

Well Name: BIG EDDY UNIT DI BB JABBA	Well Location: T20S / R32E / SEC 22 / SWSW / 32.55275 / -103.760482	County or Parish/State: LEA / NM
Well Number: 102H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMLC065750A, NMNM33955	Unit or CA Name: BIG EDDY	Unit or CA Number: NMNM68294X
US Well Number: 3002547226	Well Status: Approved Application for Permit to Drill	Operator: XTO PERMIAN OPERATING LLC

Notice of Intent

Sundry ID: 2682659

Type of Submission: Notice of Intent

Type of Action: Other

Date Sundry Submitted: 07/19/2022

Time Sundry Submitted: 05:09

Date proposed operation will begin: 08/10/2022

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/470'FSL & 670'FWL to 490'FSL & 670'FWL. Well Stays in the Same Quarter-Quarter as Permitted Total SHL Move: 20'North SHL change requested to optimize well pad layout, drilling efficiencies, and for safety purposes. Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan Multibowl Diagram

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Jabba_102H_Attachments_20220719050900.pdf

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Conditions of Approval

Additional

Sec_22_20S_32E_NMP_2682659_Big_Eddy_Unit_DI_BB_Jabba_102H_Lea_NMNM033955_XTO_COAs_2022083113 2506.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: JUL 19, 2022 05:09 AM

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 30-025- 47226		² Pool Code 53560		³ Pool Name Salt Lake; Bone Spring	
⁴ Property Code 328261		⁵ Property Name Big Eddy Unit DI BB Jabba			⁶ Well Number 102H
⁷ OGRID No. 373075		⁸ Operator Name XTO PERMIAN OPERATING, LLC.			⁹ Elevation 3,529'

¹⁰ Surface Location

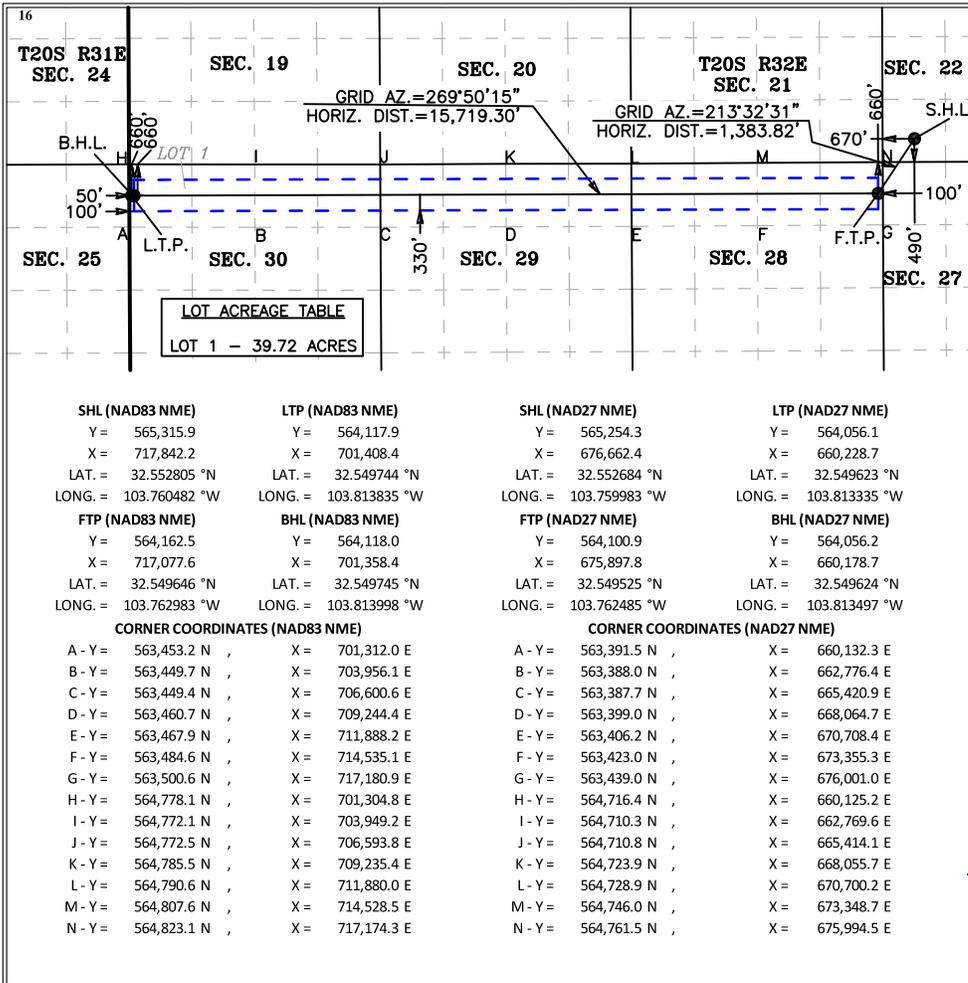
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	22	20 S	32 E		490	SOUTH	670	WEST	LEA

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
I	30	20 S	32 E		660	NORTH	50	WEST	LEA

¹² Dedicated Acres 479.72	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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

Stephanie Rabadue 05/15/2022
Signature Date

Stephanie Rabadue
Printed Name

stephanie.rabadue@exxonmobil.com
E-mail Address

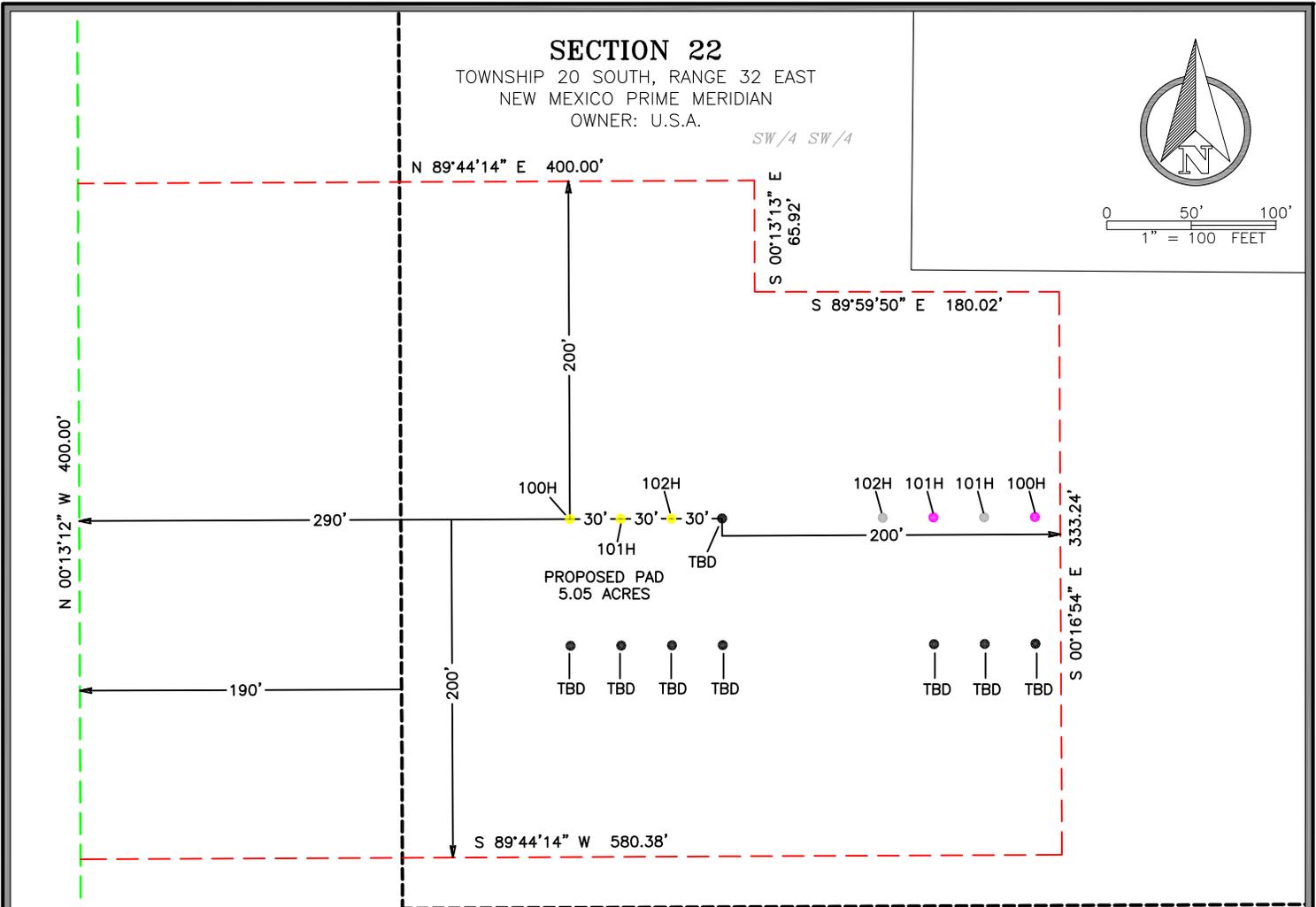
18 SURVEYOR CERTIFICATION
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

3-9-2022
Date of Survey

Signature and Seal of Professional Surveyor:

MARK DILLON HARP 23786
Certificate Number

AW 2019061805



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
- EXISTING PAD

WELL NAMES

- JABBA
- EMPIRE
- GRIEVOUS
- 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



XTO PERMIAN OPERATING, LLC.

PAD LAYOUT

BIG EDDY UNIT BB PROPOSED PAD
LOCATED 599 FEET FROM THE WEST LINE
AND 481 FEET FROM THE SOUTH LINE OF
SECTION 22, TOWNSHIP 20 SOUTH, RANGE 32
EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO



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TBPE Firm 17957 | TBPLS Firm 10193887
www.fscinc.net

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DATE:	07-05-2022	PROJECT NO:	2017111944
DRAWN BY:	LM	SCALE:	1" = 100'
CHECKED BY:	AI	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 Jabba 102H
Projected TD: 26091' MD / 9805' TVD
SHL: 490' FSL & 670' FWL , Section 22, T20S, R32E
BHL: 660' FNL & 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 26091 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	2.02
8.5	4935' - 26091'	5.5	20	RY P-110	Semi-Flush	New	1.05	2.29	2.29

· 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 +/- 26091'1st Stage

Lead: 310 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: 9246 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: 1410 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: 9246 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 nipping up on the 18.625, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nipping 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 26091'	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.

0	0	0	0	0.01	-0.01	0	0	0
2750	0	0	2750	0.01	-0.01	0	0	0
3577.63	16.55	182.31	3566.16	-118.62	-4.8	2	0	2
6830.09	16.55	182.31	6683.84	-1044.47	-42.21	0	0	0
7657.71	0	0	7500	-1163.09	-47	-2	0	2
9245.71	0	0	9088	-1163.09	-47	0	0	0
10370.71	90	270	9804.2	-1163.09	-763.2	8	0	8 FTP 4
26091.37	89.99	269.65	9805	-1210.57	-16483.76	0	0	0 BHL 4

Measured		TVD		Highside		Lateral		Vertical		Magnitude		Semi-major		Semi-minor		Semi-minor Tool	
Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Error	Azimuth	Used		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)			
0	0	0	0	0	0	0	0	2.297	0	0	0	0	0	0	0	0	XOM_R2OW SG
100	0	0	100	0.358	0	0.358	0	2.299	0	0	0.358	0.358	0	0	0	0	MWD+IFR1+ MS XOM_R2OW
200	0	0	200	0.717	0	0.717	0	2.307	0	0	0.717	0.717	0	0	0	0	SG MWD+IFR1+ MS XOM_R2OW
300	0	0	300	1.075	0	1.075	0	2.321	0	0	1.075	1.075	0	0	0	0	SG MWD+IFR1+ MS XOM_R2OW
400	0	0	400	1.434	0	1.434	0	2.34	0	0	1.434	1.434	0	0	0	0	SG MWD+IFR1+ MS XOM_R2OW
500	0	0	500	1.792	0	1.792	0	2.364	0	0	1.792	1.792	0	0	0	0	SG MWD+IFR1+ MS

600	0	0	600	2.151	0	2.151	0	2.394	0	0	2.151	2.151	XOM_R2OW SG MWD+IFR1+ MS XOM_R2OW
700	0	0	700	2.509	0	2.509	0	2.428	0	0	2.509	2.509	SG MWD+IFR1+ MS XOM_R2OW
800	0	0	800	2.868	0	2.868	0	2.467	0	0	2.868	2.868	SG MWD+IFR1+ MS XOM_R2OW
900	0	0	900	3.226	0	3.226	0	2.511	0	0	3.226	3.226	SG MWD+IFR1+ MS XOM_R2OW
1000	0	0	1000	3.585	0	3.585	0	2.56	0	0	3.585	3.585	SG MWD+IFR1+ MS XOM_R2OW
1100	0	0	1100	3.943	0	3.943	0	2.613	0	0	3.943	3.943	SG MWD+IFR1+ MS XOM_R2OW
1200	0	0	1200	4.302	0	4.302	0	2.67	0	0	4.302	4.302	SG MWD+IFR1+ MS XOM_R2OW
1300	0	0	1300	4.66	0	4.66	0	2.731	0	0	4.66	4.66	SG MWD+IFR1+ MS XOM_R2OW
1400	0	0	1400	5.019	0	5.019	0	2.797	0	0	5.019	5.019	SG MWD+IFR1+ MS XOM_R2OW
1500	0	0	1500	5.377	0	5.377	0	2.866	0	0	5.377	5.377	SG MWD+IFR1+ MS XOM_R2OW
1600	0	0	1600	5.736	0	5.736	0	2.939	0	0	5.736	5.736	SG MWD+IFR1+ MS XOM_R2OW
1700	0	0	1700	6.094	0	6.094	0	3.016	0	0	6.094	6.094	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 XOM_R2OW
1900	0	0	1900	6.811	0	6.811	0	3.179	0	0	6.811	6.811	0	SG MWD+IFR1+ MS XOM_R2OW
2000	0	0	2000	7.169	0	7.169	0	3.266	0	0	7.169	7.169	0	SG MWD+IFR1+ MS XOM_R2OW
2100	0	0	2100	7.528	0	7.528	0	3.355	0	0	7.528	7.528	0	SG MWD+IFR1+ MS XOM_R2OW
2200	0	0	2200	7.886	0	7.886	0	3.448	0	0	7.886	7.886	0	SG MWD+IFR1+ MS XOM_R2OW
2300	0	0	2300	8.245	0	8.245	0	3.544	0	0	8.245	8.245	0	SG MWD+IFR1+ MS XOM_R2OW
2400	0	0	2400	8.603	0	8.603	0	3.643	0	0	8.603	8.603	0	SG MWD+IFR1+ MS XOM_R2OW
2500	0	0	2500	8.962	0	8.962	0	3.745	0	0	8.962	8.962	0	SG MWD+IFR1+ MS XOM_R2OW
2600	0	0	2600	9.32	0	9.32	0	3.849	0	0	9.32	9.32	0	SG MWD+IFR1+ MS XOM_R2OW
2700	0	0	2700	9.679	0	9.679	0	3.956	0	0	9.679	9.679	0	SG MWD+IFR1+ MS XOM_R2OW
2750	0	0	2750	9.858	0	9.858	0	4.011	0	0	9.858	9.858	0	SG MWD+IFR1+ MS XOM_R2OW
2800	1	182.314	2799.997	10.027	0	10.028	0	4.066	0	0	10.028	10.028	135	SG MWD+IFR1+ MS

2900	3	182.314	2899.931	10.339	0	10.351	0	4.178	0	0	10.351	10.351	-3.245	XOM_R2OW SG MWD+IFR1+ MS
3000	5	182.314	2999.683	10.642	0	10.677	0	4.291	0	0	10.677	10.676	-3.307	XOM_R2OW SG MWD+IFR1+ MS
3100	7	182.314	3099.13	10.935	0	11.004	0	4.406	0	0	11.004	11.003	-1.33	XOM_R2OW SG MWD+IFR1+ MS
3200	9	182.314	3198.152	11.218	0	11.333	0	4.522	0	0	11.333	11.33	-0.181	XOM_R2OW SG MWD+IFR1+ MS
3300	11	182.314	3296.628	11.491	0	11.663	0	4.639	0	0	11.663	11.658	0.478	XOM_R2OW SG MWD+IFR1+ MS
3400	13	182.314	3394.437	11.754	0	11.995	0	4.759	0	0	11.995	11.985	0.892	XOM_R2OW SG MWD+IFR1+ MS
3500	15	182.314	3491.462	12.006	0	12.328	0	4.881	0	0	12.328	12.313	1.176	XOM_R2OW SG MWD+IFR1+ MS
3577.628	16.553	182.314	3566.163	12.196	0	12.587	0	4.978	0	0	12.587	12.568	1.314	XOM_R2OW SG MWD+IFR1+ MS
3600	16.553	182.314	3587.608	12.271	0	12.662	0	5.005	0	0	12.662	12.642	1.321	XOM_R2OW SG MWD+IFR1+ MS
3700	16.553	182.314	3683.464	12.611	0	13	0	5.144	0	0	13	12.968	1.563	XOM_R2OW SG MWD+IFR1+ MS
3800	16.553	182.314	3779.32	12.956	0	13.34	0	5.288	0	0	13.34	13.299	1.676	XOM_R2OW SG MWD+IFR1+ MS
3900	16.553	182.314	3875.176	13.304	0	13.682	0	5.436	0	0	13.682	13.633	1.742	XOM_R2OW SG MWD+IFR1+ MS

4000	16.553	182.314	3971.032	13.656	0	14.028	0	5.588	0	0	14.028	13.97	1.787	XOM_R2OW SG MWD+IFR1+ MS
4100	16.553	182.314	4066.888	14.011	0	14.375	0	5.744	0	0	14.375	14.31	1.82	XOM_R2OW SG MWD+IFR1+ MS
4200	16.553	182.314	4162.744	14.369	0	14.725	0	5.904	0	0	14.725	14.653	1.846	XOM_R2OW SG MWD+IFR1+ MS
4300	16.553	182.314	4258.6	14.73	0	15.076	0	6.067	0	0	15.076	14.999	1.866	XOM_R2OW SG MWD+IFR1+ MS
4400	16.553	182.314	4354.455	15.093	0	15.43	0	6.233	0	0	15.43	15.348	1.884	XOM_R2OW SG MWD+IFR1+ MS
4500	16.553	182.314	4450.311	15.459	0	15.785	0	6.403	0	0	15.785	15.698	1.899	XOM_R2OW SG MWD+IFR1+ MS
4600	16.553	182.314	4546.167	15.827	0	16.142	0	6.576	0	0	16.142	16.051	1.913	XOM_R2OW SG MWD+IFR1+ MS
4700	16.553	182.314	4642.023	16.197	0	16.5	0	6.752	0	0	16.5	16.406	1.926	XOM_R2OW SG MWD+IFR1+ MS
4800	16.553	182.314	4737.879	16.569	0	16.86	0	6.932	0	0	16.86	16.763	1.938	XOM_R2OW SG MWD+IFR1+ MS
4900	16.553	182.314	4833.735	16.943	0	17.221	0	7.114	0	0	17.221	17.122	1.949	XOM_R2OW SG MWD+IFR1+ MS
5000	16.553	182.314	4929.591	17.319	0	17.583	0	7.299	0	0	17.583	17.483	1.959	XOM_R2OW SG MWD+IFR1+ MS
5100	16.553	182.314	5025.447	17.696	0	17.946	0	7.487	0	0	17.946	17.845	1.97	XOM_R2OW SG MWD+IFR1+ MS

5200	16.553	182.314	5121.302	18.075	0	18.311	0	7.678	0	0	18.311	18.209	1.98	XOM_R2OW SG MWD+IFR1+ MS
5300	16.553	182.314	5217.158	18.455	0	18.676	0	7.871	0	0	18.676	18.574	1.99	XOM_R2OW SG MWD+IFR1+ MS
5400	16.553	182.314	5313.014	18.837	0	19.043	0	8.068	0	0	19.043	18.94	2	XOM_R2OW SG MWD+IFR1+ MS
5500	16.553	182.314	5408.87	19.219	0	19.41	0	8.267	0	0	19.41	19.308	2.01	XOM_R2OW SG MWD+IFR1+ MS
5600	16.553	182.314	5504.726	19.603	0	19.778	0	8.468	0	0	19.778	19.677	2.021	XOM_R2OW SG MWD+IFR1+ MS
5700	16.553	182.314	5600.582	19.988	0	20.147	0	8.673	0	0	20.147	20.047	2.031	XOM_R2OW SG MWD+IFR1+ MS
5800	16.553	182.314	5696.438	20.374	0	20.517	0	8.879	0	0	20.517	20.419	2.042	XOM_R2OW SG MWD+IFR1+ MS
5900	16.553	182.314	5792.294	20.761	0	20.888	0	9.089	0	0	20.888	20.791	2.054	XOM_R2OW SG MWD+IFR1+ MS
6000	16.553	182.314	5888.15	21.149	0	21.259	0	9.301	0	0	21.259	21.164	2.066	XOM_R2OW SG MWD+IFR1+ MS
6100	16.553	182.314	5984.005	21.538	0	21.631	0	9.515	0	0	21.631	21.539	2.079	XOM_R2OW SG MWD+IFR1+ MS
6200	16.553	182.314	6079.861	21.928	0	22.003	0	9.732	0	0	22.003	21.914	2.093	XOM_R2OW SG MWD+IFR1+ MS
6300	16.553	182.314	6175.717	22.318	0	22.377	0	9.952	0	0	22.377	22.29	2.109	XOM_R2OW SG MWD+IFR1+ MS

6400	16.553	182.314	6271.573	22.709	0	22.75	0	10.173	0	0	22.75	22.667	2.125	XOM_R2OW SG MWD+IFR1+ MS
6500	16.553	182.314	6367.429	23.101	0	23.125	0	10.398	0	0	23.125	23.045	2.143	XOM_R2OW SG MWD+IFR1+ MS
6600	16.553	182.314	6463.285	23.494	0	23.499	0	10.624	0	0	23.499	23.424	2.164	XOM_R2OW SG MWD+IFR1+ MS
6700	16.553	182.314	6559.141	23.887	0	23.875	0	10.854	0	0	23.875	23.803	2.187	XOM_R2OW SG MWD+IFR1+ MS
6800	16.553	182.314	6654.997	24.281	0	24.25	0	11.085	0	0	24.25	24.183	2.213	XOM_R2OW SG MWD+IFR1+ MS
6830.087	16.553	182.314	6683.837	24.399	0	24.363	0	11.155	0	0	24.363	24.297	2.221	XOM_R2OW SG MWD+IFR1+ MS
6900	15.154	182.314	6751.089	24.729	0	24.625	0	11.32	0	0	24.625	24.562	2.243	XOM_R2OW SG MWD+IFR1+ MS
7000	13.154	182.314	6848.048	25.175	0	24.998	0	11.555	0	0	24.998	24.939	2.278	XOM_R2OW SG MWD+IFR1+ MS
7100	11.154	182.314	6945.801	25.589	0	25.366	0	11.788	0	0	25.366	25.312	2.316	XOM_R2OW SG MWD+IFR1+ MS
7200	9.154	182.314	7044.23	25.971	0	25.731	0	12.02	0	0	25.731	25.68	2.36	XOM_R2OW SG MWD+IFR1+ MS
7300	7.154	182.314	7143.214	26.319	0	26.091	0	12.249	0	0	26.091	26.044	2.408	XOM_R2OW SG MWD+IFR1+ MS
7400	5.154	182.314	7242.633	26.634	0	26.445	0	12.476	0	0	26.445	26.401	2.459	XOM_R2OW SG MWD+IFR1+ MS

7500	3.154	182.314	7342.365	26.914	0	26.795	0	12.702	0	0	26.795	26.75	2.505	XOM_R2OW SG MWD+IFR1+ MS
7600	1.154	182.314	7442.289	27.16	0	27.138	0	12.926	0	0	27.138	27.092	2.539	XOM_R2OW SG MWD+IFR1+ MS
7657.715	0	0	7500	27.283	0	27.332	0	13.055	0	0	27.332	27.283	2.514	XOM_R2OW SG MWD+IFR1+ MS
7700	0	0	7542.285	27.42	0	27.472	0	13.149	0	0	27.473	27.42	2.471	XOM_R2OW SG MWD+IFR1+ MS
7800	0	0	7642.285	27.745	0	27.805	0	13.375	0	0	27.805	27.745	2.39	XOM_R2OW SG MWD+IFR1+ MS
7900	0	0	7742.285	28.07	0	28.137	0	13.604	0	0	28.138	28.07	2.328	XOM_R2OW SG MWD+IFR1+ MS
8000	0	0	7842.285	28.397	0	28.471	0	13.836	0	0	28.471	28.397	2.279	XOM_R2OW SG MWD+IFR1+ MS
8100	0	0	7942.285	28.724	0	28.805	0	14.071	0	0	28.805	28.724	2.239	XOM_R2OW SG MWD+IFR1+ MS
8200	0	0	8042.285	29.052	0	29.139	0	14.31	0	0	29.14	29.051	2.206	XOM_R2OW SG MWD+IFR1+ MS
8300	0	0	8142.285	29.38	0	29.475	0	14.552	0	0	29.475	29.38	2.179	XOM_R2OW SG MWD+IFR1+ MS
8400	0	0	8242.285	29.709	0	29.81	0	14.797	0	0	29.811	29.709	2.156	XOM_R2OW SG MWD+IFR1+ MS
8500	0	0	8342.285	30.039	0	30.147	0	15.045	0	0	30.147	30.039	2.135	XOM_R2OW SG MWD+IFR1+ MS

8600	0	0	8442.285	30.37	0	30.483	0	15.296	0	0	30.483	30.37	2.118	XOM_R2OW SG MWD+IFR1+ MS
8700	0	0	8542.285	30.701	0	30.821	0	15.551	0	0	30.821	30.701	2.103	XOM_R2OW SG MWD+IFR1+ MS
8800	0	0	8642.285	31.033	0	31.158	0	15.808	0	0	31.158	31.033	2.089	XOM_R2OW SG MWD+IFR1+ MS
8900	0	0	8742.285	31.365	0	31.496	0	16.069	0	0	31.497	31.365	2.077	XOM_R2OW SG MWD+IFR1+ MS
9000	0	0	8842.285	31.698	0	31.835	0	16.334	0	0	31.835	31.698	2.066	XOM_R2OW SG MWD+IFR1+ MS
9100	0	0	8942.285	32.032	0	32.174	0	16.601	0	0	32.174	32.032	2.056	XOM_R2OW SG MWD+IFR1+ MS
9200	0	0	9042.285	32.366	0	32.514	0	16.871	0	0	32.514	32.366	2.047	XOM_R2OW SG MWD+IFR1+ MS
9245.715	0	0	9088	32.519	0	32.669	0	16.996	0	0	32.669	32.519	2.043	XOM_R2OW SG MWD+IFR1+ MS
9300	4.343	270	9142.233	32.795	0	32.7	0	17.145	0	0	32.853	32.7	1.637	XOM_R2OW SG MWD+IFR1+ MS
9400	12.343	270	9241.095	32.668	0	33.033	0	17.417	0	0	33.188	33.033	-0.839	XOM_R2OW SG MWD+IFR1+ MS
9500	20.343	270	9336.976	32.086	0	33.358	0	17.685	0	0	33.511	33.357	-5.105	XOM_R2OW SG MWD+IFR1+ MS
9600	28.343	270	9428.012	31.081	0	33.671	0	17.944	0	0	33.813	33.666	-11.072	XOM_R2OW SG MWD+IFR1+ MS

9700	36.343	270	9512.429	29.702	0	33.969	0	18.196	0	0	34.089	33.954	-19.287	XOM_R2OW SG MWD+IFR1+ MS
9800	44.343	270	9588.586	28.025	0	34.249	0	18.441	0	0	34.336	34.216	-31.359	XOM_R2OW SG MWD+IFR1+ MS
9900	52.343	270	9654.999	26.153	0	34.508	0	18.681	0	0	34.559	34.441	131.007	XOM_R2OW SG MWD+IFR1+ MS
10000	60.343	270	9710.376	24.226	0	34.746	0	18.921	0	0	34.768	34.615	112.482	XOM_R2OW SG MWD+IFR1+ MS
10100	68.343	270	9753.64	22.421	0	34.961	0	19.166	0	0	34.968	34.736	99.615	XOM_R2OW SG MWD+IFR1+ MS
10200	76.343	270	9783.947	20.956	0	35.153	0	19.418	0	0	35.153	34.809	91.43	XOM_R2OW SG MWD+IFR1+ MS
10300	84.343	270	9800.709	20.059	0	35.319	0	19.679	0	0	35.322	34.844	85.694	XOM_R2OW SG MWD+IFR1+ MS
10370.715	90	270	9804.197	19.869	0	35.42	0	19.869	0	0	35.43	34.849	82.401	XOM_R2OW SG MWD+IFR1+ MS
10400	90	270	9804.197	19.949	0	35.459	0	19.949	0	0	35.473	34.848	81.221	XOM_R2OW SG MWD+IFR1+ MS
10500	90	270	9804.197	20.241	0	35.606	0	20.241	0	0	35.638	34.841	78.451	XOM_R2OW SG MWD+IFR1+ MS
10600	90	270	9804.197	20.558	0	35.772	0	20.558	0	0	35.822	34.833	76.912	XOM_R2OW SG MWD+IFR1+ MS
10700	90	269.993	9804.198	20.9	0	35.955	0	20.9	0	0	36.023	34.827	76.081	XOM_R2OW SG MWD+IFR1+ MS

10800	90	269.991	9804.198	21.266	0	36.156	0	21.266	0	0	36.242	34.823	75.672	XOM_R2OW SG MWD+IFR1+ MS
10900	90	269.988	9804.198	21.653	0	36.375	0	21.653	0	0	36.476	34.82	75.525	XOM_R2OW SG MWD+IFR1+ MS
11000	90	269.986	9804.199	22.062	0	36.61	0	22.062	0	0	36.725	34.82	75.545	XOM_R2OW SG MWD+IFR1+ MS
11100	90	269.984	9804.199	22.491	0	36.861	0	22.491	0	0	36.99	34.821	75.673	XOM_R2OW SG MWD+IFR1+ MS
11200	90	269.982	9804.199	22.939	0	37.129	0	22.939	0	0	37.27	34.825	75.869	XOM_R2OW SG MWD+IFR1+ MS
11300	90	269.98	9804.2	23.405	0	37.413	0	23.404	0	0	37.565	34.831	76.111	XOM_R2OW SG MWD+IFR1+ MS
11400	90	269.977	9804.201	23.887	0	37.713	0	23.887	0	0	37.874	34.839	76.379	XOM_R2OW SG MWD+IFR1+ MS
11500	90	269.975	9804.201	24.385	0	38.027	0	24.385	0	0	38.197	34.848	76.665	XOM_R2OW SG MWD+IFR1+ MS
11600	90	269.973	9804.202	24.897	0	38.357	0	24.897	0	0	38.535	34.86	76.958	XOM_R2OW SG MWD+IFR1+ MS
11700	90	269.971	9804.203	25.424	0	38.701	0	25.424	0	0	38.885	34.873	77.254	XOM_R2OW SG MWD+IFR1+ MS
11800	89.999	269.969	9804.204	25.964	0	39.059	0	25.964	0	0	39.25	34.887	77.549	XOM_R2OW SG MWD+IFR1+ MS
11900	89.999	269.966	9804.205	26.516	0	39.43	0	26.516	0	0	39.627	34.904	77.84	XOM_R2OW SG MWD+IFR1+ MS

12000	89.999	269.964	9804.206	27.079	0	39.815	0	27.079	0	0	40.016	34.922	78.126	XOM_R2OW SG MWD+IFR1+ MS
12100	89.999	269.962	9804.207	27.653	0	40.213	0	27.653	0	0	40.419	34.941	78.404	XOM_R2OW SG MWD+IFR1+ MS
12200	89.999	269.96	9804.208	28.237	0	40.623	0	28.237	0	0	40.833	34.962	78.675	XOM_R2OW SG MWD+IFR1+ MS
12300	89.999	269.958	9804.209	28.831	0	41.046	0	28.831	0	0	41.258	34.984	78.938	XOM_R2OW SG MWD+IFR1+ MS
12400	89.999	269.955	9804.211	29.434	0	41.48	0	29.434	0	0	41.695	35.008	79.192	XOM_R2OW SG MWD+IFR1+ MS
12500	89.999	269.953	9804.212	30.045	0	41.926	0	30.045	0	0	42.143	35.032	79.438	XOM_R2OW SG MWD+IFR1+ MS
12600	89.999	269.951	9804.213	30.664	0	42.383	0	30.664	0	0	42.602	35.059	79.675	XOM_R2OW SG MWD+IFR1+ MS
12700	89.999	269.949	9804.215	31.291	0	42.85	0	31.291	0	0	43.071	35.086	79.904	XOM_R2OW SG MWD+IFR1+ MS
12800	89.999	269.947	9804.216	31.925	0	43.328	0	31.925	0	0	43.55	35.115	80.125	XOM_R2OW SG MWD+IFR1+ MS
12900	89.999	269.944	9804.218	32.565	0	43.816	0	32.565	0	0	44.039	35.145	80.338	XOM_R2OW SG MWD+IFR1+ MS
13000	89.999	269.942	9804.22	33.211	0	44.314	0	33.211	0	0	44.538	35.176	80.544	XOM_R2OW SG MWD+IFR1+ MS
13100	89.999	269.94	9804.221	33.863	0	44.82	0	33.863	0	0	45.045	35.208	80.741	XOM_R2OW SG MWD+IFR1+ MS

13200	89.999	269.938	9804.223	34.521	0	45.336	0	34.521	0	0	45.561	35.242	80.932	XOM_R2OW SG MWD+IFR1+ MS
13300	89.999	269.936	9804.225	35.184	0	45.861	0	35.184	0	0	46.086	35.276	81.116	XOM_R2OW SG MWD+IFR1+ MS
13400	89.999	269.933	9804.227	35.852	0	46.394	0	35.852	0	0	46.619	35.312	81.293	XOM_R2OW SG MWD+IFR1+ MS
13500	89.999	269.931	9804.229	36.524	0	46.936	0	36.524	0	0	47.16	35.349	81.464	XOM_R2OW SG MWD+IFR1+ MS
13600	89.999	269.929	9804.231	37.201	0	47.485	0	37.201	0	0	47.709	35.387	81.629	XOM_R2OW SG MWD+IFR1+ MS
13700	89.999	269.927	9804.233	37.882	0	48.042	0	37.882	0	0	48.265	35.426	81.788	XOM_R2OW SG MWD+IFR1+ MS
13800	89.999	269.925	9804.235	38.567	0	48.606	0	38.567	0	0	48.829	35.466	81.942	XOM_R2OW SG MWD+IFR1+ MS
13900	89.999	269.922	9804.238	39.256	0	49.177	0	39.256	0	0	49.399	35.507	82.09	XOM_R2OW SG MWD+IFR1+ MS
14000	89.999	269.92	9804.24	39.948	0	49.755	0	39.948	0	0	49.977	35.55	82.234	XOM_R2OW SG MWD+IFR1+ MS
14100	89.999	269.918	9804.242	40.644	0	50.34	0	40.644	0	0	50.561	35.593	82.372	XOM_R2OW SG MWD+IFR1+ MS
14200	89.999	269.916	9804.245	41.343	0	50.931	0	41.343	0	0	51.151	35.637	82.506	XOM_R2OW SG MWD+IFR1+ MS
14300	89.999	269.913	9804.247	42.044	0	51.529	0	42.044	0	0	51.747	35.682	82.635	XOM_R2OW SG MWD+IFR1+ MS

14400	89.999	269.911	9804.25	42.749	0	52.132	0	42.749	0	0	52.349	35.729	82.761	XOM_R2OW SG MWD+IFR1+ MS
14500	89.998	269.909	9804.253	43.457	0	52.741	0	43.457	0	0	52.957	35.776	82.882	XOM_R2OW SG MWD+IFR1+ MS
14600	89.998	269.907	9804.255	44.167	0	53.355	0	44.167	0	0	53.57	35.824	82.999	XOM_R2OW SG MWD+IFR1+ MS
14700	89.998	269.905	9804.258	44.879	0	53.975	0	44.879	0	0	54.189	35.874	83.113	XOM_R2OW SG MWD+IFR1+ MS
14800	89.998	269.902	9804.261	45.594	0	54.6	0	45.594	0	0	54.812	35.924	83.223	XOM_R2OW SG MWD+IFR1+ MS
14900	89.998	269.9	9804.264	46.312	0	55.231	0	46.312	0	0	55.441	35.975	83.33	XOM_R2OW SG MWD+IFR1+ MS
15000	89.998	269.898	9804.267	47.031	0	55.866	0	47.031	0	0	56.075	36.027	83.433	XOM_R2OW SG MWD+IFR1+ MS
15100	89.998	269.896	9804.27	47.752	0	56.505	0	47.752	0	0	56.713	36.081	83.534	XOM_R2OW SG MWD+IFR1+ MS
15200	89.998	269.894	9804.273	48.476	0	57.149	0	48.476	0	0	57.356	36.135	83.631	XOM_R2OW SG MWD+IFR1+ MS
15300	89.998	269.891	9804.276	49.201	0	57.798	0	49.201	0	0	58.003	36.19	83.726	XOM_R2OW SG MWD+IFR1+ MS
15400	89.998	269.889	9804.279	49.928	0	58.451	0	49.928	0	0	58.654	36.246	83.818	XOM_R2OW SG MWD+IFR1+ MS
15500	89.998	269.887	9804.283	50.657	0	59.107	0	50.657	0	0	59.309	36.303	83.907	XOM_R2OW SG MWD+IFR1+ MS

15600	89.998	269.885	9804.286	51.387	0	59.768	0	51.387	0	0	59.968	36.36	83.993	XOM_R2OW SG MWD+IFR1+ MS
15700	89.998	269.883	9804.289	52.119	0	60.433	0	52.119	0	0	60.631	36.419	84.078	XOM_R2OW SG MWD+IFR1+ MS
15800	89.998	269.88	9804.293	52.853	0	61.101	0	52.853	0	0	61.298	36.479	84.16	XOM_R2OW SG MWD+IFR1+ MS
15900	89.998	269.878	9804.297	53.588	0	61.773	0	53.588	0	0	61.968	36.539	84.239	XOM_R2OW SG MWD+IFR1+ MS
16000	89.998	269.876	9804.3	54.324	0	62.448	0	54.324	0	0	62.642	36.601	84.317	XOM_R2OW SG MWD+IFR1+ MS
16100	89.998	269.874	9804.304	55.062	0	63.127	0	55.062	0	0	63.319	36.663	84.392	XOM_R2OW SG MWD+IFR1+ MS
16200	89.998	269.872	9804.308	55.801	0	63.809	0	55.801	0	0	64	36.726	84.466	XOM_R2OW SG MWD+IFR1+ MS
16300	89.998	269.869	9804.311	56.541	0	64.494	0	56.541	0	0	64.683	36.79	84.537	XOM_R2OW SG MWD+IFR1+ MS
16400	89.998	269.867	9804.315	57.283	0	65.182	0	57.283	0	0	65.37	36.855	84.607	XOM_R2OW SG MWD+IFR1+ MS
16500	89.998	269.865	9804.319	58.025	0	65.873	0	58.025	0	0	66.059	36.921	84.675	XOM_R2OW SG MWD+IFR1+ MS
16600	89.998	269.863	9804.323	58.769	0	66.567	0	58.769	0	0	66.751	36.988	84.741	XOM_R2OW SG MWD+IFR1+ MS
16700	89.998	269.861	9804.327	59.514	0	67.263	0	59.514	0	0	67.446	37.055	84.805	XOM_R2OW SG MWD+IFR1+ MS

16800	89.998	269.858	9804.332	60.26	0	67.963	0	60.26	0	0	68.144	37.123	84.868	XOM_R2OW SG MWD+IFR1+ MS
16900	89.998	269.856	9804.336	61.006	0	68.665	0	61.006	0	0	68.845	37.193	84.93	XOM_R2OW SG MWD+IFR1+ MS
17000	89.998	269.854	9804.34	61.754	0	69.369	0	61.754	0	0	69.548	37.263	84.99	XOM_R2OW SG MWD+IFR1+ MS
17100	89.997	269.852	9804.344	62.503	0	70.076	0	62.503	0	0	70.253	37.333	85.048	XOM_R2OW SG MWD+IFR1+ MS
17200	89.997	269.85	9804.349	63.252	0	70.785	0	63.252	0	0	70.961	37.405	85.105	XOM_R2OW SG MWD+IFR1+ MS
17300	89.997	269.847	9804.353	64.002	0	71.497	0	64.002	0	0	71.671	37.478	85.161	XOM_R2OW SG MWD+IFR1+ MS
17400	89.997	269.845	9804.358	64.753	0	72.21	0	64.753	0	0	72.383	37.551	85.215	XOM_R2OW SG MWD+IFR1+ MS
17500	89.997	269.843	9804.362	65.505	0	72.926	0	65.505	0	0	73.097	37.625	85.269	XOM_R2OW SG MWD+IFR1+ MS
17600	89.997	269.841	9804.367	66.258	0	73.644	0	66.258	0	0	73.814	37.7	85.321	XOM_R2OW SG MWD+IFR1+ MS
17700	89.997	269.839	9804.372	67.011	0	74.364	0	67.011	0	0	74.533	37.776	85.371	XOM_R2OW SG MWD+IFR1+ MS
17800	89.997	269.836	9804.377	67.766	0	75.086	0	67.766	0	0	75.253	37.852	85.421	XOM_R2OW SG MWD+IFR1+ MS
17900	89.997	269.834	9804.381	68.52	0	75.81	0	68.52	0	0	75.976	37.929	85.47	XOM_R2OW SG MWD+IFR1+ MS

18000	89.997	269.832	9804.386	69.276	0	76.536	0	69.276	0	0	76.7	38.007	85.517	XOM_R2OW SG MWD+IFR1+ MS
18100	89.997	269.83	9804.391	70.032	0	77.264	0	70.032	0	0	77.426	38.086	85.564	XOM_R2OW SG MWD+IFR1+ MS
18200	89.997	269.828	9804.396	70.789	0	77.993	0	70.789	0	0	78.155	38.166	85.609	XOM_R2OW SG MWD+IFR1+ MS
18300	89.997	269.825	9804.401	71.546	0	78.724	0	71.546	0	0	78.884	38.246	85.654	XOM_R2OW SG MWD+IFR1+ MS
18400	89.997	269.823	9804.407	72.304	0	79.457	0	72.304	0	0	79.616	38.327	85.697	XOM_R2OW SG MWD+IFR1+ MS
18500	89.997	269.821	9804.412	73.063	0	80.192	0	73.063	0	0	80.349	38.409	85.74	XOM_R2OW SG MWD+IFR1+ MS
18600	89.997	269.819	9804.417	73.822	0	80.928	0	73.822	0	0	81.084	38.492	85.782	XOM_R2OW SG MWD+IFR1+ MS
18700	89.997	269.817	9804.423	74.581	0	81.665	0	74.581	0	0	81.82	38.575	85.822	XOM_R2OW SG MWD+IFR1+ MS
18800	89.997	269.814	9804.428	75.341	0	82.404	0	75.341	0	0	82.558	38.659	85.863	XOM_R2OW SG MWD+IFR1+ MS
18900	89.997	269.812	9804.434	76.102	0	83.145	0	76.102	0	0	83.297	38.744	85.902	XOM_R2OW SG MWD+IFR1+ MS
19000	89.997	269.81	9804.439	76.863	0	83.887	0	76.863	0	0	84.037	38.829	85.94	XOM_R2OW SG MWD+IFR1+ MS
19100	89.997	269.808	9804.445	77.625	0	84.63	0	77.625	0	0	84.78	38.915	85.978	XOM_R2OW SG MWD+IFR1+ MS

19200	89.997	269.806	9804.45	78.387	0	85.375	0	78.387	0	0	85.523	39.002	86.015	XOM_R2OW SG MWD+IFR1+ MS
19300	89.997	269.803	9804.456	79.149	0	86.121	0	79.149	0	0	86.268	39.09	86.051	XOM_R2OW SG MWD+IFR1+ MS
19400	89.997	269.801	9804.462	79.912	0	86.868	0	79.912	0	0	87.014	39.178	86.087	XOM_R2OW SG MWD+IFR1+ MS
19500	89.997	269.799	9804.468	80.675	0	87.616	0	80.675	0	0	87.761	39.267	86.122	XOM_R2OW SG MWD+IFR1+ MS
19600	89.997	269.797	9804.474	81.439	0	88.366	0	81.439	0	0	88.509	39.357	86.156	XOM_R2OW SG MWD+IFR1+ MS
19700	89.997	269.795	9804.48	82.203	0	89.117	0	82.203	0	0	89.259	39.448	86.189	XOM_R2OW SG MWD+IFR1+ MS
19800	89.996	269.792	9804.486	82.968	0	89.869	0	82.968	0	0	90.01	39.539	86.222	XOM_R2OW SG MWD+IFR1+ MS
19900	89.996	269.79	9804.492	83.732	0	90.622	0	83.732	0	0	90.762	39.631	86.255	XOM_R2OW SG MWD+IFR1+ MS
20000	89.996	269.788	9804.498	84.498	0	91.376	0	84.498	0	0	91.515	39.723	86.286	XOM_R2OW SG MWD+IFR1+ MS
20100	89.996	269.786	9804.505	85.263	0	92.132	0	85.263	0	0	92.269	39.816	86.318	XOM_R2OW SG MWD+IFR1+ MS
20200	89.996	269.784	9804.511	86.029	0	92.888	0	86.029	0	0	93.024	39.91	86.348	XOM_R2OW SG MWD+IFR1+ MS
20300	89.996	269.781	9804.517	86.796	0	93.645	0	86.796	0	0	93.781	40.005	86.378	XOM_R2OW SG MWD+IFR1+ MS

20400	89.996	269.779	9804.524	87.562	0	94.404	0	87.562	0	0	94.538	40.1	86.408	XOM_R2OW SG MWD+IFR1+ MS
20500	89.996	269.777	9804.531	88.329	0	95.163	0	88.329	0	0	95.296	40.196	86.437	XOM_R2OW SG MWD+IFR1+ MS
20600	89.996	269.775	9804.537	89.096	0	95.923	0	89.096	0	0	96.055	40.292	86.465	XOM_R2OW SG MWD+IFR1+ MS
20700	89.996	269.773	9804.544	89.864	0	96.685	0	89.864	0	0	96.816	40.389	86.493	XOM_R2OW SG MWD+IFR1+ MS
20800	89.996	269.77	9804.551	90.632	0	97.447	0	90.632	0	0	97.577	40.487	86.521	XOM_R2OW SG MWD+IFR1+ MS
20900	89.996	269.768	9804.557	91.4	0	98.21	0	91.4	0	0	98.338	40.585	86.548	XOM_R2OW SG MWD+IFR1+ MS
21000	89.996	269.766	9804.564	92.168	0	98.973	0	92.168	0	0	99.101	40.684	86.574	XOM_R2OW SG MWD+IFR1+ MS
21100	89.996	269.764	9804.571	92.937	0	99.738	0	92.937	0	0	99.865	40.784	86.6	XOM_R2OW SG MWD+IFR1+ MS
21200	89.996	269.762	9804.578	93.706	0	100.504	0	93.706	0	0	100.629	40.884	86.626	XOM_R2OW SG MWD+IFR1+ MS
21300	89.996	269.759	9804.585	94.475	0	101.27	0	94.475	0	0	101.395	40.985	86.651	XOM_R2OW SG MWD+IFR1+ MS
21400	89.996	269.757	9804.592	95.245	0	102.037	0	95.245	0	0	102.161	41.086	86.676	XOM_R2OW SG MWD+IFR1+ MS
21500	89.996	269.755	9804.6	96.014	0	102.805	0	96.014	0	0	102.928	41.188	86.7	XOM_R2OW SG MWD+IFR1+ MS

21600	89.996	269.753	9804.607	96.784	0	103.574	0	96.784	0	0	103.695	41.291	86.724	XOM_R2OW SG MWD+IFR1+ MS
21700	89.996	269.751	9804.614	97.554	0	104.343	0	97.554	0	0	104.464	41.394	86.748	XOM_R2OW SG MWD+IFR1+ MS
21800	89.996	269.748	9804.622	98.325	0	105.113	0	98.325	0	0	105.233	41.498	86.771	XOM_R2OW SG MWD+IFR1+ MS
21900	89.996	269.746	9804.629	99.095	0	105.884	0	99.096	0	0	106.003	41.602	86.794	XOM_R2OW SG MWD+IFR1+ MS
22000	89.996	269.744	9804.637	99.866	0	106.655	0	99.866	0	0	106.773	41.707	86.817	XOM_R2OW SG MWD+IFR1+ MS
22100	89.996	269.742	9804.644	100.637	0	107.427	0	100.637	0	0	107.544	41.813	86.839	XOM_R2OW SG MWD+IFR1+ MS
22200	89.996	269.74	9804.652	101.409	0	108.2	0	101.409	0	0	108.316	41.919	86.861	XOM_R2OW SG MWD+IFR1+ MS
22300	89.996	269.737	9804.659	102.18	0	108.973	0	102.18	0	0	109.089	42.025	86.882	XOM_R2OW SG MWD+IFR1+ MS
22400	89.996	269.735	9804.667	102.952	0	109.747	0	102.952	0	0	109.862	42.133	86.903	XOM_R2OW SG MWD+IFR1+ MS
22500	89.995	269.733	9804.675	103.724	0	110.522	0	103.724	0	0	110.636	42.241	86.924	XOM_R2OW SG MWD+IFR1+ MS
22600	89.995	269.731	9804.683	104.496	0	111.297	0	104.496	0	0	111.41	42.349	86.944	XOM_R2OW SG MWD+IFR1+ MS
22700	89.995	269.729	9804.691	105.268	0	112.073	0	105.268	0	0	112.185	42.458	86.965	XOM_R2OW SG MWD+IFR1+ MS

22800	89.995	269.726	9804.699	106.041	0	112.85	0	106.041	0	0	112.961	42.567	86.985	XOM_R2OW SG MWD+IFR1+ MS
22900	89.995	269.724	9804.707	106.813	0	113.627	0	106.813	0	0	113.737	42.677	87.004	XOM_R2OW SG MWD+IFR1+ MS
23000	89.995	269.722	9804.715	107.586	0	114.404	0	107.586	0	0	114.513	42.788	87.023	XOM_R2OW SG MWD+IFR1+ MS
23100	89.995	269.72	9804.724	108.359	0	115.182	0	108.359	0	0	115.291	42.899	87.042	XOM_R2OW SG MWD+IFR1+ MS
23200	89.995	269.718	9804.732	109.132	0	115.961	0	109.132	0	0	116.069	43.01	87.061	XOM_R2OW SG MWD+IFR1+ MS
23300	89.995	269.715	9804.74	109.906	0	116.74	0	109.906	0	0	116.847	43.123	87.08	XOM_R2OW SG MWD+IFR1+ MS
23400	89.995	269.713	9804.749	110.679	0	117.52	0	110.679	0	0	117.626	43.235	87.098	XOM_R2OW SG MWD+IFR1+ MS
23500	89.995	269.711	9804.757	111.453	0	118.3	0	111.453	0	0	118.405	43.348	87.116	XOM_R2OW SG MWD+IFR1+ MS
23600	89.995	269.709	9804.766	112.226	0	119.081	0	112.227	0	0	119.185	43.462	87.133	XOM_R2OW SG MWD+IFR1+ MS
23700	89.995	269.707	9804.774	113	0	119.862	0	113.001	0	0	119.965	43.576	87.151	XOM_R2OW SG MWD+IFR1+ MS
23800	89.995	269.704	9804.783	113.775	0	120.643	0	113.775	0	0	120.746	43.691	87.168	XOM_R2OW SG MWD+IFR1+ MS
23900	89.995	269.702	9804.792	114.549	0	121.425	0	114.549	0	0	121.527	43.806	87.185	XOM_R2OW SG MWD+IFR1+ MS

24000	89.995	269.7	9804.801	115.323	0	122.208	0	115.323	0	0	122.309	43.922	87.201	XOM_R2OW SG MWD+IFR1+ MS
24100	89.995	269.698	9804.81	116.098	0	122.991	0	116.098	0	0	123.091	44.038	87.218	XOM_R2OW SG MWD+IFR1+ MS
24200	89.995	269.696	9804.818	116.872	0	123.774	0	116.872	0	0	123.874	44.155	87.234	XOM_R2OW SG MWD+IFR1+ MS
24300	89.995	269.693	9804.827	117.647	0	124.558	0	117.647	0	0	124.657	44.272	87.25	XOM_R2OW SG MWD+IFR1+ MS
24400	89.995	269.691	9804.837	118.422	0	125.342	0	118.422	0	0	125.441	44.389	87.266	XOM_R2OW SG MWD+IFR1+ MS
24500	89.995	269.689	9804.846	119.197	0	126.127	0	119.197	0	0	126.225	44.507	87.281	XOM_R2OW SG MWD+IFR1+ MS
24600	89.995	269.687	9804.855	119.972	0	126.912	0	119.972	0	0	127.009	44.626	87.297	XOM_R2OW SG MWD+IFR1+ MS
24700	89.995	269.685	9804.864	120.748	0	127.698	0	120.748	0	0	127.794	44.745	87.312	XOM_R2OW SG MWD+IFR1+ MS
24800	89.995	269.682	9804.874	121.523	0	128.484	0	121.523	0	0	128.579	44.865	87.327	XOM_R2OW SG MWD+IFR1+ MS
24900	89.995	269.68	9804.883	122.299	0	129.27	0	122.299	0	0	129.365	44.984	87.341	XOM_R2OW SG MWD+IFR1+ MS
25000	89.995	269.678	9804.892	123.074	0	130.057	0	123.074	0	0	130.151	45.105	87.356	XOM_R2OW SG MWD+IFR1+ MS
25100	89.995	269.676	9804.902	123.85	0	130.844	0	123.85	0	0	130.937	45.226	87.37	XOM_R2OW SG MWD+IFR1+ MS

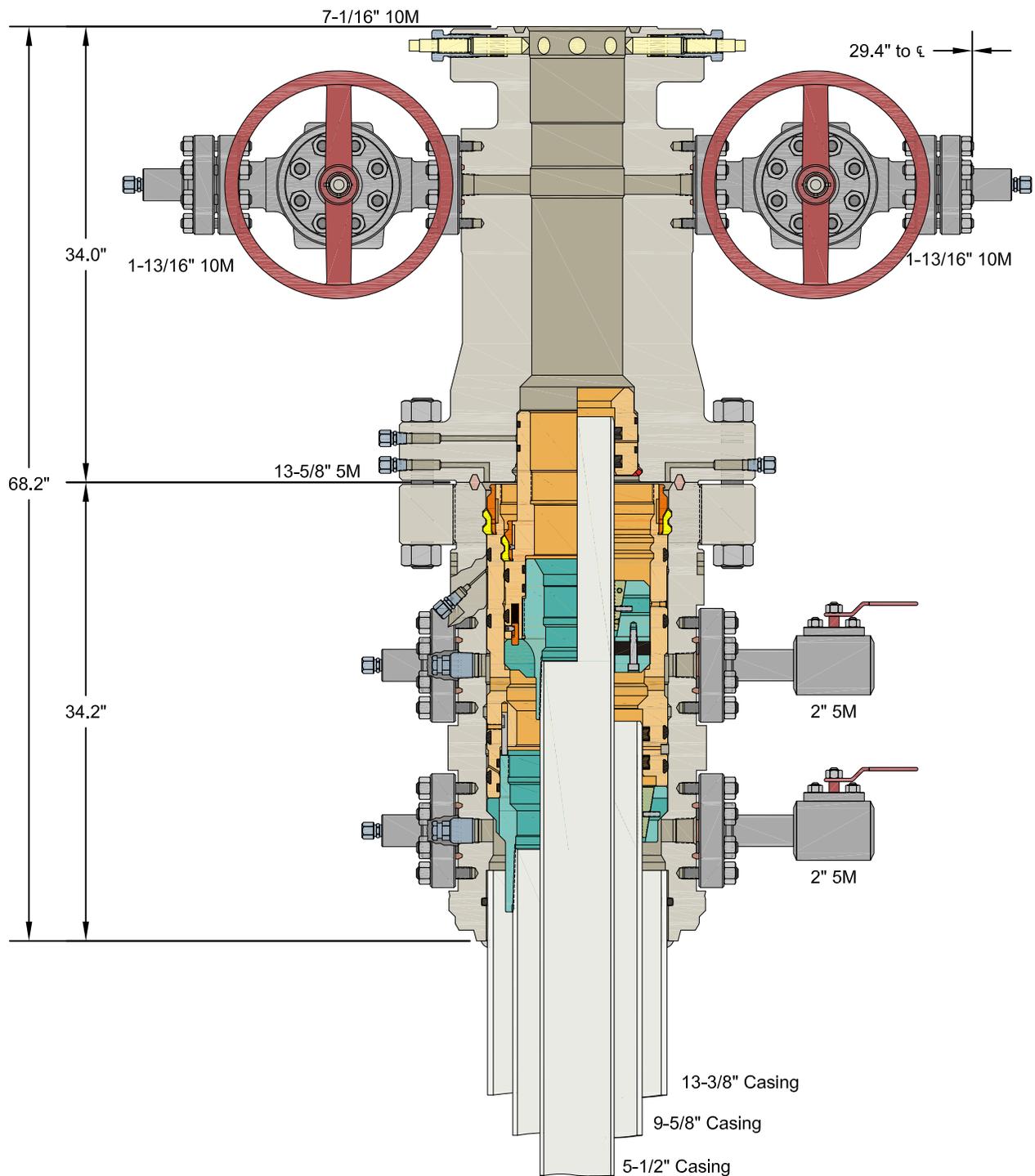
25200	89.994	269.674	9804.912	124.626	0	131.631	0	124.626	0	0	131.724	45.347	87.384	XOM_R2OW SG MWD+IFR1+ MS
25300	89.994	269.671	9804.921	125.402	0	132.419	0	125.402	0	0	132.511	45.469	87.398	XOM_R2OW SG MWD+IFR1+ MS
25400	89.994	269.669	9804.931	126.178	0	133.207	0	126.178	0	0	133.298	45.591	87.412	XOM_R2OW SG MWD+IFR1+ MS
25500	89.994	269.667	9804.941	126.954	0	133.995	0	126.954	0	0	134.086	45.714	87.426	XOM_R2OW SG MWD+IFR1+ MS
25600	89.994	269.665	9804.951	127.731	0	134.784	0	127.731	0	0	134.874	45.837	87.439	XOM_R2OW SG MWD+IFR1+ MS
25700	89.994	269.663	9804.961	128.507	0	135.573	0	128.507	0	0	135.662	45.96	87.452	XOM_R2OW SG MWD+IFR1+ MS
25800	89.994	269.66	9804.971	129.284	0	136.362	0	129.284	0	0	136.451	46.084	87.465	XOM_R2OW SG MWD+IFR1+ MS
25900	89.994	269.658	9804.981	130.06	0	137.152	0	130.06	0	0	137.24	46.209	87.478	XOM_R2OW SG MWD+IFR1+ MS
26000	89.994	269.656	9804.991	130.837	0	137.942	0	130.837	0	0	138.03	46.333	87.491	XOM_R2OW SG MWD+IFR1+ MS
26091.371	89.994	269.654	9805	131.547	0	138.664	0	131.547	0	0	138.751	46.448	87.503	XOM_R2OW SG MWD+IFR1+ MS

Plan Targets	BEU BB JABBA 102H
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Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 4	10371.84	564092.27	675880.55	6262	CIRCLE
LTP 4	26041.42	564044.74	660210.73	6262	CIRCLE
BHL 4	26091.37	564044.79	660160.78	6262	CIRCLE



GE Oil & Gas



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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.

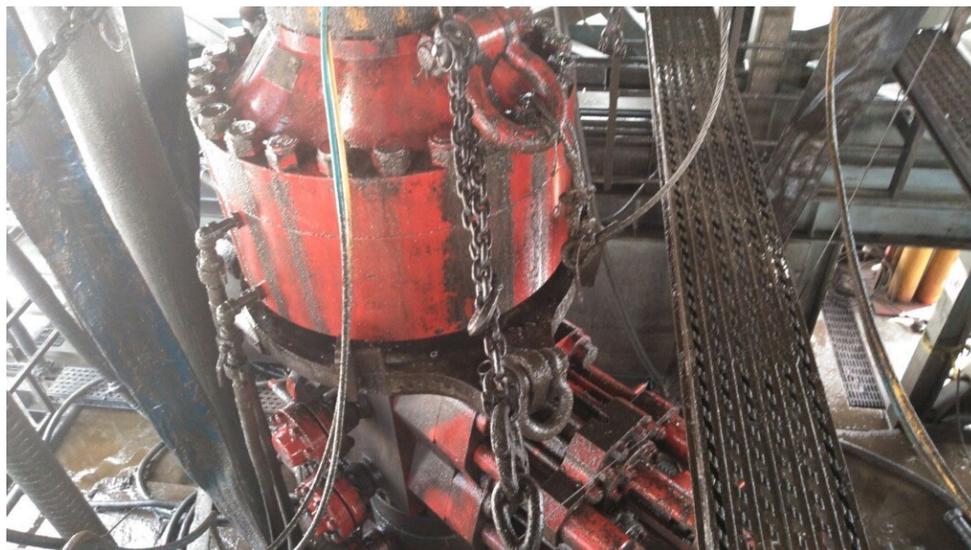


Figure 1: Winch System attached to BOP Stack

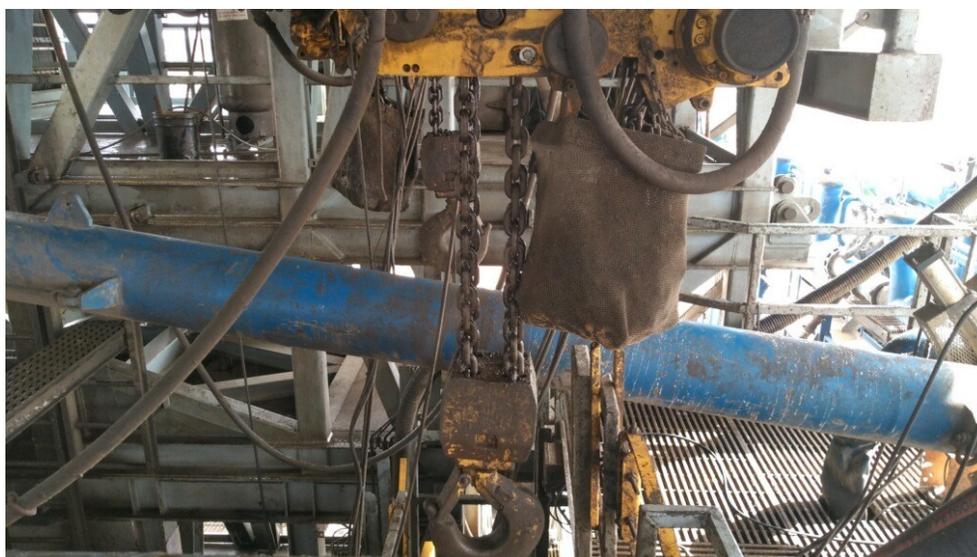


Figure 2: BOP Winch System

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.

62 API STANDARD 53			
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.

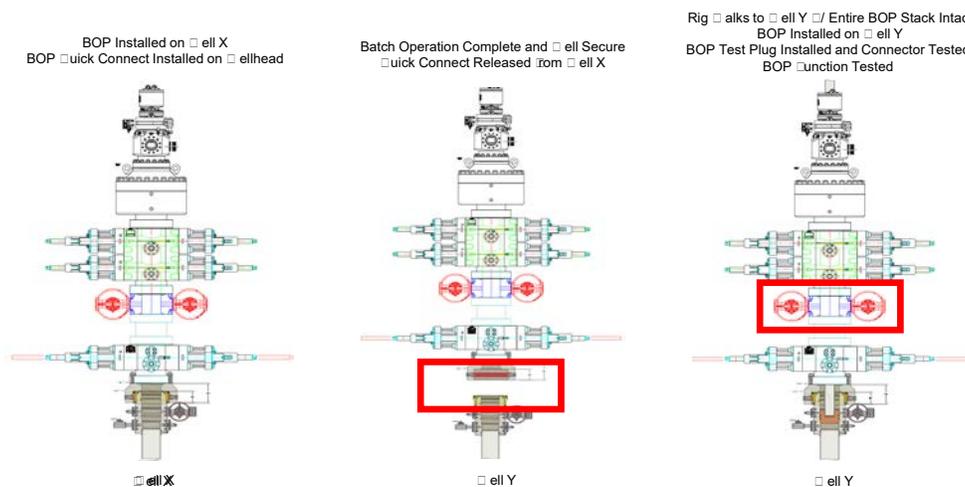
XTO Energy feels break testing and our current procedures meet the intent of OOGO No. 2 and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often than that 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.

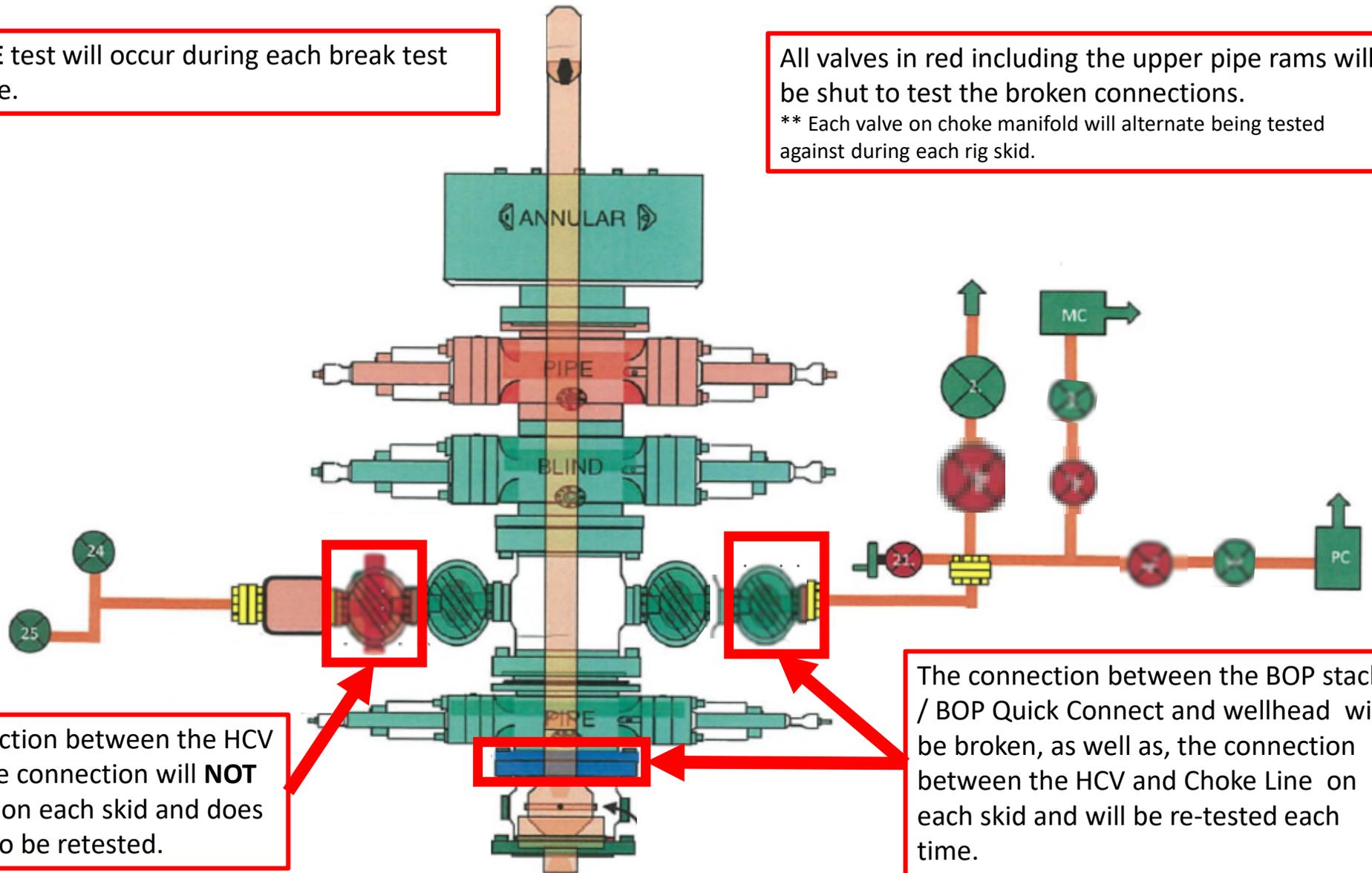
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.

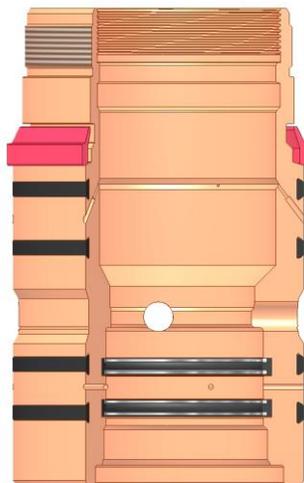
1. Cement Program

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

2. Offline Cementing Procedure

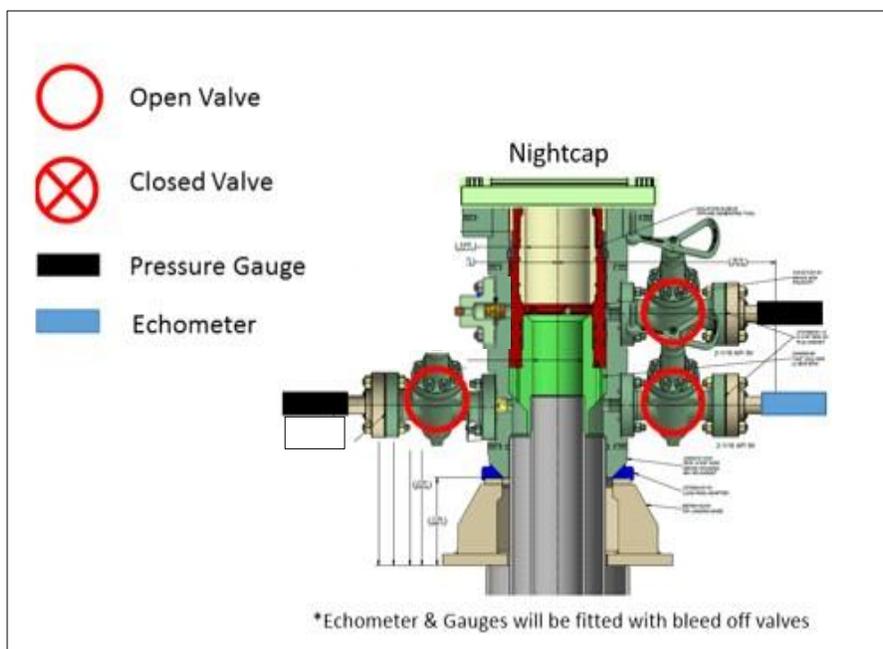
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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 nipped 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

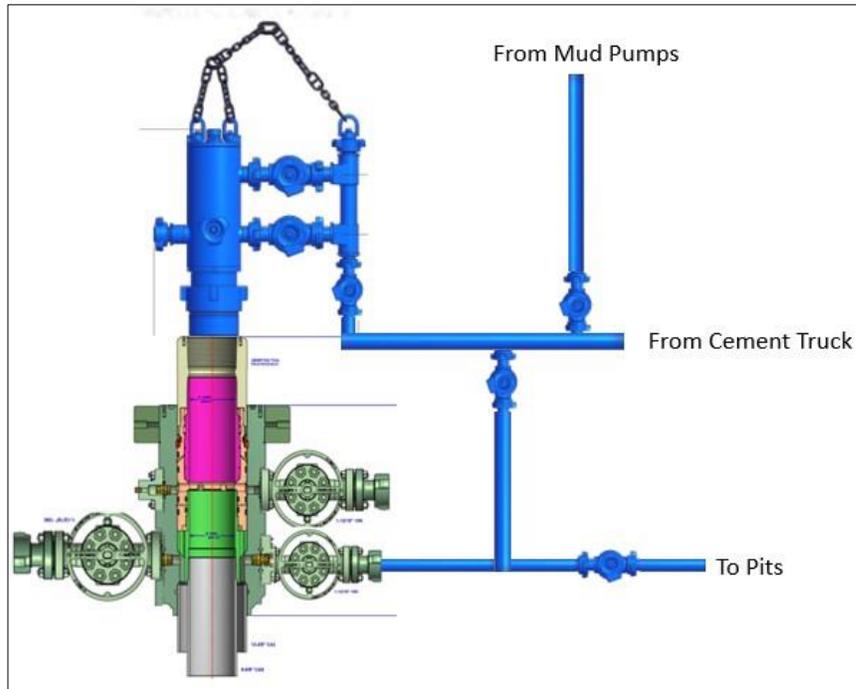
XTO Permian Operating, LLC Offline Cementing Variance Request



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 nipping 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 nipped 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.

Sec 22 20S 32E MP 2682661 Big Eddy Unit DI BB Jabba 102H Lea M M033955 XTO 13 22 44804 Illison Morency

Big Eddy Unit DI BB Jabba 102H

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
"□"	87.50	J 55	BTC	14.25	1.24	1.49	1066	5	2.50	2.29	93275
"B"			BTC				0				0
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,110				Tail Cmt	does not	circ to sfc.	Totals:	1066			93275
<u>Comparison of Proposed to Minimum Required Cement Volumes</u>											
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	1.2496	1890	3356	1332	152	9.20	901	2M			12.00
Site plat (pipe racks S or E) as per D.O.I. Ill D 4 L 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
"□"	54.50	J 55	BTC	5.65	0.75	1.93	2769	2	3.48	1.25	150911
"B"							0				0
w/8.4#/g mud, 30min Sfc Csg Test psig:				The cement volume(s) are intended to achieve a top of	0	ft from surface or a	Totals:	2769			150911
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	0.6946	2060	3825	1976	94	10.50	785	2M			1.56
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
"□"	40.00	HCP 110	BTC	10.98	2.99	3.08	2869	6	5.35	5.39	114760
"B"	40.00	HCL 80	BTC	∞	2.99	2.24	2166	4	3.89	5.39	86640
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				The cement volume(s) are intended to achieve a top of	0	ft from surface or a	Totals:	5035			201400
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	0.3132	1390	3149	1714	84	9.50	1478	2M			0.81
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
"□"	20.00	RY P 110	Semi-Premiur	6.49	4.33	4.93	4935	5	8.55	7.51	98700
"B"	20.00	RY P 110	Semi-Flush	∞	4.33	4.93	21938	5	8.55	7.51	438760
w/8.4#/g mud, 30min Sfc Csg Test psig: 1,500				The cement volume(s) are intended to achieve a top of	4400	ft from surface or a	Totals:	26873			537460
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	0.2291	3320	5438	5168	5	10.00					1.30
Class 'C' tail cmt yld > 1.35 Capitan Reef est top XXXX.											

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Permian Operating LLC
WELL NAME & NO.:	Big Eddy Unit DI BB Jabba 102H
LOCATION:	Sec 22-20S-32E-NMP
COUNTY:	Lea County, New Mexico

Updated COAs per Sundry 2682659 approved through engineering on 08/31/2022.

COA

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

A. HYDROGEN SULFIDE

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 1177 feet (a minimum of 25 feet (Lea 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 2,800 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 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:
 - 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.
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 or potash.**

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.
 - 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 **50 feet** on top of Capitan Reef top. 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.**

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.

Commercial Well Determination

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

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)
393-3612

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

3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.

7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

- a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500

feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

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

CONDITIONS

Action 140782

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 140782
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

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