

Well Name: POKER LAKE UNIT 21 DTD	Well Location: T24S / R30E / SEC 16 / SESE / 32.211144 / -103.879773	County or Parish/State: EDDY / NM
Well Number: 157H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMLC0068431	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number: 3001553256	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2784159

Type of Submission: Notice of Intent Type of Action: APD Change

Date Sundry Submitted: 04/09/2024 Time Sundry Submitted: 01:51

Date proposed operation will begin: 04/30/2024

Procedure Description: XTO Permian Operating, LLC. respectfully requests approval to make the following changes to the approved APD. Changes to include SHL, FTP, LTP, BHL, Casing sizes, Cement, Proposed total Depth, and formation (Pool). FROM: TO: SHL: 237' FSL & 677' FEL OF SECTION 16-T24S-R30E 332' FSL & 187' FEL OF SECTION 16-T24S-R30E FTP: 386' FNL & 1244' FEL OF SECTION 21-T24S-R30E 100' FNL & 1190' FEL OF SECTION 21-T24S-R30E LTP: 330' FNL & 1196' FEL OF SECTION 33-T23S-R30E 2538' FNL & 1186' FEL OF SECTION 33-T24S-R30E BHL: 200' FNL & 1195' FEL OF SECTION 33-T23S-R30E 2628' FNL & 1187' FEL OF SECTION 33-T24S-R30E The proposed total depth is changing from 33768' MD; 12011' TVD (Wolfcamp) to 25010' MD; 11910' TVD (Wolfcamp C). See attached Drilling Plan for updated cement and casing program. Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

NOI Attachments

Procedure Description

PLU_21_DTD_157H_Sundry_Documents_20240409135048.pdf

Received by OCD: 7/1/2024 3:34:02 PM

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US Well Number: 3001553256	Operator: XTO PERMIAN OPERATING LLC	

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: TERRA SEBASTIAN	Signed on: APR 29, 2024 07:42 AM
Name: XTO PERMIAN OPERATING LLC	
Title: Regulatory Advisor	
Street Address: 6401 HOLIDAY HILL ROAD SUITE 200	
City: MIDLAND	State: TX
Phone: (432) 999-3107	
Email address: TERRA.B.SEBASTIAN@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: 07/01/2024
Signature: Chris Walls	

Form 3160-5
(June 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 2021

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

5. Lease Serial No.	
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	
8. Well Name and No.	
9. API Well No.	
10. Field and Pool or Exploratory Area	
11. Country or Parish, State	

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Hydraulic Fracturing	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon		
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

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

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed)	Title
Signature	Date

THE SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

GENERAL INSTRUCTIONS

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

SPECIFIC INSTRUCTIONS

Item 4 - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c) and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-3, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

Additional Information

Additional Remarks

Attachments: C-102, Drilling Plan, Directional Plan, MBS, BOP Variance and Well Control Plan.

Location of Well

0. SHL: SESE / 237 FSL / 677 FEL / TWSP: 24S / RANGE: 30E / SECTION: 16 / LAT: 32.211144 / LONG: -103.879773 (TVD: 0 feet, MD: 0 feet)
PPP: NENE / 386 FNL / 1244 FEL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.209426 / LONG: -103.88161 (TVD: 12011 feet, MD: 12500 feet)
BHL: NENE / 200 FNL / 1196 FEL / TWSP: 23S / RANGE: 30E / SECTION: 33 / LAT: 32.268077 / LONG: -103.881454 (TVD: 12011 feet, MD: 33768 feet)

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

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

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

☒ **AMENDED REPORT**

WELL LOCATION AND ACREAGE DEDICATION PLAT

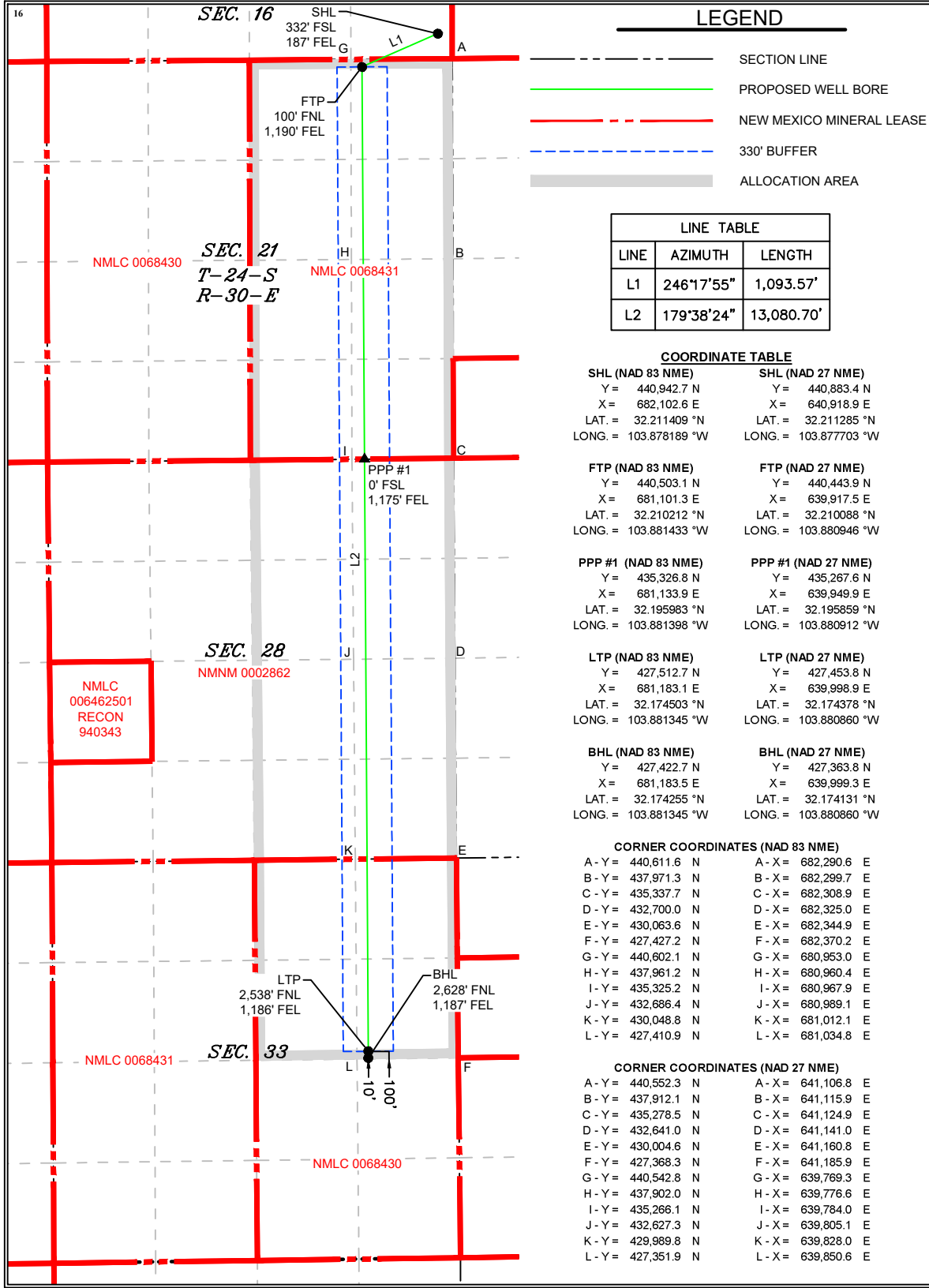
¹ API Number 30-015-53256	² Pool Code 98220	³ Pool Name PURPLE SAGE;WOLFCAMP (GAS)
⁴ Property Code 333571	⁵ Property Name POKER LAKE UNIT 21 DTD	⁶ Well Number 157H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,397'

¹⁰ Surface Location									
UL or lot no. P	Section 16	Township 24S	Range 30E	Lot Idn	Feet from the 332	North/South line SOUTH	Feet from the 187	East/West line EAST	County EDDY

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no. H	Section 33	Township 24S	Range 30E	Lot Idn	Feet from the 2,628	North/South line NORTH	Feet from the 1,187	East/West line EAST	County EDDY

¹² Dedicated Acres 800.00	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.

Manish Saini 03/28/2024
Signature Date

Manish Saini
Printed Name

manish.saini@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.

3/26/2024
Date of Survey

Signature and Seal of
Professional Surveyor:



MARK DILLON HARP 23786
Certificate Number

DB 618.013003.07-54

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Is this well the defining well for the Horizontal Spacing Unit? ☐Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018

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

XTO Energy Inc.
POKER LAKE UNIT 21 DTD 157H
Projected TD: 24829' MD / 11866' TVD
SHL: 332' FSL & 187' FEL , Section 16, T24S, R30E
BHL: 2628' FNL & 1187' FEL , Section 33, T23S, R30E
EDDY County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	1044'	Water
Top of Salt	1447'	Water
Base of Salt	3640'	Water
Delaware	3834'	Water
Brushy Canyon	6380'	Water/Oil/Gas
Bone Spring	7704'	Water
Avalon	8397'	Water/Oil/Gas
1st Bone Spring	8413'	Water/Oil/Gas
2nd Bone Spring	8998'	Water/Oil/Gas
3rd Bone Spring	9824'	Water/Oil/Gas
Wolfcamp	11009'	Water/Oil/Gas
Wolfcamp X	11030'	Water/Oil/Gas
Wolfcamp Y	11111'	Water/Oil/Gas
Wolfcamp A	11158'	Water/Oil/Gas
Wolfcamp B	11541'	Water/Oil/Gas
Wolfcamp C	11746'	Water/Oil/Gas
Target/Land Curve	11866'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon

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

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13.375 inch casing @ 1144' (303' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 9.625 inch casing at 11140' and cemented to surface. A 8.5 inch curve and 8.5 inch lateral hole will be drilled to 24829 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 10840 feet).

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1144'	13.375	54.5	J-55	BTC	New	1.04	2.26	14.58
12.25	0' – 4000'	9.625	40	HC P-110	BTC	New	1.76	2.31	2.84
12.25	4000' – 11140'	9.625	40	HC L-80	BTC	New	1.28	1.57	3.21
8.5	0' – 11040'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.68	1.91
8.5	11040' - 24829'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.56	1.91

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

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

- 9.625 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35
- Test on 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: 11" 10M top flange x 9-5/8" bottom

B. Tubing Head: 11" 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.

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1144'

Lead: 620 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft³/sx, 10.13 gal/sx water)

Tail: 300 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

2nd Intermediate Casing: 9.625, 40 New casing to be set at +/- 11140'

1st Stage

Optional Lead: 1080 sxs Class C (mixed at 10.5 ppg, 2.77 ft³/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 1380 sxs Class C (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6380

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft³/sx, 9.61 gal/sx water)

Tail: 2250 sxs Class C (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

Top of Cement: 0

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6380') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will 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 inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

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

Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 24829'

Lead: 50 sxs NeoCem (mixed at 13.2 ppg, 2.69 ft³/sx, 15.00 gal/sx water) Top of Cement: 10840 feet

Tail: 2660 sxs VersaCem (mixed at 14.5 ppg, 1.51 ft³/sx, 8.38 gal/sx water) Top of Cement: 11340 feet

Compressives: 12-hr = 800 psi 24 hr = 1500 psi

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

5. Pressure Control Equipment

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 4485 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13.375, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nipping up on the 9.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each week.

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' - 1144'	17.5	FW/Native	8.4-8.9	35-40	NC
1144' - 11140'	12.25	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
11140' - 24829'	8.5	OBM	11.5-12	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 9-5/8" surface casing with brine solution. Cut brine mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. Auxiliary Well Control and Monitoring Equipment

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

8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 180 to 200 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 7096 psi.

10. Anticipated Starting Date and Duration of Operations

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

Well Plan Report - Poker Lake Unit 21 DTD South 157H

Measured Depth: 24829.40 ft

TVD RKB: 11866.00 ft

Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 440883.40 ft

Easting: 640918.90 ft

RKB: 3429.00 ft

Ground Level: 3397.00 ft

North Reference: Grid

Convergence Angle: 0.24 Deg

Plan Sections

Poker Lake Unit 21 DTD South 157H

Measured		TVD		Build		Turn	Dogleg	
Depth	Inclination	Azimuth	RKB	Y Offset	X Offset	Rate	Rate	Rate
(ft)	(Deg)	(Deg)	(ft)	(ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft) Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3700.00	0.00	0.00	3700.00	0.00	0.00	0.00	0.00	0.00
4752.73	22.55	246.30	4725.76	-82.19	-187.27	2.14	0.00	2.14
6537.70	22.55	246.30	6374.24	-357.31	-814.13	0.00	0.00	0.00
7590.43	0.00	0.00	7400.00	-439.50	-1001.40	-2.14	0.00	2.14
11340.23	0.00	0.00	11149.80	-439.50	-1001.40	0.00	0.00	0.00
12465.23	90.00	179.64	11866.00	-1155.68	-996.91	8.00	0.00	8.00
24739.39	90.00	179.64	11866.00	-13429.59	-920.01	0.00	0.00	0.00 LTP 23
24829.40	90.00	179.64	11866.00	-13519.61	-919.44	0.00	0.00	0.00 BHL 23

Position Uncertainty

Poker Lake Unit 21 DTD South 157H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
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Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	of Bias	Error	Error	Azimuth	Used
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+MS
100.000	0.000	0.000	100.000	0.700	0.000	0.350	0.000	2.300	0.000	0.000	0.751	0.220	112.264	MWD+IFR1+MS
200.000	0.000	0.000	200.000	1.112	0.000	0.861	0.000	2.310	0.000	0.000	1.259	0.627	122.711	MWD+IFR1+MS
300.000	0.000	0.000	300.000	1.497	0.000	1.271	0.000	2.325	0.000	0.000	1.698	0.986	125.469	MWD+IFR1+MS
400.000	0.000	0.000	400.000	1.871	0.000	1.658	0.000	2.347	0.000	0.000	2.108	1.344	126.713	MWD+IFR1+MS
500.000	0.000	0.000	500.000	2.240	0.000	2.034	0.000	2.374	0.000	0.000	2.503	1.701	127.419	MWD+IFR1+MS
600.000	0.000	0.000	600.000	2.607	0.000	2.405	0.000	2.407	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	700.000	2.971	0.000	2.773	0.000	2.444	0.000	0.000	3.267	2.417	128.190	MWD+IFR1+MS
800.000	0.000	0.000	800.000	3.334	0.000	3.138	0.000	2.486	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	900.000	3.696	0.000	3.502	0.000	2.532	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	1000.000	4.058	0.000	3.865	0.000	2.582	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1100.000	4.419	0.000	4.228	0.000	2.635	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	0.000	0.000	1200.000	4.779	0.000	4.589	0.000	2.692	0.000	0.000	5.119	4.207	128.954	MWD+IFR1+MS
1300.000	0.000	0.000	1300.000	5.140	0.000	4.950	0.000	2.752	0.000	0.000	5.484	4.565	129.034	MWD+IFR1+MS
1400.000	0.000	0.000	1400.000	5.500	0.000	5.311	0.000	2.814	0.000	0.000	5.849	4.924	129.102	MWD+IFR1+MS
1500.000	0.000	0.000	1500.000	5.860	0.000	5.672	0.000	2.879	0.000	0.000	6.213	5.282	129.161	MWD+IFR1+MS
1600.000	0.000	0.000	1600.000	6.219	0.000	6.032	0.000	2.947	0.000	0.000	6.577	5.640	129.212	MWD+IFR1+MS
1700.000	0.000	0.000	1700.000	6.579	0.000	6.392	0.000	3.017	0.000	0.000	6.939	5.999	129.257	MWD+IFR1+MS
1800.000	0.000	0.000	1800.000	6.938	0.000	6.752	0.000	3.088	0.000	0.000	7.302	6.357	129.297	MWD+IFR1+MS
1900.000	0.000	0.000	1900.000	7.298	0.000	7.112	0.000	3.162	0.000	0.000	7.664	6.715	129.333	MWD+IFR1+MS
2000.000	0.000	0.000	2000.000	7.657	0.000	7.471	0.000	3.238	0.000	0.000	8.026	7.074	129.365	MWD+IFR1+MS
2100.000	0.000	0.000	2100.000	8.016	0.000	7.831	0.000	3.315	0.000	0.000	8.387	7.432	129.394	MWD+IFR1+MS
2200.000	0.000	0.000	2200.000	8.375	0.000	8.190	0.000	3.393	0.000	0.000	8.748	7.791	129.420	MWD+IFR1+MS
2300.000	0.000	0.000	2300.000	8.734	0.000	8.550	0.000	3.474	0.000	0.000	9.109	8.149	129.444	MWD+IFR1+MS
2400.000	0.000	0.000	2400.000	9.093	0.000	8.909	0.000	3.555	0.000	0.000	9.470	8.507	129.466	MWD+IFR1+MS
2500.000	0.000	0.000	2500.000	9.452	0.000	9.268	0.000	3.639	0.000	0.000	9.831	8.866	129.486	MWD+IFR1+MS
2600.000	0.000	0.000	2600.000	9.811	0.000	9.627	0.000	3.723	0.000	0.000	10.191	9.224	129.505	MWD+IFR1+MS
2700.000	0.000	0.000	2700.000	10.170	0.000	9.986	0.000	3.809	0.000	0.000	10.552	9.583	129.522	MWD+IFR1+MS
2800.000	0.000	0.000	2800.000	10.529	0.000	10.345	0.000	3.896	0.000	0.000	10.912	9.941	129.538	MWD+IFR1+MS
2900.000	0.000	0.000	2900.000	10.888	0.000	10.705	0.000	3.985	0.000	0.000	11.272	10.299	129.552	MWD+IFR1+MS
3000.000	0.000	0.000	3000.000	11.247	0.000	11.063	0.000	4.075	0.000	0.000	11.632	10.658	129.566	MWD+IFR1+MS

3100.000	0.000	0.000	3100.000	11.606	0.000	11.422	0.000	4.166	0.000	0.000	11.992	11.016	129.579	MWD+IFR1+MS
3200.000	0.000	0.000	3200.000	11.965	0.000	11.781	0.000	4.258	0.000	0.000	12.352	11.375	129.591	MWD+IFR1+MS
3300.000	0.000	0.000	3300.000	12.323	0.000	12.140	0.000	4.352	0.000	0.000	12.712	11.733	129.603	MWD+IFR1+MS
3400.000	0.000	0.000	3400.000	12.682	0.000	12.499	0.000	4.447	0.000	0.000	13.071	12.092	129.613	MWD+IFR1+MS
3500.000	0.000	0.000	3500.000	13.041	0.000	12.858	0.000	4.543	0.000	0.000	13.431	12.450	129.623	MWD+IFR1+MS
3600.000	0.000	0.000	3600.000	13.400	0.000	13.217	0.000	4.641	0.000	0.000	13.790	12.809	129.633	MWD+IFR1+MS
3700.000	0.000	0.000	3700.000	13.758	0.000	13.576	0.000	4.740	0.000	0.000	14.150	13.167	129.642	MWD+IFR1+MS
3800.000	2.142	246.304	3799.977	14.299	-0.000	13.721	0.000	4.841	0.000	0.000	14.484	13.535	130.441	MWD+IFR1+MS
3900.000	4.284	246.304	3899.814	14.798	-0.000	14.065	0.000	4.943	0.000	0.000	14.940	13.951	-43.199	MWD+IFR1+MS
4000.000	6.427	246.304	3999.371	15.269	-0.000	14.410	0.000	5.049	0.000	0.000	15.409	14.343	-37.946	MWD+IFR1+MS
4100.000	8.569	246.304	4098.511	15.713	-0.000	14.755	0.000	5.160	0.000	0.000	15.883	14.718	-33.807	MWD+IFR1+MS
4200.000	10.711	246.304	4197.093	16.129	-0.000	15.101	0.000	5.277	0.000	0.000	16.356	15.082	-30.590	MWD+IFR1+MS
4300.000	12.853	246.304	4294.980	16.520	-0.000	15.449	0.000	5.403	0.000	0.000	16.825	15.440	-28.073	MWD+IFR1+MS
4400.000	14.995	246.304	4392.036	16.884	-0.000	15.797	0.000	5.538	0.000	0.000	17.288	15.794	-26.074	MWD+IFR1+MS
4500.000	17.138	246.304	4488.124	17.224	-0.000	16.147	0.000	5.685	0.000	0.000	17.742	16.147	-24.453	MWD+IFR1+MS
4600.000	19.280	246.304	4583.111	17.540	-0.000	16.499	0.000	5.844	0.000	0.000	18.187	16.498	-23.110	MWD+IFR1+MS
4700.000	21.422	246.304	4676.864	17.832	-0.000	16.853	0.000	6.016	0.000	0.000	18.624	16.851	-21.970	MWD+IFR1+MS
4752.729	22.552	246.304	4725.757	17.914	-0.000	17.037	0.000	6.085	0.000	0.000	18.798	17.035	-21.828	MWD+IFR1+MS
4800.000	22.552	246.304	4769.413	18.061	-0.000	17.201	0.000	6.143	0.000	0.000	18.935	17.199	-21.817	MWD+IFR1+MS
4900.000	22.552	246.304	4861.767	18.373	-0.000	17.559	0.000	6.276	0.000	0.000	19.224	17.557	-21.703	MWD+IFR1+MS
5000.000	22.552	246.304	4954.120	18.695	-0.000	17.926	0.000	6.415	0.000	0.000	19.523	17.923	-21.427	MWD+IFR1+MS
5100.000	22.552	246.304	5046.474	19.022	-0.000	18.297	0.000	6.559	0.000	0.000	19.825	18.293	-21.124	MWD+IFR1+MS
5200.000	22.552	246.304	5138.827	19.354	-0.000	18.671	0.000	6.708	0.000	0.000	20.132	18.668	-20.793	MWD+IFR1+MS
5300.000	22.552	246.304	5231.180	19.691	-0.000	19.050	0.000	6.861	0.000	0.000	20.443	19.045	-20.430	MWD+IFR1+MS
5400.000	22.552	246.304	5323.534	20.032	-0.000	19.432	0.000	7.018	0.000	0.000	20.758	19.426	-20.030	MWD+IFR1+MS
5500.000	22.552	246.304	5415.887	20.378	-0.000	19.817	0.000	7.180	0.000	0.000	21.077	19.810	-19.589	MWD+IFR1+MS
5600.000	22.552	246.304	5508.241	20.727	-0.000	20.205	0.000	7.345	0.000	0.000	21.400	20.197	-19.100	MWD+IFR1+MS
5700.000	22.552	246.304	5600.594	21.080	-0.000	20.596	0.000	7.514	0.000	0.000	21.726	20.587	-18.558	MWD+IFR1+MS
5800.000	22.552	246.304	5692.947	21.437	-0.000	20.990	0.000	7.687	0.000	0.000	22.055	20.979	-17.954	MWD+IFR1+MS
5900.000	22.552	246.304	5785.301	21.797	-0.000	21.387	0.000	7.863	0.000	0.000	22.388	21.374	-17.278	MWD+IFR1+MS
6000.000	22.552	246.304	5877.654	22.161	-0.000	21.786	0.000	8.042	0.000	0.000	22.725	21.770	-16.518	MWD+IFR1+MS
6100.000	22.552	246.304	5970.008	22.528	-0.000	22.187	0.000	8.225	0.000	0.000	23.064	22.169	-15.660	MWD+IFR1+MS
6200.000	22.552	246.304	6062.361	22.897	-0.000	22.590	0.000	8.410	0.000	0.000	23.407	22.569	-14.688	MWD+IFR1+MS

6300.000	22.552	246.304	6154.715	23.270	-0.000	22.996	0.000	8.599	0.000	0.000	23.753	22.971	-13.580	MWD+IFR1+MS
6400.000	22.552	246.304	6247.068	23.645	-0.000	23.403	0.000	8.791	0.000	0.000	24.102	23.374	-12.311	MWD+IFR1+MS
6500.000	22.552	246.304	6339.421	24.023	-0.000	23.812	0.000	8.985	0.000	0.000	24.454	23.778	-10.851	MWD+IFR1+MS
6537.705	22.552	246.304	6374.243	24.164	-0.000	23.964	0.000	9.058	0.000	0.000	24.585	23.929	-10.422	MWD+IFR1+MS
6600.000	21.217	246.304	6432.048	24.518	-0.000	24.216	0.000	9.183	0.000	0.000	24.806	24.178	-9.665	MWD+IFR1+MS
6700.000	19.075	246.304	6525.924	25.132	-0.000	24.619	0.000	9.403	0.000	0.000	25.231	24.574	-8.602	MWD+IFR1+MS
6800.000	16.933	246.304	6621.022	25.749	-0.000	25.020	0.000	9.625	0.000	0.000	25.697	24.965	-7.886	MWD+IFR1+MS
6900.000	14.791	246.304	6717.209	26.325	-0.000	25.414	0.000	9.834	0.000	0.000	26.162	25.350	-7.451	MWD+IFR1+MS
7000.000	12.648	246.304	6814.350	26.859	-0.000	25.802	0.000	10.030	0.000	0.000	26.625	25.729	-7.211	MWD+IFR1+MS
7100.000	10.506	246.304	6912.310	27.351	-0.000	26.182	0.000	10.217	0.000	0.000	27.084	26.101	-7.104	MWD+IFR1+MS
7200.000	8.364	246.304	7010.951	27.799	-0.000	26.555	0.000	10.394	0.000	0.000	27.537	26.465	-7.082	MWD+IFR1+MS
7300.000	6.222	246.304	7110.137	28.203	-0.000	26.919	0.000	10.564	0.000	0.000	27.985	26.823	-7.113	MWD+IFR1+MS
7400.000	4.079	246.304	7209.727	28.563	-0.000	27.275	0.000	10.727	0.000	0.000	28.424	27.172	-7.173	MWD+IFR1+MS
7500.000	1.937	246.304	7309.583	28.879	-0.000	27.623	0.000	10.886	0.000	0.000	28.855	27.513	-7.244	MWD+IFR1+MS
7590.434	0.000	0.000	7400.000	27.849	0.000	29.129	0.000	11.027	0.000	0.000	29.146	27.831	-6.591	MWD+IFR1+MS
7600.000	0.000	0.000	7409.566	27.881	0.000	29.158	0.000	11.042	0.000	0.000	29.175	27.863	-6.590	MWD+IFR1+MS
7700.000	0.000	0.000	7509.566	28.215	0.000	29.466	0.000	11.198	0.000	0.000	29.483	28.197	-6.631	MWD+IFR1+MS
7800.000	0.000	0.000	7609.566	28.554	0.000	29.780	0.000	11.357	0.000	0.000	29.797	28.535	-6.864	MWD+IFR1+MS
7900.000	0.000	0.000	7709.566	28.893	0.000	30.094	0.000	11.519	0.000	0.000	30.113	28.874	-7.100	MWD+IFR1+MS
8000.000	0.000	0.000	7809.566	29.233	0.000	30.410	0.000	11.684	0.000	0.000	30.429	29.213	-7.340	MWD+IFR1+MS
8100.000	0.000	0.000	7909.566	29.573	0.000	30.726	0.000	11.852	0.000	0.000	30.746	29.552	-7.584	MWD+IFR1+MS
8200.000	0.000	0.000	8009.566	29.914	0.000	31.043	0.000	12.023	0.000	0.000	31.065	29.892	-7.830	MWD+IFR1+MS
8300.000	0.000	0.000	8109.566	30.255	0.000	31.362	0.000	12.198	0.000	0.000	31.384	30.232	-8.081	MWD+IFR1+MS
8400.000	0.000	0.000	8209.566	30.597	0.000	31.681	0.000	12.375	0.000	0.000	31.704	30.572	-8.335	MWD+IFR1+MS
8500.000	0.000	0.000	8309.566	30.939	0.000	32.001	0.000	12.556	0.000	0.000	32.025	30.913	-8.593	MWD+IFR1+MS
8600.000	0.000	0.000	8409.566	31.281	0.000	32.321	0.000	12.740	0.000	0.000	32.347	31.255	-8.855	MWD+IFR1+MS
8700.000	0.000	0.000	8509.566	31.624	0.000	32.643	0.000	12.927	0.000	0.000	32.670	31.596	-9.120	MWD+IFR1+MS
8800.000	0.000	0.000	8609.566	31.967	0.000	32.965	0.000	13.117	0.000	0.000	32.993	31.938	-9.389	MWD+IFR1+MS
8900.000	0.000	0.000	8709.566	32.310	0.000	33.288	0.000	13.310	0.000	0.000	33.317	32.280	-9.662	MWD+IFR1+MS
9000.000	0.000	0.000	8809.566	32.654	0.000	33.612	0.000	13.507	0.000	0.000	33.642	32.623	-9.939	MWD+IFR1+MS
9100.000	0.000	0.000	8909.566	32.998	0.000	33.937	0.000	13.706	0.000	0.000	33.968	32.966	-10.220	MWD+IFR1+MS
9200.000	0.000	0.000	9009.566	33.342	0.000	34.262	0.000	13.909	0.000	0.000	34.294	33.309	-10.505	MWD+IFR1+MS
9300.000	0.000	0.000	9109.566	33.686	0.000	34.587	0.000	14.115	0.000	0.000	34.621	33.652	-10.793	MWD+IFR1+MS

9400.000	0.000	0.000	9209.566	34.031	0.000	34.914	0.000	14.325	0.000	0.000	34.949	33.996	-11.086	MWD+IFR1+MS
9500.000	0.000	0.000	9309.566	34.376	0.000	35.241	0.000	14.537	0.000	0.000	35.277	34.339	-11.382	MWD+IFR1+MS
9600.000	0.000	0.000	9409.566	34.722	0.000	35.569	0.000	14.753	0.000	0.000	35.606	34.684	-11.683	MWD+IFR1+MS
9700.000	0.000	0.000	9509.566	35.068	0.000	35.897	0.000	14.972	0.000	0.000	35.936	35.028	-11.988	MWD+IFR1+MS
9800.000	0.000	0.000	9609.566	35.414	0.000	36.226	0.000	15.194	0.000	0.000	36.266	35.373	-12.296	MWD+IFR1+MS
9900.000	0.000	0.000	9709.566	35.760	0.000	36.555	0.000	15.420	0.000	0.000	36.596	35.717	-12.609	MWD+IFR1+MS
10000.000	0.000	0.000	9809.566	36.106	0.000	36.885	0.000	15.648	0.000	0.000	36.928	36.062	-12.926	MWD+IFR1+MS
10100.000	0.000	0.000	9909.566	36.453	0.000	37.215	0.000	15.880	0.000	0.000	37.260	36.408	-13.247	MWD+IFR1+MS
10200.000	0.000	0.000	10009.566	36.800	0.000	37.546	0.000	16.115	0.000	0.000	37.592	36.753	-13.571	MWD+IFR1+MS
10300.000	0.000	0.000	10109.566	37.147	0.000	37.878	0.000	16.354	0.000	0.000	37.925	37.099	-13.900	MWD+IFR1+MS
10400.000	0.000	0.000	10209.566	37.494	0.000	38.210	0.000	16.596	0.000	0.000	38.258	37.444	-14.233	MWD+IFR1+MS
10500.000	0.000	0.000	10309.566	37.842	0.000	38.542	0.000	16.841	0.000	0.000	38.592	37.790	-14.570	MWD+IFR1+MS
10600.000	0.000	0.000	10409.566	38.189	0.000	38.875	0.000	17.089	0.000	0.000	38.927	38.137	-14.911	MWD+IFR1+MS
10700.000	0.000	0.000	10509.566	38.537	0.000	39.208	0.000	17.340	0.000	0.000	39.262	38.483	-15.256	MWD+IFR1+MS
10800.000	0.000	0.000	10609.566	38.885	0.000	39.542	0.000	17.595	0.000	0.000	39.597	38.829	-15.604	MWD+IFR1+MS
10900.000	0.000	0.000	10709.566	39.234	0.000	39.876	0.000	17.853	0.000	0.000	39.933	39.176	-15.957	MWD+IFR1+MS
11000.000	0.000	0.000	10809.566	39.582	0.000	40.211	0.000	18.114	0.000	0.000	40.269	39.523	-16.313	MWD+IFR1+MS
11100.000	0.000	0.000	10909.566	39.931	0.000	40.546	0.000	18.379	0.000	0.000	40.606	39.870	-16.674	MWD+IFR1+MS
11200.000	0.000	0.000	11009.566	40.280	0.000	40.881	0.000	18.646	0.000	0.000	40.943	40.217	-17.038	MWD+IFR1+MS
11300.000	0.000	0.000	11109.566	40.629	0.000	41.217	0.000	18.918	0.000	0.000	41.281	40.564	-17.405	MWD+IFR1+MS
11340.234	0.000	0.000	11149.800	40.768	0.000	41.351	0.000	19.027	0.000	0.000	41.415	40.703	-17.461	MWD+IFR1+MS
11400.000	4.781	179.641	11209.497	40.983	0.000	41.547	-0.000	19.192	0.000	0.000	41.611	40.931	-18.266	MWD+IFR1+MS
11500.000	12.781	179.641	11308.244	41.459	0.000	41.865	-0.000	19.510	0.000	0.000	42.156	41.671	128.772	MWD+IFR1+MS
11600.000	20.781	179.641	11403.908	41.696	0.000	42.181	-0.000	19.965	0.000	0.000	43.283	42.099	104.730	MWD+IFR1+MS
11700.000	28.781	179.641	11494.626	41.349	0.000	42.488	-0.000	20.603	0.000	0.000	44.369	42.421	100.253	MWD+IFR1+MS
11800.000	36.781	179.641	11578.632	40.479	0.000	42.784	-0.000	21.457	0.000	0.000	45.305	42.718	98.677	MWD+IFR1+MS
11900.000	44.781	179.641	11654.291	39.172	0.000	43.065	-0.000	22.533	0.000	0.000	46.070	42.998	97.981	MWD+IFR1+MS
12000.000	52.781	179.641	11720.131	37.549	0.000	43.327	-0.000	23.812	0.000	0.000	46.659	43.259	97.655	MWD+IFR1+MS
12100.000	60.781	179.641	11774.870	35.759	0.000	43.569	-0.000	25.257	0.000	0.000	47.080	43.500	97.497	MWD+IFR1+MS
12200.000	68.781	179.641	11817.443	33.994	0.000	43.789	-0.000	26.820	0.000	0.000	47.349	43.721	97.392	MWD+IFR1+MS
12300.000	76.781	179.641	11847.021	32.475	0.000	43.984	-0.000	28.444	0.000	0.000	47.493	43.919	97.241	MWD+IFR1+MS
12400.000	84.781	179.641	11863.028	31.436	0.000	44.152	-0.000	30.075	0.000	0.000	47.546	44.094	96.938	MWD+IFR1+MS
12465.234	90.000	179.641	11865.997	30.612	0.000	44.244	-0.000	30.612	0.000	0.000	47.551	44.193	96.578	MWD+IFR1+MS

12500.000	90.000	179.641	11865.997	30.697	0.000	44.289	-0.000	30.697	0.000	0.000	47.551	44.243	96.352	MWD+IFR1+MS
12600.000	90.000	179.641	11865.997	30.903	0.000	44.432	-0.000	30.903	0.000	0.000	47.550	44.396	95.686	MWD+IFR1+MS
12700.000	90.000	179.641	11865.997	31.131	0.000	44.590	-0.000	31.131	0.000	0.000	47.551	44.563	94.980	MWD+IFR1+MS
12800.000	90.000	179.641	11865.997	31.376	0.000	44.761	-0.000	31.376	0.000	0.000	47.553	44.742	94.215	MWD+IFR1+MS
12900.000	90.000	179.641	11865.997	31.639	0.000	44.943	-0.000	31.639	0.000	0.000	47.558	44.932	93.368	MWD+IFR1+MS
13000.000	90.000	179.641	11865.997	31.919	0.000	45.138	-0.000	31.919	0.000	0.000	47.564	45.133	92.411	MWD+IFR1+MS
13100.000	90.000	179.641	11865.997	32.216	0.000	45.345	-0.000	32.216	0.000	0.000	47.572	45.344	91.304	MWD+IFR1+MS
13200.000	90.000	179.641	11865.997	32.529	0.000	45.565	-0.000	32.529	0.000	0.000	47.583	45.564	89.986	MWD+IFR1+MS
13300.000	90.000	179.641	11865.997	32.857	0.000	45.795	-0.000	32.857	0.000	0.000	47.598	45.794	88.368	MWD+IFR1+MS
13400.000	90.000	179.641	11865.997	33.201	0.000	46.038	-0.000	33.201	0.000	0.000	47.616	46.032	86.306	MWD+IFR1+MS
13500.000	90.000	179.641	11865.997	33.560	0.000	46.292	-0.000	33.560	0.000	0.000	47.640	46.276	83.566	MWD+IFR1+MS
13600.000	90.000	179.641	11865.997	33.933	0.000	46.557	-0.000	33.933	0.000	0.000	47.674	46.522	79.752	MWD+IFR1+MS
13700.000	90.000	179.641	11865.997	34.320	0.000	46.833	-0.000	34.320	0.000	0.000	47.723	46.764	74.223	MWD+IFR1+MS
13800.000	90.000	179.641	11865.997	34.721	0.000	47.119	-0.000	34.721	0.000	0.000	47.800	46.990	66.147	MWD+IFR1+MS
13900.000	90.000	179.641	11865.997	35.134	0.000	47.417	-0.000	35.134	0.000	0.000	47.924	47.179	55.374	MWD+IFR1+MS
14000.000	90.000	179.641	11865.997	35.560	0.000	47.725	-0.000	35.560	0.000	0.000	48.111	47.318	44.004	MWD+IFR1+MS
14100.000	90.000	179.641	11865.997	35.999	0.000	48.043	-0.000	35.999	0.000	0.000	48.355	47.408	34.844	MWD+IFR1+MS
14200.000	90.000	179.641	11865.997	36.448	0.000	48.371	-0.000	36.448	0.000	0.000	48.641	47.469	28.473	MWD+IFR1+MS
14300.000	90.000	179.641	11865.997	36.909	0.000	48.709	-0.000	36.909	0.000	0.000	48.954	47.512	24.141	MWD+IFR1+MS
14400.000	90.000	179.641	11865.997	37.381	0.000	49.057	-0.000	37.381	0.000	0.000	49.286	47.547	21.104	MWD+IFR1+MS
14500.000	90.000	179.641	11865.997	37.863	0.000	49.414	-0.000	37.863	0.000	0.000	49.633	47.576	18.886	MWD+IFR1+MS
14600.000	90.000	179.641	11865.997	38.355	0.000	49.780	-0.000	38.355	0.000	0.000	49.993	47.603	17.199	MWD+IFR1+MS
14700.000	90.000	179.641	11865.997	38.857	0.000	50.155	-0.000	38.857	0.000	0.000	50.363	47.627	15.874	MWD+IFR1+MS
14800.000	90.000	179.641	11865.997	39.368	0.000	50.539	-0.000	39.368	0.000	0.000	50.745	47.651	14.802	MWD+IFR1+MS
14900.000	90.000	179.641	11865.997	39.888	0.000	50.932	-0.000	39.888	0.000	0.000	51.135	47.675	13.914	MWD+IFR1+MS
15000.000	90.000	179.641	11865.997	40.416	0.000	51.333	-0.000	40.416	0.000	0.000	51.535	47.698	13.165	MWD+IFR1+MS
15100.000	90.000	179.641	11865.997	40.953	0.000	51.742	-0.000	40.953	0.000	0.000	51.944	47.721	12.521	MWD+IFR1+MS
15200.000	90.000	179.641	11865.997	41.497	0.000	52.160	-0.000	41.497	0.000	0.000	52.361	47.745	11.961	MWD+IFR1+MS
15300.000	90.000	179.641	11865.997	42.049	0.000	52.585	-0.000	42.049	0.000	0.000	52.786	47.769	11.467	MWD+IFR1+MS
15400.000	90.000	179.641	11865.997	42.609	0.000	53.017	-0.000	42.609	0.000	0.000	53.219	47.793	11.027	MWD+IFR1+MS
15500.000	90.000	179.641	11865.997	43.175	0.000	53.458	-0.000	43.175	0.000	0.000	53.659	47.818	10.632	MWD+IFR1+MS
15600.000	90.000	179.641	11865.997	43.749	0.000	53.905	-0.000	43.749	0.000	0.000	54.107	47.843	10.275	MWD+IFR1+MS
15700.000	90.000	179.641	11865.997	44.328	0.000	54.360	-0.000	44.328	0.000	0.000	54.562	47.869	9.948	MWD+IFR1+MS

15800.000	90.000	179.641	11865.997	44.914	0.000	54.822	-0.000	44.914	0.000	0.000	55.023	47.895	9.649	MWD+IFR1+MS
15900.000	90.000	179.641	11865.997	45.506	0.000	55.290	-0.000	45.506	0.000	0.000	55.492	47.922	9.373	MWD+IFR1+MS
16000.000	90.000	179.641	11865.997	46.104	0.000	55.765	-0.000	46.104	0.000	0.000	55.967	47.949	9.117	MWD+IFR1+MS
16100.000	90.000	179.641	11865.997	46.707	0.000	56.246	-0.000	46.707	0.000	0.000	56.448	47.977	8.879	MWD+IFR1+MS
16200.000	90.000	179.641	11865.997	47.316	0.000	56.734	-0.000	47.316	0.000	0.000	56.936	48.006	8.657	MWD+IFR1+MS
16300.000	90.000	179.641	11865.997	47.929	0.000	57.227	-0.000	47.929	0.000	0.000	57.430	48.035	8.448	MWD+IFR1+MS
16400.000	90.000	179.641	11865.997	48.548	0.000	57.727	-0.000	48.548	0.000	0.000	57.930	48.065	8.252	MWD+IFR1+MS
16500.000	90.000	179.641	11865.997	49.171	0.000	58.232	-0.000	49.171	0.000	0.000	58.435	48.095	8.067	MWD+IFR1+MS
16600.000	90.000	179.641	11865.997	49.799	0.000	58.743	-0.000	49.799	0.000	0.000	58.946	48.126	7.892	MWD+IFR1+MS
16700.000	90.000	179.641	11865.997	50.431	0.000	59.260	-0.000	50.431	0.000	0.000	59.463	48.158	7.726	MWD+IFR1+MS
16800.000	90.000	179.641	11865.997	51.068	0.000	59.782	-0.000	51.068	0.000	0.000	59.984	48.190	7.568	MWD+IFR1+MS
16900.000	90.000	179.641	11865.997	51.708	0.000	60.309	-0.000	51.708	0.000	0.000	60.511	48.223	7.418	MWD+IFR1+MS
17000.000	90.000	179.641	11865.997	52.353	0.000	60.841	-0.000	52.353	0.000	0.000	61.043	48.256	7.275	MWD+IFR1+MS
17100.000	90.000	179.641	11865.997	53.001	0.000	61.378	-0.000	53.001	0.000	0.000	61.580	48.290	7.139	MWD+IFR1+MS
17200.000	90.000	179.641	11865.997	53.653	0.000	61.920	-0.000	53.653	0.000	0.000	62.122	48.325	7.008	MWD+IFR1+MS
17300.000	90.000	179.641	11865.997	54.309	0.000	62.466	-0.000	54.309	0.000	0.000	62.668	48.360	6.882	MWD+IFR1+MS
17400.000	90.000	179.641	11865.997	54.968	0.000	63.017	-0.000	54.968	0.000	0.000	63.219	48.396	6.762	MWD+IFR1+MS
17500.000	90.000	179.641	11865.997	55.630	0.000	63.573	-0.000	55.630	0.000	0.000	63.774	48.432	6.647	MWD+IFR1+MS
17600.000	90.000	179.641	11865.997	56.295	0.000	64.133	-0.000	56.295	0.000	0.000	64.334	48.469	6.535	MWD+IFR1+MS
17700.000	90.000	179.641	11865.997	56.963	0.000	64.697	-0.000	56.963	0.000	0.000	64.897	48.507	6.428	MWD+IFR1+MS
17800.000	90.000	179.641	11865.997	57.634	0.000	65.265	-0.000	57.634	0.000	0.000	65.465	48.545	6.325	MWD+IFR1+MS
17900.000	90.000	179.641	11865.997	58.309	0.000	65.837	-0.000	58.309	0.000	0.000	66.037	48.584	6.226	MWD+IFR1+MS
18000.000	90.000	179.641	11865.997	58.985	0.000	66.413	-0.000	58.985	0.000	0.000	66.612	48.623	6.130	MWD+IFR1+MS
18100.000	90.000	179.641	11865.997	59.665	0.000	66.993	-0.000	59.665	0.000	0.000	67.192	48.664	6.037	MWD+IFR1+MS
18200.000	90.000	179.641	11865.997	60.347	0.000	67.577	-0.000	60.347	0.000	0.000	67.775	48.704	5.947	MWD+IFR1+MS
18300.000	90.000	179.641	11865.997	61.031	0.000	68.164	-0.000	61.031	0.000	0.000	68.362	48.745	5.860	MWD+IFR1+MS
18400.000	90.000	179.641	11865.997	61.718	0.000	68.755	-0.000	61.718	0.000	0.000	68.952	48.787	5.775	MWD+IFR1+MS
18500.000	90.000	179.641	11865.997	62.407	0.000	69.349	-0.000	62.407	0.000	0.000	69.545	48.830	5.694	MWD+IFR1+MS
18600.000	90.000	179.641	11865.997	63.099	0.000	69.946	-0.000	63.099	0.000	0.000	70.142	48.873	5.614	MWD+IFR1+MS
18700.000	90.000	179.641	11865.997	63.793	0.000	70.547	-0.000	63.793	0.000	0.000	70.742	48.916	5.537	MWD+IFR1+MS
18800.000	90.000	179.641	11865.997	64.488	0.000	71.151	-0.000	64.488	0.000	0.000	71.345	48.960	5.462	MWD+IFR1+MS
18900.000	90.000	179.641	11865.997	65.186	0.000	71.758	-0.000	65.186	0.000	0.000	71.952	49.005	5.390	MWD+IFR1+MS
19000.000	90.000	179.641	11865.997	65.886	0.000	72.368	-0.000	65.886	0.000	0.000	72.561	49.050	5.319	MWD+IFR1+MS

19100.000	90.000	179.641	11865.997	66.587	0.000	72.981	-0.000	66.587	0.000	0.000	73.173	49.096	5.250	MWD+IFR1+MS
19200.000	90.000	179.641	11865.997	67.291	0.000	73.597	-0.000	67.291	0.000	0.000	73.788	49.143	5.183	MWD+IFR1+MS
19300.000	90.000	179.641	11865.997	67.996	0.000	74.215	-0.000	67.996	0.000	0.000	74.406	49.190	5.118	MWD+IFR1+MS
19400.000	90.000	179.641	11865.997	68.703	0.000	74.836	-0.000	68.703	0.000	0.000	75.027	49.238	5.054	MWD+IFR1+MS
19500.000	90.000	179.641	11865.997	69.411	0.000	75.460	-0.000	69.411	0.000	0.000	75.650	49.286	4.992	MWD+IFR1+MS
19600.000	90.000	179.641	11865.997	70.121	0.000	76.087	-0.000	70.121	0.000	0.000	76.276	49.334	4.932	MWD+IFR1+MS
19700.000	90.000	179.641	11865.997	70.833	0.000	76.716	-0.000	70.833	0.000	0.000	76.904	49.384	4.873	MWD+IFR1+MS
19800.000	90.000	179.641	11865.997	71.546	0.000	77.347	-0.000	71.546	0.000	0.000	77.535	49.434	4.815	MWD+IFR1+MS
19900.000	90.000	179.641	11865.997	72.261	0.000	77.981	-0.000	72.261	0.000	0.000	78.168	49.484	4.759	MWD+IFR1+MS
20000.000	90.000	179.641	11865.997	72.977	0.000	78.618	-0.000	72.977	0.000	0.000	78.803	49.535	4.704	MWD+IFR1+MS
20100.000	90.000	179.641	11865.997	73.695	0.000	79.256	-0.000	73.695	0.000	0.000	79.441	49.587	4.651	MWD+IFR1+MS
20200.000	90.000	179.641	11865.997	74.414	0.000	79.897	-0.000	74.414	0.000	0.000	80.081	49.639	4.598	MWD+IFR1+MS
20300.000	90.000	179.641	11865.997	75.134	0.000	80.540	-0.000	75.134	0.000	0.000	80.723	49.691	4.547	MWD+IFR1+MS
20400.000	90.000	179.641	11865.997	75.856	0.000	81.185	-0.000	75.856	0.000	0.000	81.368	49.745	4.497	MWD+IFR1+MS
20500.000	90.000	179.641	11865.997	76.579	0.000	81.832	-0.000	76.579	0.000	0.000	82.014	49.798	4.448	MWD+IFR1+MS
20600.000	90.000	179.641	11865.997	77.303	0.000	82.481	-0.000	77.303	0.000	0.000	82.663	49.853	4.400	MWD+IFR1+MS
20700.000	90.000	179.641	11865.997	78.028	0.000	83.133	-0.000	78.028	0.000	0.000	83.313	49.907	4.353	MWD+IFR1+MS
20800.000	90.000	179.641	11865.997	78.754	0.000	83.786	-0.000	78.754	0.000	0.000	83.965	49.963	4.307	MWD+IFR1+MS
20900.000	90.000	179.641	11865.997	79.482	0.000	84.441	-0.000	79.482	0.000	0.000	84.619	50.019	4.262	MWD+IFR1+MS
21000.000	90.000	179.641	11865.997	80.210	0.000	85.097	-0.000	80.210	0.000	0.000	85.276	50.075	4.217	MWD+IFR1+MS
21100.000	90.000	179.641	11865.997	80.940	0.000	85.756	-0.000	80.940	0.000	0.000	85.933	50.132	4.174	MWD+IFR1+MS
21200.000	90.000	179.641	11865.997	81.671	0.000	86.417	-0.000	81.671	0.000	0.000	86.593	50.189	4.132	MWD+IFR1+MS
21300.000	90.000	179.641	11865.997	82.402	0.000	87.079	-0.000	82.402	0.000	0.000	87.254	50.247	4.090	MWD+IFR1+MS
21400.000	90.000	179.641	11865.997	83.135	0.000	87.743	-0.000	83.135	0.000	0.000	87.917	50.306	4.049	MWD+IFR1+MS
21500.000	90.000	179.641	11865.997	83.868	0.000	88.408	-0.000	83.868	0.000	0.000	88.582	50.365	4.009	MWD+IFR1+MS
21600.000	90.000	179.641	11865.997	84.603	0.000	89.075	-0.000	84.603	0.000	0.000	89.248	50.425	3.970	MWD+IFR1+MS
21700.000	90.000	179.641	11865.997	85.338	0.000	89.744	-0.000	85.338	0.000	0.000	89.916	50.485	3.932	MWD+IFR1+MS
21800.000	90.000	179.641	11865.997	86.074	0.000	90.414	-0.000	86.074	0.000	0.000	90.586	50.545	3.894	MWD+IFR1+MS
21900.000	90.000	179.641	11865.997	86.811	0.000	91.086	-0.000	86.811	0.000	0.000	91.257	50.606	3.857	MWD+IFR1+MS
22000.000	90.000	179.641	11865.997	87.549	0.000	91.759	-0.000	87.549	0.000	0.000	91.929	50.668	3.820	MWD+IFR1+MS
22100.000	90.000	179.641	11865.997	88.288	0.000	92.433	-0.000	88.288	0.000	0.000	92.603	50.730	3.785	MWD+IFR1+MS
22200.000	90.000	179.641	11865.997	89.027	0.000	93.109	-0.000	89.027	0.000	0.000	93.278	50.793	3.750	MWD+IFR1+MS
22300.000	90.000	179.641	11865.997	89.768	0.000	93.787	-0.000	89.768	0.000	0.000	93.955	50.856	3.715	MWD+IFR1+MS

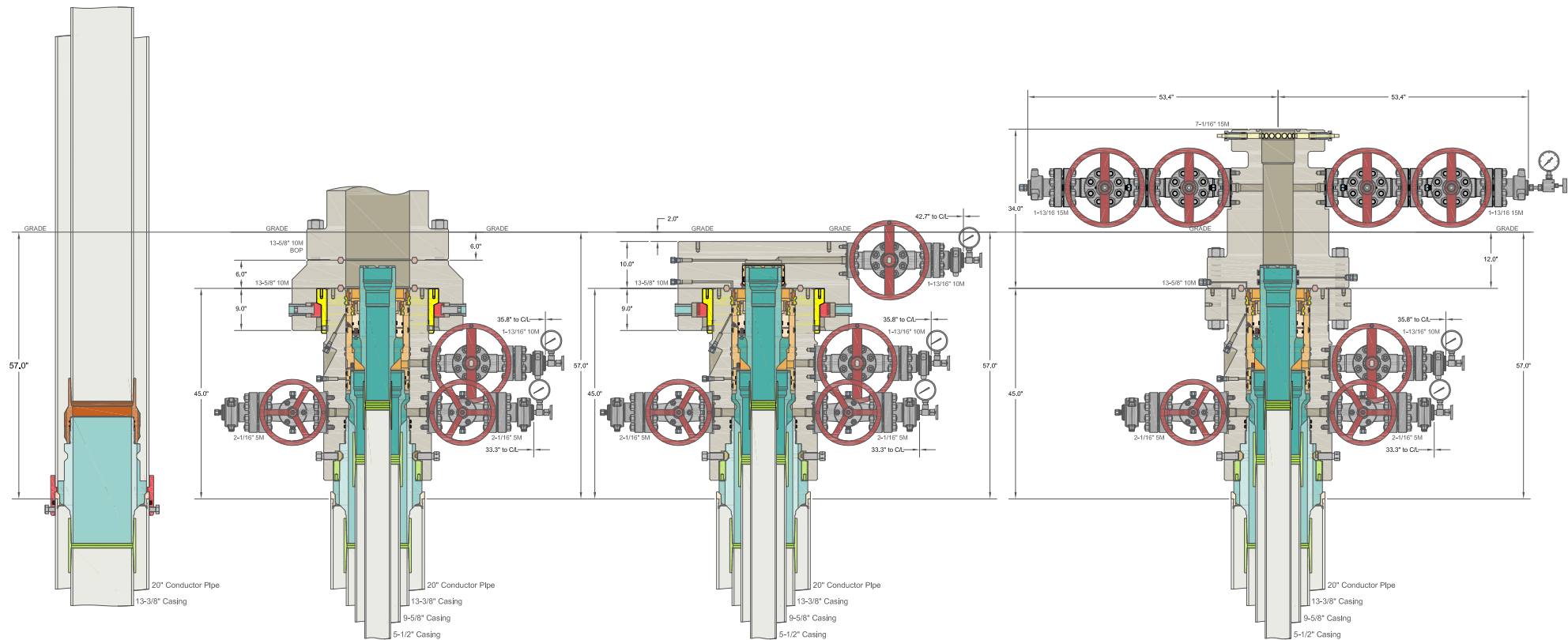
22400.000	90.000	179.641	11865.997	90.509	0.000	94.466	-0.000	90.509	0.000	0.000	94.633	50.920	3.681	MWD+IFR1+MS
22500.000	90.000	179.641	11865.997	91.250	0.000	95.146	-0.000	91.250	0.000	0.000	95.312	50.984	3.648	MWD+IFR1+MS
22600.000	90.000	179.641	11865.997	91.993	0.000	95.827	-0.000	91.993	0.000	0.000	95.992	51.049	3.615	MWD+IFR1+MS
22700.000	90.000	179.641	11865.997	92.736	0.000	96.510	-0.000	92.736	0.000	0.000	96.674	51.114	3.583	MWD+IFR1+MS
22800.000	90.000	179.641	11865.997	93.480	0.000	97.193	-0.000	93.480	0.000	0.000	97.357	51.179	3.551	MWD+IFR1+MS
22900.000	90.000	179.641	11865.997	94.224	0.000	97.878	-0.000	94.224	0.000	0.000	98.042	51.246	3.520	MWD+IFR1+MS
23000.000	90.000	179.641	11865.997	94.969	0.000	98.565	-0.000	94.969	0.000	0.000	98.727	51.312	3.489	MWD+IFR1+MS
23100.000	90.000	179.641	11865.997	95.715	0.000	99.252	-0.000	95.715	0.000	0.000	99.414	51.379	3.459	MWD+IFR1+MS
23200.000	90.000	179.641	11865.997	96.462	0.000	99.941	-0.000	96.462	0.000	0.000	100.102	51.447	3.430	MWD+IFR1+MS
23300.000	90.000	179.641	11865.997	97.209	0.000	100.630	-0.000	97.209	0.000	0.000	100.791	51.515	3.400	MWD+IFR1+MS
23400.000	90.000	179.641	11865.997	97.956	0.000	101.321	-0.000	97.956	0.000	0.000	101.481	51.584	3.372	MWD+IFR1+MS
23500.000	90.000	179.641	11865.997	98.704	0.000	102.013	-0.000	98.704	0.000	0.000	102.172	51.653	3.343	MWD+IFR1+MS
23600.000	90.000	179.641	11865.997	99.453	0.000	102.706	-0.000	99.453	0.000	0.000	102.864	51.722	3.316	MWD+IFR1+MS
23700.000	90.000	179.641	11865.997	100.202	0.000	103.400	-0.000	100.202	0.000	0.000	103.557	51.792	3.288	MWD+IFR1+MS
23800.000	90.000	179.641	11865.997	100.952	0.000	104.095	-0.000	100.952	0.000	0.000	104.251	51.863	3.261	MWD+IFR1+MS
23900.000	90.000	179.641	11865.997	101.703	0.000	104.790	-0.000	101.703	0.000	0.000	104.946	51.934	3.235	MWD+IFR1+MS
24000.000	90.000	179.641	11865.997	102.453	0.000	105.487	-0.000	102.453	0.000	0.000	105.642	52.005	3.208	MWD+IFR1+MS
24100.000	90.000	179.641	11865.997	103.205	0.000	106.185	-0.000	103.205	0.000	0.000	106.339	52.077	3.183	MWD+IFR1+MS
24200.000	90.000	179.641	11865.997	103.957	0.000	106.884	-0.000	103.957	0.000	0.000	107.037	52.150	3.157	MWD+IFR1+MS
24300.000	90.000	179.641	11865.997	104.709	0.000	107.583	-0.000	104.709	0.000	0.000	107.736	52.223	3.132	MWD+IFR1+MS
24400.000	90.000	179.641	11865.997	105.462	0.000	108.284	-0.000	105.462	0.000	0.000	108.436	52.296	3.107	MWD+IFR1+MS
24500.000	90.000	179.641	11865.997	106.215	0.000	108.985	-0.000	106.215	0.000	0.000	109.137	52.370	3.083	MWD+IFR1+MS
24600.000	90.000	179.641	11865.997	106.969	0.000	109.688	-0.000	106.969	0.000	0.000	109.839	52.444	3.059	MWD+IFR1+MS
24700.000	90.000	179.641	11865.997	107.723	0.000	110.391	-0.000	107.723	0.000	0.000	110.541	52.519	3.036	MWD+IFR1+MS
24739.386	90.000	179.641	11865.997	108.020	0.000	110.667	-0.000	108.020	0.000	0.000	110.817	52.548	3.026	MWD+IFR1+MS
24800.000	90.000	179.641	11865.997	108.476	0.000	111.093	-0.000	108.476	0.000	0.000	111.242	52.594	3.012	MWD+IFR1+MS
24829.404	90.000	179.641	11865.997	108.698	0.000	111.299	-0.000	108.698	0.000	0.000	111.448	52.616	3.006	MWD+IFR1+MS

Plan Targets

Poker Lake Unit 21 DTD South 157H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 23	12196.68	440443.90	639917.50	8437.00	RECTANGLE
SHL 19	12340.39	440850.39	640982.63	7553.00	RECTANGLE

LTP 23	24739.39	427453.80	639998.90	8437.00	RECTANGLE
BHL 23	24829.39	427363.80	639999.30	8437.00	RECTANGLE



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ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC		XTO ENERGY INC	
(20") x 13-3/8" x 9-5/8" x 5-1/2" MBU-3T-CFL-R-DBLO-SF Wellhead		DELAWARE BASIN	
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head		DRAWN	VJK
		APPRV	31MAR22
And Drilling & Skid Configurations		DRAWING NO.	SDT-2856

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 CFR Title 43 Part 3170, 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. CFR Title 43 Part 3170 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 CFR Title 43 Part 3170, XTO Energy submits this request for the variance.

Supporting Documentation

CFR Title 43 Part 3170 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 CFR Title 43 Part 3170 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. CFR Title 43 Part 3170 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.

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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 ^a	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^a	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 CFR Title 43 Part 317 0and 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 CFR Title 43 Part 3170 (Every 21 days). In addition to function testing the annular, pipe rams and blind rams after

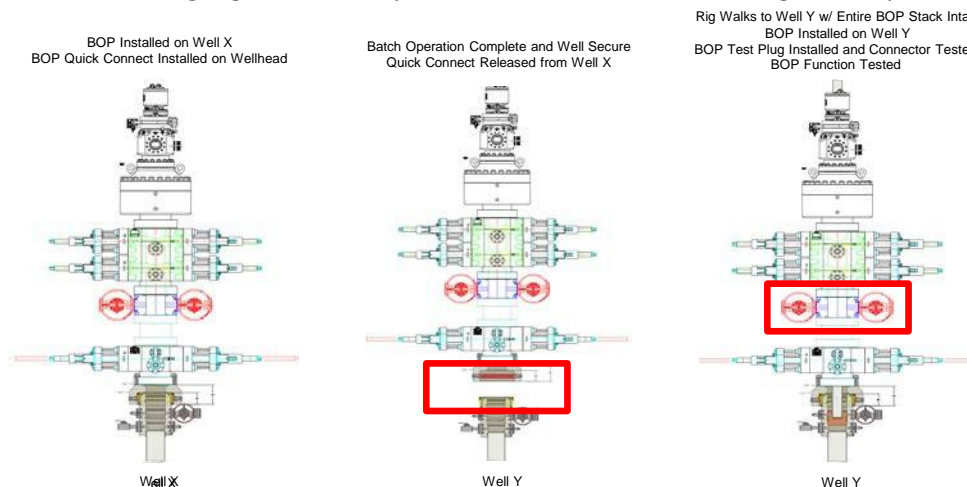
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

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.

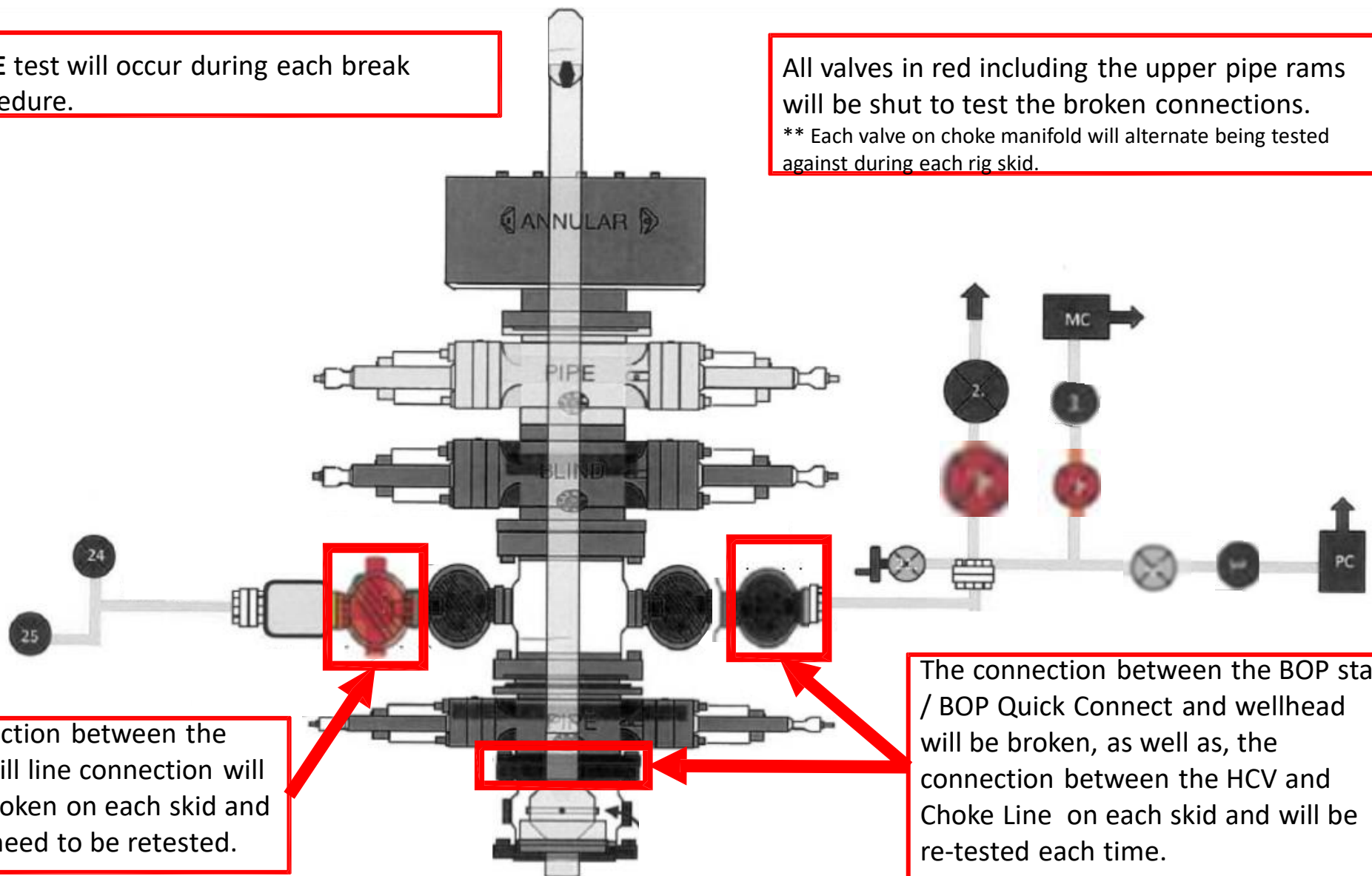
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.

10,000 PSI Annular BOP Variance Request

XTO Energy/XTO Permian Op. request a variance to use a 5000 psi annular BOP with a 10,000 psi BOP stack. The component and compatibility tables along with the general well control plans demonstrate how the 5000 psi annular BOP will be protected from pressures that exceed its rated working pressure (RWP). The pressure at which the control of the wellbore is transferred from the annular preventer to another available preventer will not exceed 3500 psi (70% of the RWP of the 5000 psi annular BOPL).

1. Component and Preventer Compatibility Tables

The tables below outline the tubulars and the compatible preventers in use. This table, combined with the drilling fluid, documents that two barriers to flow will be maintained at all times.

8-1/2" Production Hole Section 10M psi Requirement					
Component	OD	Primary Preventer	RWP	Alternate Preventer(s)	RWP
Drillpipe	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
HWDP	5.000" or 4.500"	Annular	5M	Upper 3.5"-5.5" VBR Lower 3.5"-5.5" VBR	10M 10M
Jars	6.500"	Annular	5M	-	-
DCs and MWD tools	6.500"-8.000"	Annular	5M	-	-
Mud Motor	6.750"-8.000"	Annular	5M	-	-
Production Casing	5-1/2"	Annular	5M	-	-
Open-Hole	-	Blind Rams	10M	-	-

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per 43.CFR.3172 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan

9. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full-opening safety valve & close
3. Space out drill string
4. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
5. Confirm shut-in
6. Notify toolpusher/company representative
7. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
8. Regroup and identify forward plan
9. If pressure has built or is anticipated during the kill to reach 70% of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure While Running Production Casing

- a. Sound alarm (alert crew)
- b. Stab crossover and full-opening safety valve and close
- c. Space out string
- d. Shut-in well (uppermost applicable BOP, typically annular preventer, first. HCR & choke will already be in the closed position.)
- e. Confirm shut-in
- f. Notify toolpusher/company representative
- g. Read and record the following:
 - a. SIDPP & SICP
 - b. Pit gain
 - c. Time
- h. Regroup and identify forward plan
- i. If pressure has built or is anticipated during the kill to reach 70% or greater of the RWP of the annular preventer, confirm spacing and close the upper variable bore rams.

General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams (HCR & choke will already be in the closed position)
3. Confirm shut-in
4. Notify toolpusher/company representative
5. Read and record the following:
 - a. SICP
 - b. Pit gain
 - c. Time
6. Regroup and identify forward plan

General Procedures While Pulling BHA Through Stack

1. PRIOR to pulling last joint of drillpipe through stack:
 - a. Perform flow check. If flowing, continue to (b).
 - b. Sound alarm (alert crew)
 - c. Stab full-opening safety valve and close
 - d. Space out drill string with tool joint just beneath the upper variable bore rams
 - e. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
 - f. Confirm shut-in
 - g. Notify toolpusher/company representative
 - h. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time
 - i. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combination immediately available:
 - a. Sound alarm (alert crew)
 - b. Stab crossover and full-opening safety valve and close
 - c. Space out drill string with upset just beneath the upper variable bore rams
 - d. Shut-in using upper variable bore rams (HCR & choke will already be in the closed position)
 - e. Confirm shut-in
 - f. Notify toolpusher/company representative
 - g. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time

- h. Regroup and identify forward plan
 - 3. With BHA in the stack and NO compatible ram preventer and pipe combination immediately available:
 - a. Sound alarm (alert crew)
 - b. If possible, pull string clear of the stack and follow "Open Hole" procedure.
 - c. If impossible to pull string clear of the stack:
 - d. Stab crossover, make up one joint/stand of drillpipe and full-opening safety valve and close
 - e. Space out drill string with tooljoint just beneath the upper variable bore ram
 - f. Shut-in using upper variable bore ram (HCR & choke will already be in the closed position)
 - g. Confirm shut-in
 - h. Notify toolpusher/company representative
 - i. Read and record the following:
 - i. SIDPP & SICP
 - ii. Pit gain
 - iii. Time
 - j. Regroup and identify forward plan

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1625 N. French Dr., Hobbs, NM 88240
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District II
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District III
1000 Rio Brazos Rd., Aztec, NM 87410
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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 360215

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 360215
	Action Type: [C-103] NOI Change of Plans (C-103A)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	7/12/2024