9805	47.99	0	48.864	0	47.99	0	0	52.671	43.206	48.959	XOM_R2OW SG MWD+IFR1+ MS
13900	90	269.7	9805	48.683	0	49.233	0	48.683	0	0	53.053	43.179	49.816	XOM_R2OW SG MWD+IFR1+ MS
14000	90	269.7	9805	49.376	0	49.609	0	49.376	0	0	53.441	43.151	50.628	XOM_R2OW SG MWD+IFR1+ MS
14100	90	269.7	9805	50.08	0	49.993	0	50.08	0	0	53.839	43.131	51.37	XOM_R2OW SG MWD+IFR1+ MS
14200	90	269.7	9805	50.784	0	50.393	0	50.784	0	0	54.246	43.109	52.128	XOM_R2OW SG MWD+IFR1+ MS
14300	90	269.7	9805	51.488	0	50.801	0	51.488	0	0	54.658	43.087	52.849	XOM_R2OW SG MWD+IFR1+ MS
14400	90	269.7	9805	52.192	0	51.214	0	52.192	0	0	55.079	43.073	53.512	XOM_R2OW SG MWD+IFR1+ MS
14500	90	269.7	9805	52.906	0	51.644	0	52.906	0	0	55.512	43.063	54.167	XOM_R2OW SG MWD+IFR1+ MS
14600	90	269.7	9805	53.61	0	52.08	0	53.61	0	0	55.946	43.046	54.815	XOM_R2OW SG MWD+IFR1+ MS

14700	90	269.7	9805	54.323	0	52.521	0	54.323	0	0	56.39	43.036	55.412	XOM_R2OW SG MWD+IFR1+ MS
14800	90	269.7	9805	55.045	0	52.969	0	55.045	0	0	56.838	43.028	55.986	XOM_R2OW SG MWD+IFR1+ MS
14900	90	269.7	9805	55.758	0	53.431	0	55.758	0	0	57.297	43.024	56.555	XOM_R2OW SG MWD+IFR1+ MS
15000	90	269.7	9805	56.48	0	53.908	0	56.48	0	0	57.767	43.022	57.117	XOM_R2OW SG MWD+IFR1+ MS
15100	90	269.7	9805	57.201	0	54.381	0	57.201	0	0	58.236	43.019	57.641	XOM_R2OW SG MWD+IFR1+ MS
15200	90	269.7	9805	57.922	0	54.868	0	57.922	0	0	58.715	43.018	58.159	XOM_R2OW SG MWD+IFR1+ MS
15300	90	269.7	9805	58.643	0	55.369	0	58.643	0	0	59.205	43.02	58.673	XOM_R2OW SG MWD+IFR1+ MS
15400	90	269.7	9805	59.372	0	55.865	0	59.372	0	0	59.692	43.021	59.154	XOM_R2OW SG MWD+IFR1+ MS
15500	90	269.7	9805	60.1	0	56.374	0	60.1	0	0	60.191	43.024	59.629	XOM_R2OW SG MWD+IFR1+ MS
15600	90	269.7	9805	60.828	0	56.897	0	60.828	0	0	60.701	43.039	60.088	XOM_R2OW SG MWD+IFR1+ MS
15700	90	269.7	9805	61.555	0	57.415	0	61.555	0	0	61.207	43.042	60.53	XOM_R2OW SG MWD+IFR1+ MS
15800	90	269.7	9805	62.29	0	57.945	0	62.29	0	0	61.725	43.059	60.958	XOM_R2OW SG MWD+IFR1+ MS

15900	90	269.7	9805	63.016	0	58.488	0	63.016	0	0	62.25	43.068	61.394	XOM_R2OW SG MWD+IFR1+ MS
16000	90	269.7	9805	63.75	0	59.026	0	63.75	0	0	62.775	43.084	61.791	XOM_R2OW SG MWD+IFR1+ MS
16100	90	269.7	9805	64.49	0	59.576	0	64.49	0	0	63.31	43.103	62.186	XOM_R2OW SG MWD+IFR1+ MS
16200	90	269.7	9805	65.223	0	60.137	0	65.223	0	0	63.852	43.115	62.59	XOM_R2OW SG MWD+IFR1+ MS
16300	90	269.7	9805	65.962	0	60.693	0	65.962	0	0	64.393	43.134	62.96	XOM_R2OW SG MWD+IFR1+ MS
16400	90	269.7	9805	66.701	0	61.261	0	66.701	0	0	64.943	43.156	63.327	XOM_R2OW SG MWD+IFR1+ MS
16500	90	269.7	9805	67.439	0	61.831	0	67.439	0	0	65.496	43.177	63.682	XOM_R2OW SG MWD+IFR1+ MS
16600	90	269.7	9805	68.176	0	62.412	0	68.176	0	0	66.058	43.201	64.036	XOM_R2OW SG MWD+IFR1+ MS
16700	90	269.7	9805	68.92	0	62.996	0	68.92	0	0	66.622	43.226	64.38	XOM_R2OW SG MWD+IFR1+ MS
16800	90	269.7	9805	69.663	0	63.582	0	69.663	0	0	67.19	43.261	64.706	XOM_R2OW SG MWD+IFR1+ MS
16900	90	269.7	9805	70.406	0	64.178	0	70.406	0	0	67.765	43.288	65.038	XOM_R2OW SG MWD+IFR1+ MS
17000	90	269.7	9805	71.148	0	64.777	0	71.148	0	0	68.343	43.316	65.36	XOM_R2OW SG MWD+IFR1+ MS

17100	90	269.7	9805	71.896	0	65.378	0	71.896	0	0	68.924	43.353	65.664	XOM_R2OW SG MWD+IFR1+ MS
17200	90	269.7	9805	72.636	0	65.988	0	72.636	0	0	69.513	43.382	65.975	XOM_R2OW SG MWD+IFR1+ MS
17300	90	269.7	9805	73.383	0	66.601	0	73.383	0	0	70.11	43.413	66.256	XOM_R2OW SG MWD+IFR1+ MS
17400	90	269.7	9805	74.135	0	67.215	0	74.135	0	0	70.702	43.442	66.549	XOM_R2OW SG MWD+IFR1+ MS
17500	90	269.7	9805	74.88	0	67.838	0	74.88	0	0	71.304	43.483	66.834	XOM_R2OW SG MWD+IFR1+ MS
17600	90	269.7	9805	75.631	0	68.463	0	75.631	0	0	71.907	43.524	67.11	XOM_R2OW SG MWD+IFR1+ MS
17700	90	269.7	9805	76.381	0	69.09	0	76.381	0	0	72.513	43.565	67.379	XOM_R2OW SG MWD+IFR1+ MS
17800	90	269.7	9805	77.13	0	69.725	0	77.13	0	0	73.126	43.607	67.647	XOM_R2OW SG MWD+IFR1+ MS
17900	90	269.7	9805	77.878	0	70.362	0	77.878	0	0	73.745	43.642	67.896	XOM_R2OW SG MWD+IFR1+ MS
18000	90	269.7	9805	78.632	0	71	0	78.632	0	0	74.362	43.685	68.149	XOM_R2OW SG MWD+IFR1+ MS
18100	90	269.7	9805	79.385	0	71.647	0	79.385	0	0	74.985	43.729	68.401	XOM_R2OW SG MWD+IFR1+ MS
18200	90	269.7	9805	80.137	0	72.294	0	80.137	0	0	75.611	43.773	68.646	XOM_R2OW SG MWD+IFR1+ MS

18300	90	269.7	9805	80.889	0	72.943	0	80.889	0	0	76.237	43.817	68.885	XOM_R2OW SG MWD+IFR1+ MS
18400	90	269.7	9805	81.646	0	73.599	0	81.646	0	0	76.875	43.854	69.112	XOM_R2OW SG MWD+IFR1+ MS
18500	90	269.7	9805	82.395	0	74.256	0	82.395	0	0	77.511	43.909	69.338	XOM_R2OW SG MWD+IFR1+ MS
18600	90	269.7	9805	83.156	0	74.915	0	83.156	0	0	78.147	43.955	69.564	XOM_R2OW SG MWD+IFR1+ MS
18700	90	269.7	9805	83.911	0	75.581	0	83.911	0	0	78.791	44.011	69.784	XOM_R2OW SG MWD+IFR1+ MS
18800	90	269.7	9805	84.664	0	76.247	0	84.664	0	0	79.435	44.057	70.002	XOM_R2OW SG MWD+IFR1+ MS
18900	90	269.7	9805	85.422	0	76.914	0	85.422	0	0	80.085	44.106	70.201	XOM_R2OW SG MWD+IFR1+ MS
19000	90	269.7	9805	86.18	0	77.589	0	86.18	0	0	80.738	44.164	70.41	XOM_R2OW SG MWD+IFR1+ MS
19100	90	269.7	9805	86.937	0	78.264	0	86.937	0	0	81.391	44.221	70.613	XOM_R2OW SG MWD+IFR1+ MS
19200	90	269.7	9805	87.698	0	78.939	0	87.698	0	0	82.045	44.278	70.811	XOM_R2OW SG MWD+IFR1+ MS
19300	90	269.7	9805	88.453	0	79.622	0	88.453	0	0	82.71	44.33	70.999	XOM_R2OW SG MWD+IFR1+ MS
19400	90	269.7	9805	89.213	0	80.304	0	89.213	0	0	83.371	44.388	71.191	XOM_R2OW SG MWD+IFR1+ MS

19500	90	269.7	9805	89.972	0	80.988	0	89.972	0	0	84.033	44.446	71.379	XOM_R2OW SG MWD+IFR1+ MS
19600	90	269.7	9805	90.73	0	81.677	0	90.73	0	0	84.701	44.505	71.566	XOM_R2OW SG MWD+IFR1+ MS
19700	90	269.7	9805	91.493	0	82.368	0	91.493	0	0	85.374	44.557	71.74	XOM_R2OW SG MWD+IFR1+ MS
19800	90	269.7	9805	92.255	0	83.058	0	92.255	0	0	86.043	44.616	71.919	XOM_R2OW SG MWD+IFR1+ MS
19900	90	269.7	9805	93.016	0	83.754	0	93.016	0	0	86.719	44.686	72.093	XOM_R2OW SG MWD+IFR1+ MS
20000	90	269.7	9805	93.776	0	84.451	0	93.776	0	0	87.398	44.739	72.258	XOM_R2OW SG MWD+IFR1+ MS
20100	90	269.7	9805	94.541	0	85.148	0	94.541	0	0	88.075	44.809	72.425	XOM_R2OW SG MWD+IFR1+ MS
20200	90	269.7	9805	95.3	0	85.851	0	95.3	0	0	88.757	44.869	72.594	XOM_R2OW SG MWD+IFR1+ MS
20300	90	269.7	9805	96.062	0	86.554	0	96.062	0	0	89.44	44.939	72.756	XOM_R2OW SG MWD+IFR1+ MS
20400	90	269.7	9805	96.83	0	87.257	0	96.83	0	0	90.126	45.003	72.907	XOM_R2OW SG MWD+IFR1+ MS
20500	90	269.7	9805	97.591	0	87.966	0	97.591	0	0	90.815	45.064	73.068	XOM_R2OW SG MWD+IFR1+ MS
20600	90	269.7	9805	98.356	0	88.675	0	98.356	0	0	91.504	45.134	73.223	XOM_R2OW SG MWD+IFR1+ MS

20700	90	269.7	9805	99.116	0	89.383	0	99.116	0	0	92.196	45.199	73.367	XOM_R2OW SG MWD+IFR1+ MS
20800	90	269.7	9805	99.885	0	90.098	0	99.885	0	0	92.89	45.27	73.517	XOM_R2OW SG MWD+IFR1+ MS
20900	90	269.7	9805	100.648	0	90.812	0	100.648	0	0	93.585	45.341	73.665	XOM_R2OW SG MWD+IFR1+ MS
21000	90	269.7	9805	101.39	0	91.526	0	101.39	0	0	94.283	45.406	73.802	XOM_R2OW SG MWD+IFR1+ MS
21100	90	269.7	9805	102.176	0	92.245	0	102.176	0	0	94.984	45.488	73.944	XOM_R2OW SG MWD+IFR1+ MS
21200	90	269.7	9805	102.908	0	92.964	0	102.908	0	0	95.684	45.559	74.084	XOM_R2OW SG MWD+IFR1+ MS
21300	90	269.7	9805	103.682	0	93.683	0	103.682	0	0	96.387	45.624	74.216	XOM_R2OW SG MWD+IFR1+ MS
21400	90	269.7	9805	104.451	0	94.408	0	104.451	0	0	97.092	45.706	74.351	XOM_R2OW SG MWD+IFR1+ MS
21500	90	269.7	9805	105.214	0	95.131	0	105.214	0	0	97.798	45.778	74.485	XOM_R2OW SG MWD+IFR1+ MS
21600	90	269.7	9805	105.972	0	95.855	0	105.972	0	0	98.506	45.854	74.609	XOM_R2OW SG MWD+IFR1+ MS
21700	90	269.7	9805	106.771	0	96.584	0	106.771	0	0	99.216	45.926	74.74	XOM_R2OW SG MWD+IFR1+ MS
21800	90	269.7	9805	107.517	0	97.312	0	107.517	0	0	99.926	46.008	74.867	XOM_R2OW SG MWD+IFR1+ MS

21900	90	269.7	9805	108.305	0	98.04	0	108.305	0	0	100.639	46.084	74.985	XOM_R2OW SG MWD+IFR1+ MS
22000	90	269.7	9805	109.041	0	98.772	0	109.041	0	0	101.354	46.166	75.108	XOM_R2OW SG MWD+IFR1+ MS
22100	90	269.7	9805	109.818	0	99.505	0	109.818	0	0	102.072	46.243	75.224	XOM_R2OW SG MWD+IFR1+ MS
22200	90	269.7	9805	110.589	0	100.207	0	110.589	0	0	102.759	46.31	75.334	XOM_R2OW SG MWD+IFR1+ MS
22300	90	269.7	9805	111.355	0	100.953	0	111.355	0	0	103.488	46.404	75.455	XOM_R2OW SG MWD+IFR1+ MS
22400	90	269.7	9805	112.116	0	101.695	0	112.116	0	0	104.214	46.481	75.567	XOM_R2OW SG MWD+IFR1+ MS
22500	90	269.7	9805	112.916	0	102.43	0	112.916	0	0	104.933	46.563	75.681	XOM_R2OW SG MWD+IFR1+ MS
22600	90	269.7	9805	113.666	0	103.161	0	113.666	0	0	105.649	46.639	75.786	XOM_R2OW SG MWD+IFR1+ MS
22700	90	269.7	9805	114.455	0	103.886	0	114.455	0	0	106.359	46.719	75.894	XOM_R2OW SG MWD+IFR1+ MS
22800	90	269.7	9805	115.195	0	104.655	0	115.195	0	0	107.109	46.815	76.011	XOM_R2OW SG MWD+IFR1+ MS
22900	90	269.7	9805	115.974	0	105.37	0	115.974	0	0	107.812	46.888	76.106	XOM_R2OW SG MWD+IFR1+ MS
23000	90	269.7	9805	116.748	0	106.127	0	116.748	0	0	108.553	46.982	76.216	XOM_R2OW SG MWD+IFR1+ MS

23100	90	269.7	9805	117.516	0	106.879	0	117.516	0	0	109.29	47.06	76.318	XOM_R2OW SG MWD+IFR1+ MS
23200	90	269.7	9805	118.279	0	107.626	0	118.279	0	0	110.021	47.153	76.422	XOM_R2OW SG MWD+IFR1+ MS
23300	90	269.7	9805	119.08	0	108.368	0	119.08	0	0	110.75	47.239	76.517	XOM_R2OW SG MWD+IFR1+ MS
23400	90	269.7	9805	119.833	0	109.104	0	119.833	0	0	111.472	47.33	76.614	XOM_R2OW SG MWD+IFR1+ MS
23500	90	269.7	9805	120.582	0	109.882	0	120.582	0	0	112.231	47.425	76.721	XOM_R2OW SG MWD+IFR1+ MS
23600	90	269.7	9805	121.367	0	110.608	0	121.367	0	0	112.946	47.499	76.809	XOM_R2OW SG MWD+IFR1+ MS
23700	90	269.7	9805	122.147	0	111.375	0	122.147	0	0	113.697	47.593	76.91	XOM_R2OW SG MWD+IFR1+ MS
23800	90	269.7	9805	122.923	0	112.092	0	122.923	0	0	114.403	47.686	76.99	XOM_R2OW SG MWD+IFR1+ MS
23900	90	269.7	9805	123.693	0	112.848	0	123.693	0	0	115.145	47.778	77.085	XOM_R2OW SG MWD+IFR1+ MS
24000	90	269.7	9805	124.459	0	113.6	0	124.459	0	0	115.883	47.865	77.173	XOM_R2OW SG MWD+IFR1+ MS
24100	90	269.7	9805	125.22	0	114.39	0	125.22	0	0	116.657	47.96	77.274	XOM_R2OW SG MWD+IFR1+ MS
24200	90	269.7	9805	126.016	0	115.132	0	126.016	0	0	117.387	48.056	77.355	XOM_R2OW SG MWD+IFR1+ MS

24300	90	269.7	9805	126.768	0	115.869	0	126.768	0	0	118.11	48.145	77.44	XOM_R2OW SG MWD+IFR1+ MS
24400	90	269.7	9805	127.554	0	116.644	0	127.554	0	0	118.872	48.244	77.527	XOM_R2OW SG MWD+IFR1+ MS
24500	90	269.7	9805	128.335	0	117.414	0	128.335	0	0	119.627	48.336	77.617	XOM_R2OW SG MWD+IFR1+ MS
24600	90	269.7	9805	129.112	0	118.136	0	129.112	0	0	120.34	48.429	77.69	XOM_R2OW SG MWD+IFR1+ MS
24700	90	269.7	9805	129.885	0	118.896	0	129.885	0	0	121.086	48.53	77.774	XOM_R2OW SG MWD+IFR1+ MS
24800	90	269.7	9805	130.652	0	119.694	0	130.652	0	0	121.869	48.62	77.863	XOM_R2OW SG MWD+IFR1+ MS
24900	90	269.7	9805	131.415	0	120.444	0	131.415	0	0	122.607	48.72	77.942	XOM_R2OW SG MWD+IFR1+ MS
25000	90	269.7	9805	132.174	0	121.19	0	132.174	0	0	123.342	48.814	78.016	XOM_R2OW SG MWD+IFR1+ MS
25100	90	269.7	9805	132.966	0	121.972	0	132.966	0	0	124.109	48.917	78.101	XOM_R2OW SG MWD+IFR1+ MS
25200	90	269.7	9805	133.716	0	122.708	0	133.716	0	0	124.836	49.01	78.17	XOM_R2OW SG MWD+IFR1+ MS
25300	90	269.7	9805	134.499	0	123.481	0	134.499	0	0	125.595	49.111	78.25	XOM_R2OW SG MWD+IFR1+ MS
25400	90	269.7	9805	135.277	0	124.249	0	135.277	0	0	126.351	49.217	78.324	XOM_R2OW SG MWD+IFR1+ MS

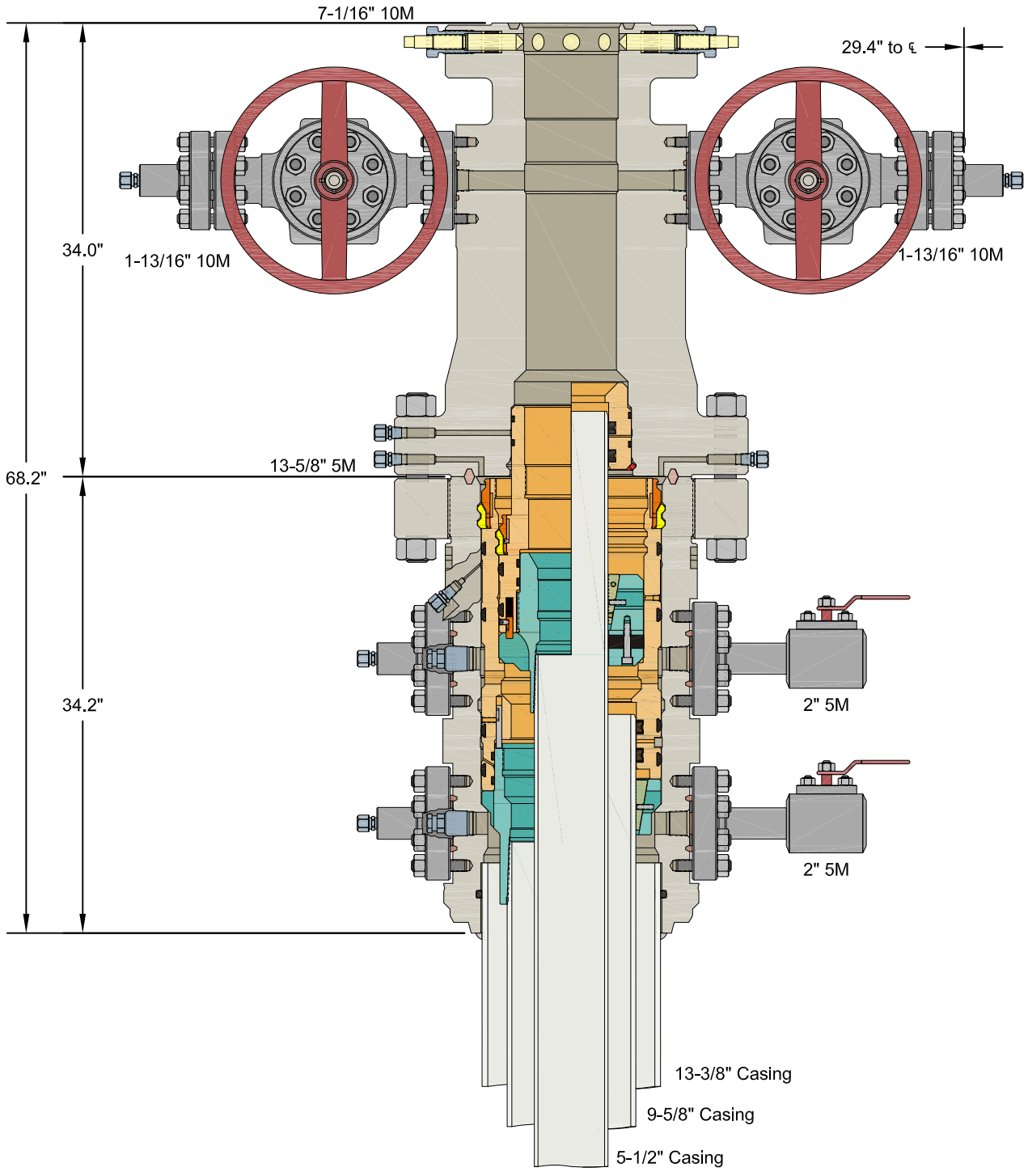
25500	90	269.7	9805	136.051	0	125.012	0	136.051	0	0	127.103	49.313	78.396	XOM_R2OW SG MWD+IFR1+ MS
25600	90	269.7	9805	136.821	0	125.77	0	136.821	0	0	127.849	49.412	78.47	XOM_R2OW SG MWD+IFR1+ MS
25700	90	269.7	9805	137.586	0	126.524	0	137.586	0	0	128.593	49.516	78.538	XOM_R2OW SG MWD+IFR1+ MS
25800	90	269.7	9805	138.384	0	127.313	0	138.384	0	0	129.368	49.618	78.616	XOM_R2OW SG MWD+IFR1+ MS
25900	90	269.7	9805	139.14	0	128.058	0	139.14	0	0	130.103	49.72	78.68	XOM_R2OW SG MWD+IFR1+ MS
26000	90	269.7	9805	139.929	0	128.837	0	139.929	0	0	130.87	49.821	78.755	XOM_R2OW SG MWD+IFR1+ MS
26100	90	269.7	9805	140.712	0	129.612	0	140.712	0	0	131.634	49.926	78.823	XOM_R2OW SG MWD+IFR1+ MS
26200	90	269.7	9805	141.492	0	130.382	0	141.492	0	0	132.392	50.035	78.893	XOM_R2OW SG MWD+IFR1+ MS
26300	90	269.7	9805	142.267	0	131.147	0	142.267	0	0	133.147	50.139	78.958	XOM_R2OW SG MWD+IFR1+ MS
26400	90	269.7	9805	143.038	0	131.908	0	143.038	0	0	133.898	50.233	79.022	XOM_R2OW SG MWD+IFR1+ MS
26500	90	269.7	9805	143.805	0	132.703	0	143.805	0	0	134.68	50.343	79.094	XOM_R2OW SG MWD+IFR1+ MS
26600	90	269.7	9805	144.568	0	133.455	0	144.568	0	0	135.423	50.445	79.154	XOM_R2OW SG MWD+IFR1+ MS

26700	90	269.7	9805	145.362	0	134.24	0	145.362	0	0	136.196	50.564	79.222	XOM_R2OW SG MWD+IFR1+ MS
26800	90	269.7	9805	146.116	0	135.021	0	146.116	0	0	136.966	50.668	79.285	XOM_R2OW SG MWD+IFR1+ MS
26900	90	269.7	9805	146.901	0	135.76	0	146.901	0	0	137.697	50.769	79.341	XOM_R2OW SG MWD+IFR1+ MS
27000	90	269.7	9805	147.682	0	136.569	0	147.682	0	0	138.493	50.879	79.411	XOM_R2OW SG MWD+IFR1+ MS
27100	90	269.7	9805	148.459	0	137.336	0	148.459	0	0	139.251	50.992	79.469	XOM_R2OW SG MWD+IFR1+ MS
27200	90	269.7	9805	149.231	0	138.099	0	149.231	0	0	140.005	51.094	79.527	XOM_R2OW SG MWD+IFR1+ MS
27300	90	269.7	9805	150	0	138.858	0	150	0	0	140.754	51.209	79.586	XOM_R2OW SG MWD+IFR1+ MS
27400	90	269.7	9805	150.798	0	139.649	0	150.798	0	0	141.534	51.313	79.647	XOM_R2OW SG MWD+IFR1+ MS
27500	90	269.7	9805	151.559	0	140.435	0	151.559	0	0	142.309	51.43	79.708	XOM_R2OW SG MWD+IFR1+ MS
27609	90	269.7	9805	152.414	0	141.288	0	152.414	0	0	143.152	51.551	79.77	XOM_R2OW SG MWD+IFR1+ MS

Plan Targets	BEU BB Jabba 105/HUX 200H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 1	11890.97	560123.27	675900.81	6262	CIRCLE
LTP 1	27559.17	560064.03	660232.78	6262	CIRCLE
BHL 1	27609.12	560063.96	660182.83	6262	CIRCLE

GE Oil & Gas



ALL DIMENSIONS ARE APPROXIMATE

XTO ENERGY, INC.

13-3/8" x 9-5/8" x 5-1/2" 10M RSH-2 Wellhead Assembly, With T-EBS-F Tubing Head

DRAWN	VJK	16FEB17
APPRV	KN	16FEB17

FOR REFERENCE ONLY
DRAWING NO. 10012842

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

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

Background

Onshore Oil and Gas Order (OOGO) No. 2, Drilling Operations, Sections III.A.2.i.iv.B states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. OOGO No. 2, Section I.D.2 states, "Some situation may exist either on a well-by-well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this order. This situation can be resolved by requesting a variance…". XTO Energy feels the break testing the BOPE is such a situation. Therefore, as per OOGO No. 2, Section IV., XTO Energy submits this request for the variance.

Supporting Documentation

OOGO No. 2 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time there have been significant changes in drilling technology. BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since OOGO No. 2 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.

Figure 1: Winch System attached to BOP Stack

Figure 2: BOP Winch System

American Petroleum Institute (API) standards, specification and recommended practices are considered the industry standard and are consistently utilized and referenced by the industry. OOGO No. 2 recognizes API recommended Practices (RP) 53 in its original development. API Standard 53, *Well Control Equipment Systems for Drilling Wells* (Fifth Edition, December 2018, Annex C, Table C.4) recognizes break testing as an acceptable practice. Specifically, API Standard 53, Section 5.3.7.1 states "A pressure test of the pressure containing component shall be performed following the disconnection or repair, limited to the affected component." See Table C.4 below for reference.

Table C.4—Initial Pressure Testing, Surface BOP Stacks

Component to be Pressure Tested	Pressure Test—Low Pressure[ac] psig (MPa)	Pressure Test—High Pressure[ac]	
		Change Out of Component, Elastomer, or Ring Gasket	No Change Out of Component, Elastomer, or Ring Gasket
Annular preventer[b]	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers[bd]	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes[e]	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

[a] Pressure test evaluation periods shall be a minimum of five minutes.
No visible leaks.
The pressure shall remain stable during the evaluation period. The pressure shall not decrease below the intended test pressure.

[b] Annular(s) and VBR(s) shall be pressure tested on the largest and smallest OD drill pipe to be used in well program.

[c] For pad drilling operations, moving from one wellhead to another within the 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken.

[d] For surface offshore operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented during the initial test. For land operations, the ram BOPs shall be pressure tested with the ram locks engaged and the closing and locking pressure vented at commissioning and annually.

[e] Adjustable chokes are not required to be full sealing devices. Pressure testing against a closed choke is not required.

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

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

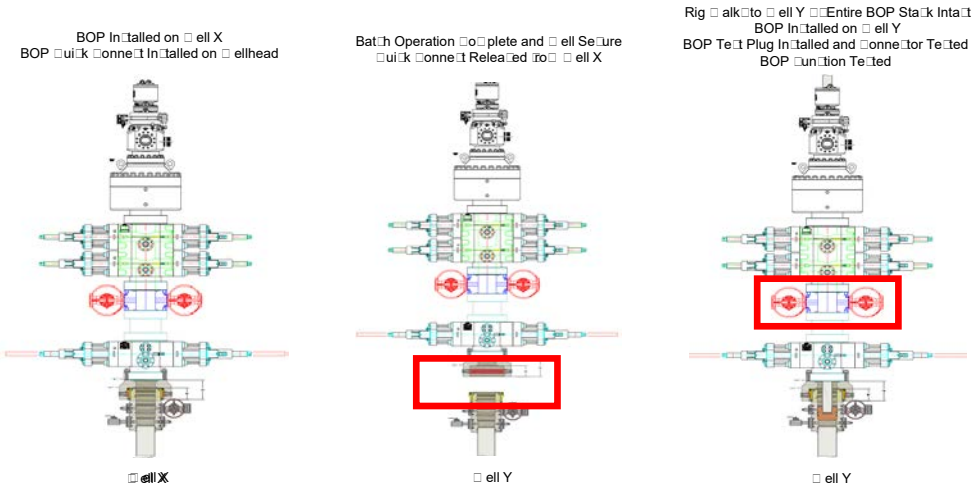
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that of OOGO No. 2 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the OOGO No.2.

Procedures

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

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

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



Summary

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

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

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

1. After a full BOP test is conducted on the first well on the pad.

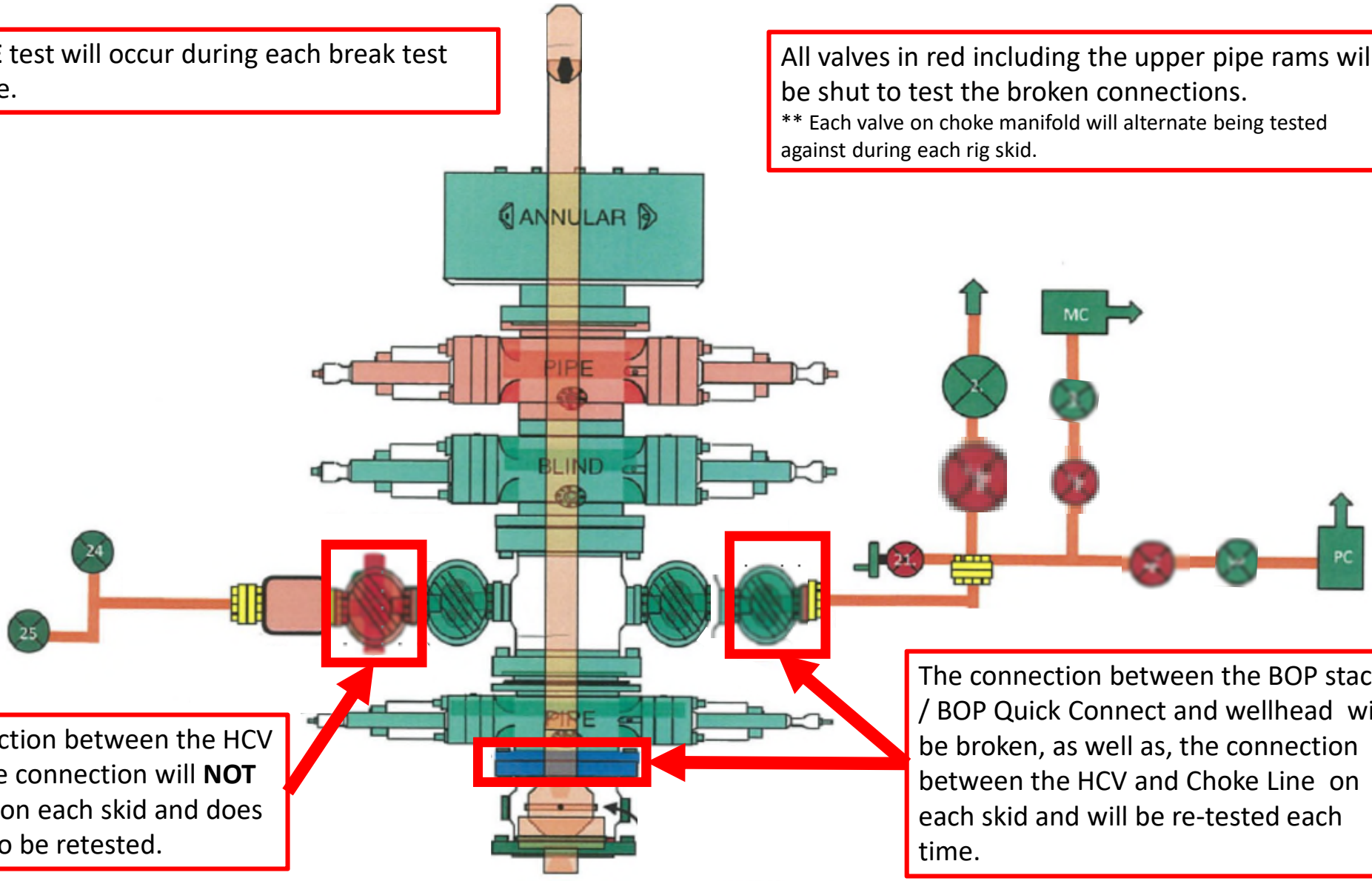
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.

3. Full BOP test will be required if the intermediate hole section being drilled has a MASP over 5M.

4. Full BOP test will be required prior to drilling the production hole.

Only **ONE** test will occur during each break test procedure.

All valves in red including the upper pipe rams will be shut to test the broken connections.
** Each valve on choke manifold will alternate being tested against during each rig skid.



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

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.

XTO Permian Operating, LLC Offline Cementing Variance Request

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

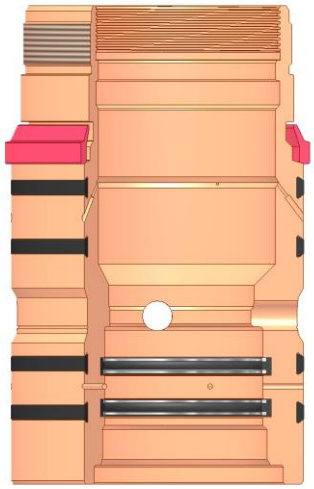
1. Cement Program

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

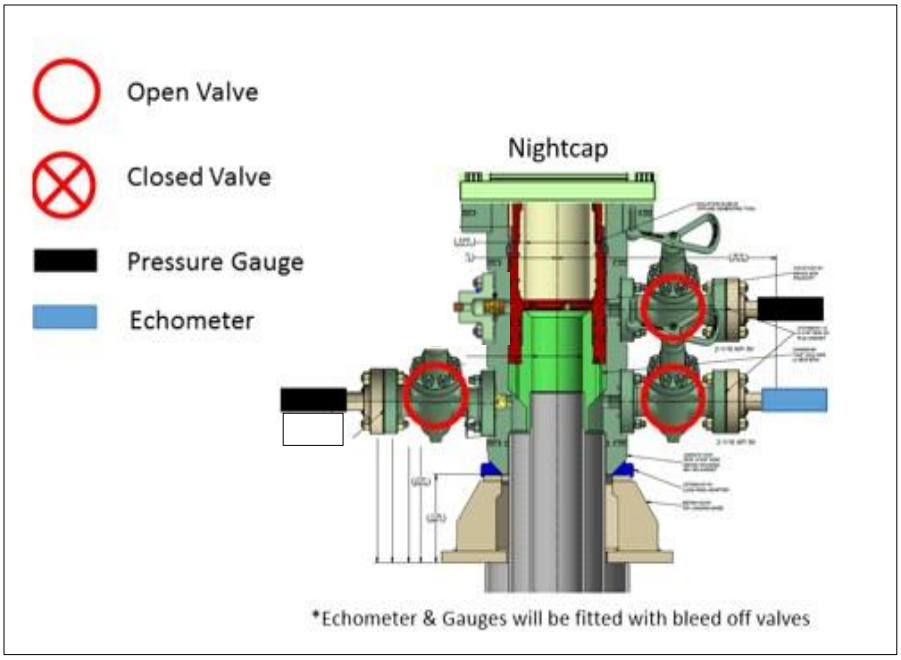
2. Offline Cementing Procedure

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

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



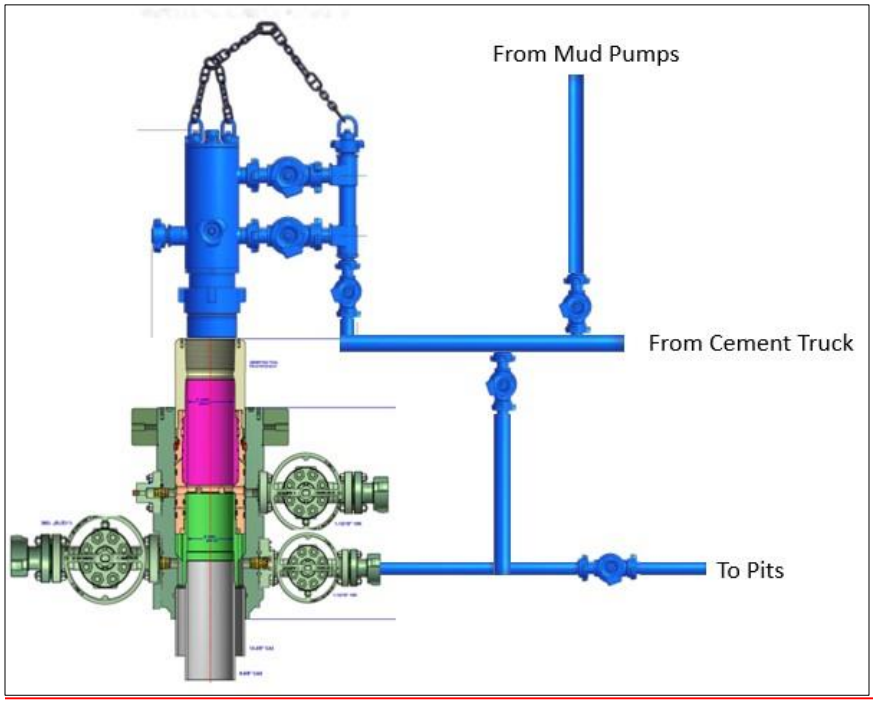
Annular packoff with both external and internal seals



Wellhead diagram during skidding operations

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

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

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

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

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
    a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
    b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
    a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be nippled up and tested on the wellhead before drilling operations resume on each well.
    a. The larger rig will move back onto the location within 180 days from the point at which the wells are secured and the spudder rig is moved off location.
    b. The BLM will be notified 24 hours before the larger rig moves back on the pre-set locations
7. XTO will have supervision on the rig to ensure compliance with all BLM and NMOCD regulations and to oversee operations.
8. Once the rig is removed, XTO will secure the wellhead area by placing a guard rail around the cellar area.

Se□ □□□□0S□3□E□□MP □6□6□3 Big Eddy Unit BB Hux □00H Eddy □M□M33□55 XTO □3□□□ □□□0□ □lli□on Moren□y

Big Eddy Unit BB Hux 200H

18 5/8 surface csg in a 24 inch hole. Design Factors — Surface

Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"□"	□□□50	J 55	BT□	□□□□5	□□□□	□□□□	□□066	5	□□50	□□□□	□3□□□5
"B"			BT□				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,110			Tail Cmt	does not	circ to sfc.	Totals:	□□066				□3□□□5

Comparison of Proposed to Minimum Required Cement Volumes

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
24	□□□□□6	1890	3356	1332	□5□	9.20	□0□	2M	□□□00

Site plat (pipe racks S or E) as per O.O.1.III.D.4.i. not found.

13 3/8 casing inside the 18 5/8 Design Factors — Int 1

Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"□"	5□□50	J 55	BT□	5□65	0□□5	□□□3	□□□6□	□	3□□□	□□□5	□50□□□□
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:						Totals:	□□□6□				□50□□□□
The cement volume(s) are intended to achieve a top of				0	ft from surface or a		1066				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
17 1/2	0□6□□6	2060	3□□5	1976	□□	10.50	□□5	2M	□56

Class 'H' tail cmt yld > 1.20

9 5/8 casing inside the 13 3/8 Design Factors — Int 2

Segment	#/ft	Grade	Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"□"	□0□00	H□P □□0	BT□	□0□□□	□□□□	3□0□	□□□6□	6	5□35	5□3□	□□□□□60
"B"	40.00	HCL 80	BT□	∞	2.99	2.24	2,166	4	3.89	5□3□	86,640
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500						Totals:	5□035				□0□□□00
The cement volume(s) are intended to achieve a top of				2200	ft from surface or a		569				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
12 1/4	0□3□3□	1390	3□□□	916	□□□	9.50	□□□□	2M	0□□□

Class 'C' tail cmt yld > 1.35

5 1/2 casing inside the 9 5/8 Design Factors — Prod 1

Segment	#/ft	Grade	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"□"	□0□00	RY P □□0	Se□i□Pre□iu□	6□□□	□□33	□□□3	□□□35	5	□□55	□□5□	□□□□00
"B"	20.00	RY P 110	Semi-Flush	∞	4.33	4.93	22,674	5	8.55	□□5□	453,480
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500						Totals:	□□□60□				55□□□□0
The cement volume(s) are intended to achieve a top of				4700	ft from surface or a		335				overlap.

Hole Size	Annular Volume	1 Stage Cmt Sx	1 Stage CuFt Cmt	Min Cu Ft	1 Stage % Excess	Drilling Mud Wt	Calc MASP	Req'd BOPE	Min Dist Hole-Cplg
8 1/2	0□□□□□	3400	56□6	5258	□	10.50			□30

Class 'C' tail cmt yld > 1.35 Capitan Reef est top XXXX.

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating
WELL NAME & NO.:	Big Eddy Unit BB Hux 200H
LOCATION:	Sec 22-20S-32E-NMP
COUNTY:	Eddy County, New Mexico

*Updated COAs per **Sundry 2686813** approved through engineering on 08/31/2022.*

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

Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **18 5/8** inch surface casing shall be set at approximately 1200 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite and above the salt) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run

to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

b. Wait on cement (WOC) time for a primary cement job will be a minimum of **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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the **13-3/8** inch intermediate casing (set at **2800** ft) 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 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.

❖ In Capitan Reef 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.

❖ **Special Capitan Reef requirements.** If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:
(Use this for 3 string wells in the Capitan Reef, if 4 string well ensure FW based mud used across the capitan interval)

- Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.
- Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by

0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.

3. The minimum required fill of cement behind the **9-5/8** 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 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, potash or capitan reef.**

4. The minimum required fill of cement behind the **5-1/2** inch production 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.

   c. 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.

   d. Second stage above DV tool:

      - Cement to should tie-back at least **50 feet** on top of Capitan Reef top **or 200 feet** into the previous casing, whichever is greater. 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, potash or capitan reef.**

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 **3000 (3M)** 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.

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.

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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 140775

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 140775
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
pkautz	None	9/7/2022