

Well Name: POKER LAKE UNIT 21 DTD	Well Location: T24S / R30E / SEC 16 / SESE / 32.211144 / -103.879676	County or Parish/State: EDDY / NM
Well Number: 158H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMLC0068430	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number: 3001553257	Operator: XTO PERMIAN OPERATING LLC	

Notice of Intent

Sundry ID: 2784173

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 04/09/2024

Time Sundry Submitted: 02:07

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 & 647' FEL OF SECTION 16-T24S-R30E 332' FSL & 157' FEL OF SECTION 16-T24S-R30E FTP: 386' FNL & 421' FEL OF SECTION 21-T24S-R30E 100' FNL & 935' FEL OF SECTION 21-T24S-R30E LTP: 329' FNL & 316' FEL OF SECTION 33-T23S-R30E 2538' FNL & 931' FEL OF SECTION 33-T24S-R30E BHL: 200' FNL & 315' FEL OF SECTION 33-T23S-R30E 2628' FNL & 932' FEL OF SECTION 33-T24S-R30E The proposed total depth is changing from 33752' MD; 12012' TVD (Wolfcamp) to 23956' MD; 11060' TVD (Wolfcamp X/Y). 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_158H_Sundry_Documents_20240409140641.pdf

Received by OCD: 7/1/2024 3:35:13 PM

Page 2 of 32

Well Name: POKER LAKE UNIT 21 DTD	Well Location: T24S / R30E / SEC 16 / SESE / 32.211144 / -103.879676	County or Parish/State: EDDY / NM
Well Number: 158H	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMLC0068430	Unit or CA Name: POKER LAKE UNIT	Unit or CA Number: NMNM71016X
US Well Number: 3001553257	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 09, 2024 02:06 PM
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.

SUBMIT IN TRIPLICATE - Other instructions on page 2		5. Lease Serial No.
1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator		7. If Unit of CA/Agreement, Name and/or No.
3a. Address	3b. Phone No. (include area code)	8. Well Name and No.
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description)		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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be perfonned or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has detennined that the site is ready for final inspection.)

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 / 647 FEL / TWSP: 24S / RANGE: 30E / SECTION: 16 / LAT: 32.211144 / LONG: -103.879676 (TVD: 0 feet, MD: 0 feet)

PPP: NENE / 386 FNL / 421 FEL / TWSP: 24S / RANGE: 30E / SECTION: 21 / LAT: 32.209432 / LONG: -103.878949 (TVD: 12012 feet, MD: 12500 feet)

BHL: NENE / 200 FNL / 315 FEL / TWSP: 23S / RANGE: 30E / SECTION: 33 / LAT: 32.268076 / LONG: -103.878607 (TVD: 12012 feet, MD: 33752 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

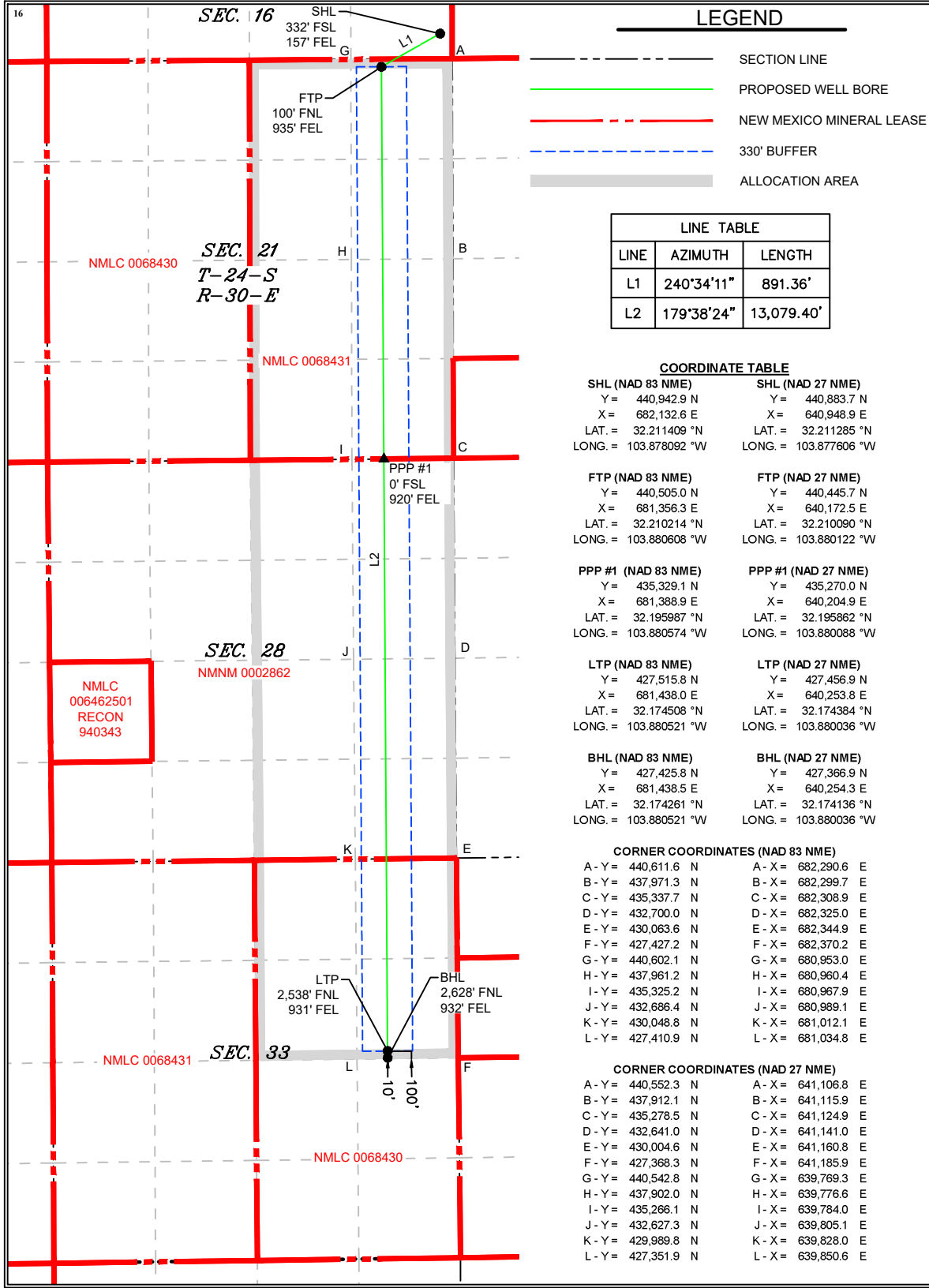
¹ API Number 30-015-53257	² Pool Code 98220	³ Pool Name PURPLE SAGE;WOLFCAMP (GAS)
⁴ Property Code 333571	⁵ Property Name POKER LAKE UNIT 21 DTD	⁶ Well Number 158H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,397'

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 157	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 932	East/West line EAST	County EDDY

¹² Dedicated Acres 800.00	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--	-------------------------------	----------------------------------	-------------------------

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 618.013003.07-55

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 158H
Projected TD: 23956' MD / 11060' TVD
SHL: 332' FSL & 157' FEL , Section 16, T24S, R30E
BHL: 2628' FNL & 932' 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
Wolfcamp	11009'	Water/Oil/Gas
Wolfcamp X	11030'	Water/Oil/Gas
Target/Land Curve	11060'	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 @ 1422' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3740' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 10144' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23956 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9844 feet) per Potash regulations.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 1422'	13.375	54.5	J-55	BTC	New	3.08	1.82	11.73
12.25	0' – 3740'	9.625	40	J-55	BTC	New	1.64	3.04	4.21
8.75	0' – 3840'	7.625	29.7	RY P-110	Flush Joint	New	2.26	3.04	1.85
8.75	3840' – 10144'	7.625	29.7	HC L-80	Flush Joint	New	1.65	3.35	2.17
6.75	0' – 10044'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.85	2.01
6.75	10044' - 23956'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.68	5.45

· Production casing meets the clearance requirements as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1

· XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and intermediate 1 casing per this Sundry

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

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

· 5.5 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

· XTO requests the option to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 13-3/8" bottom

B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange

· Wellhead will be installed by manufacturer's representatives.

· Manufacturer will monitor welding process to ensure appropriate temperature of seal.

4. Cement Program

Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 1422'

Optional Lead: 1170 sxs EconoCem-HLTRRC (mixed at 12.8 ppg, 1.33 ft3/sx, 10.13 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 = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3740'

Lead: 780 sxs Class C (mixed at 14.8 ppg, 2.06 ft3/sx, 10.13 gal/sx water)

Tail: 60 sxs Class C + 2% CaCl (mixed at 15.6 ppg, 2.06 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

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

2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 10144'

1st Stage

Optional Lead: 140 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: 3440

Tail: 400 sxs Class C (mixed at 14.8 ppg, 1.27 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 6380

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

2nd Stage - bradenhead contingency

Tail: 140 sxs Class C (mixed at 14.8 ppg, 2.77 ft3/sx, 6.39 gal/sx water)

Top of Cement: 3440

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.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement to surface. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per wellhead provider 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 +/- 23956'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9844 feet

Tail: 850 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10468 feet

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

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

5. Pressure Control Equipment

Once the permanent WH is installed on the 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 10M Double Ram BOP. MASP should not exceed 4181 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 conducted to at least 50% of the rated 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 7.625, 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' - 1422'	17.5	FW/Native	8.4-8.9	35-40	NC
1422' - 3740'	12.25	Brine	8.8-9.3	30-32	NC
3740' to 10144'	8.75	BDE/OBM or FW/Brine	8.8-9.3	30-32	NC
10144' to 23956'	6.75	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 13-3/8" surface casing with brine solution. A 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 175 to 195 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 6614 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 158H

Measured Depth:	23955.56 ft
TVD RKB:	11060.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	440883.70 ft
Easting:	640948.90 ft
RKB:	3429.00 ft
Ground Level:	3397.00 ft
North Reference:	Grid
Convergence Angle:	0.24 Deg

Plan SectionsPoker Lake Unit 21 DTD South 158H

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
4578.79	17.58	240.57	4565.07	-65.71	-116.48	2.00	0.00	2.00
6645.10	17.58	240.57	6534.93	-372.29	-659.92	0.00	0.00	0.00
7523.89	0.00	0.00	7400.00	-438.00	-776.40	-2.00	0.00	2.00
10467.69	0.00	0.00	10343.80	-438.00	-776.40	0.00	0.00	0.00
11592.69	90.00	179.64	11060.00	-1154.18	-771.91	8.00	0.00	8.00
23865.61	90.00	179.64	11060.00	-13426.86	-695.01	0.00	0.00	0.00 LTP 4
23955.56	90.00	179.64	11060.00	-13516.81	-694.45	0.00	0.00	0.00 BHL 4

Position UncertaintyPoker Lake Unit 21 DTD South 158H

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	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	2.000	240.571	3799.980	14.364	-0.000	13.646	0.000	4.841	0.000	0.000	14.483	13.527	130.281	MWD+IFR1+MS
3900.000	4.000	240.571	3899.838	14.836	-0.000	13.989	0.000	4.943	0.000	0.000	14.933	13.918	-44.547	MWD+IFR1+MS
4000.000	6.000	240.571	3999.452	15.284	-0.000	14.334	0.000	5.048	0.000	0.000	15.390	14.293	-40.350	MWD+IFR1+MS
4100.000	8.000	240.571	4098.702	15.708	-0.000	14.679	0.000	5.157	0.000	0.000	15.849	14.657	-37.020	MWD+IFR1+MS
4200.000	10.000	240.571	4197.465	16.110	-0.000	15.025	0.000	5.271	0.000	0.000	16.305	15.014	-34.381	MWD+IFR1+MS
4300.000	12.000	240.571	4295.623	16.489	-0.000	15.371	0.000	5.392	0.000	0.000	16.757	15.367	-32.271	MWD+IFR1+MS
4400.000	14.000	240.571	4393.055	16.846	-0.000	15.718	0.000	5.520	0.000	0.000	17.203	15.718	-30.557	MWD+IFR1+MS
4500.000	16.000	240.571	4489.643	17.182	-0.000	16.067	0.000	5.658	0.000	0.000	17.642	16.067	-29.141	MWD+IFR1+MS
4578.791	17.576	240.571	4565.073	17.386	-0.000	16.340	0.000	5.761	0.000	0.000	17.943	16.340	-28.562	MWD+IFR1+MS
4600.000	17.576	240.571	4585.292	17.451	-0.000	16.412	0.000	5.782	0.000	0.000	18.006	16.412	-28.576	MWD+IFR1+MS
4700.000	17.576	240.571	4680.624	17.760	-0.000	16.759	0.000	5.903	0.000	0.000	18.301	16.758	-28.563	MWD+IFR1+MS
4800.000	17.576	240.571	4775.956	18.079	-0.000	17.115	0.000	6.029	0.000	0.000	18.606	17.115	-28.307	MWD+IFR1+MS
4900.000	17.576	240.571	4871.288	18.402	-0.000	17.475	0.000	6.158	0.000	0.000	18.914	17.474	-28.035	MWD+IFR1+MS
5000.000	17.576	240.571	4966.620	18.728	-0.000	17.837	0.000	6.291	0.000	0.000	19.226	17.836	-27.746	MWD+IFR1+MS
5100.000	17.576	240.571	5061.951	19.059	-0.000	18.202	0.000	6.427	0.000	0.000	19.541	18.200	-27.439	MWD+IFR1+MS
5200.000	17.576	240.571	5157.283	19.392	-0.000	18.569	0.000	6.566	0.000	0.000	19.860	18.566	-27.111	MWD+IFR1+MS
5300.000	17.576	240.571	5252.615	19.729	-0.000	18.938	0.000	6.709	0.000	0.000	20.181	18.935	-26.761	MWD+IFR1+MS
5400.000	17.576	240.571	5347.947	20.069	-0.000	19.309	0.000	6.854	0.000	0.000	20.505	19.306	-26.388	MWD+IFR1+MS
5500.000	17.576	240.571	5443.279	20.412	-0.000	19.682	0.000	7.003	0.000	0.000	20.833	19.678	-25.989	MWD+IFR1+MS
5600.000	17.576	240.571	5538.611	20.757	-0.000	20.057	0.000	7.154	0.000	0.000	21.162	20.052	-25.562	MWD+IFR1+MS
5700.000	17.576	240.571	5633.942	21.105	-0.000	20.434	0.000	7.309	0.000	0.000	21.495	20.428	-25.105	MWD+IFR1+MS
5800.000	17.576	240.571	5729.274	21.456	-0.000	20.813	0.000	7.466	0.000	0.000	21.830	20.806	-24.614	MWD+IFR1+MS
5900.000	17.576	240.571	5824.606	21.809	-0.000	21.193	0.000	7.626	0.000	0.000	22.167	21.184	-24.086	MWD+IFR1+MS
6000.000	17.576	240.571	5919.938	22.164	-0.000	21.575	0.000	7.788	0.000	0.000	22.507	21.565	-23.519	MWD+IFR1+MS
6100.000	17.576	240.571	6015.270	22.521	-0.000	21.958	0.000	7.953	0.000	0.000	22.849	21.946	-22.907	MWD+IFR1+MS
6200.000	17.576	240.571	6110.601	22.880	-0.000	22.342	0.000	8.121	0.000	0.000	23.193	22.329	-22.248	MWD+IFR1+MS

6300.000	17.576	240.571	6205.933	23.242	-0.000	22.728	0.000	8.292	0.000	0.000	23.539	22.712	-21.535	MWD+IFR1+MS
6400.000	17.576	240.571	6301.265	23.605	-0.000	23.115	0.000	8.465	0.000	0.000	23.887	23.097	-20.765	MWD+IFR1+MS
6500.000	17.576	240.571	6396.597	23.970	-0.000	23.503	0.000	8.640	0.000	0.000	24.237	23.482	-19.930	MWD+IFR1+MS
6600.000	17.576	240.571	6491.929	24.337	-0.000	23.892	0.000	8.818	0.000	0.000	24.590	23.868	-19.026	MWD+IFR1+MS
6645.103	17.576	240.571	6534.927	24.500	-0.000	24.065	0.000	8.899	0.000	0.000	24.746	24.041	-18.783	MWD+IFR1+MS
6700.000	16.478	240.571	6587.416	24.775	-0.000	24.275	0.000	8.999	0.000	0.000	24.939	24.250	-18.482	MWD+IFR1+MS
6800.000	14.478	240.571	6683.785	25.312	-0.000	24.659	0.000	9.192	0.000	0.000	25.348	24.629	-17.727	MWD+IFR1+MS
6900.000	12.478	240.571	6781.026	25.859	-0.000	25.041	0.000	9.387	0.000	0.000	25.800	25.004	-16.968	MWD+IFR1+MS
7000.000	10.478	240.571	6879.021	26.370	-0.000	25.419	0.000	9.574	0.000	0.000	26.249	25.374	-16.413	MWD+IFR1+MS
7100.000	8.478	240.571	6977.651	26.845	-0.000	25.791	0.000	9.754	0.000	0.000	26.695	25.739	-16.005	MWD+IFR1+MS
7200.000	6.478	240.571	7076.795	27.283	-0.000	26.158	0.000	9.929	0.000	0.000	27.137	26.098	-15.703	MWD+IFR1+MS
7300.000	4.478	240.571	7176.334	27.683	-0.000	26.518	0.000	10.099	0.000	0.000	27.572	26.452	-15.476	MWD+IFR1+MS
7400.000	2.478	240.571	7276.144	28.047	-0.000	26.872	0.000	10.266	0.000	0.000	28.001	26.799	-15.299	MWD+IFR1+MS
7500.000	0.478	240.571	7376.106	28.373	-0.000	27.220	0.000	10.430	0.000	0.000	28.423	27.140	-15.156	MWD+IFR1+MS
7523.894	0.000	0.000	7400.000	27.310	0.000	28.414	0.000	10.469	0.000	0.000	28.499	27.221	-15.132	MWD+IFR1+MS
7600.000	0.000	0.000	7476.106	27.569	0.000	28.655	0.000	10.594	0.000	0.000	28.740	27.480	-15.233	MWD+IFR1+MS
7700.000	0.000	0.000	7576.106	27.911	0.000	28.976	0.000	10.760	0.000	0.000	29.062	27.821	-15.455	MWD+IFR1+MS
7800.000	0.000	0.000	7676.106	28.255	0.000	29.299	0.000	10.929	0.000	0.000	29.387	28.163	-15.735	MWD+IFR1+MS
7900.000	0.000	0.000	7776.106	28.599	0.000	29.623	0.000	11.101	0.000	0.000	29.713	28.506	-16.017	MWD+IFR1+MS
8000.000	0.000	0.000	7876.106	28.944	0.000	29.948	0.000	11.276	0.000	0.000	30.040	28.848	-16.299	MWD+IFR1+MS
8100.000	0.000	0.000	7976.106	29.289	0.000	30.273	0.000	11.454	0.000	0.000	30.367	29.191	-16.582	MWD+IFR1+MS
8200.000	0.000	0.000	8076.106	29.634	0.000	30.599	0.000	11.635	0.000	0.000	30.696	29.535	-16.867	MWD+IFR1+MS
8300.000	0.000	0.000	8176.106	29.980	0.000	30.926	0.000	11.819	0.000	0.000	31.024	29.878	-17.152	MWD+IFR1+MS
8400.000	0.000	0.000	8276.106	30.325	0.000	31.254	0.000	12.006	0.000	0.000	31.354	30.222	-17.438	MWD+IFR1+MS
8500.000	0.000	0.000	8376.106	30.672	0.000	31.582	0.000	12.196	0.000	0.000	31.684	30.566	-17.725	MWD+IFR1+MS
8600.000	0.000	0.000	8476.106	31.018	0.000	31.911	0.000	12.389	0.000	0.000	32.015	30.911	-18.013	MWD+IFR1+MS
8700.000	0.000	0.000	8576.106	31.365	0.000	32.241	0.000	12.585	0.000	0.000	32.347	31.255	-18.302	MWD+IFR1+MS
8800.000	0.000	0.000	8676.106	31.712	0.000	32.571	0.000	12.784	0.000	0.000	32.679	31.600	-18.591	MWD+IFR1+MS
8900.000	0.000	0.000	8776.106	32.059	0.000	32.902	0.000	12.986	0.000	0.000	33.012	31.945	-18.881	MWD+IFR1+MS
9000.000	0.000	0.000	8876.106	32.406	0.000	33.233	0.000	13.191	0.000	0.000	33.346	32.291	-19.171	MWD+IFR1+MS
9100.000	0.000	0.000	8976.106	32.754	0.000	33.565	0.000	13.399	0.000	0.000	33.680	32.637	-19.462	MWD+IFR1+MS
9200.000	0.000	0.000	9076.106	33.102	0.000	33.898	0.000	13.611	0.000	0.000	34.014	32.982	-19.753	MWD+IFR1+MS
9300.000	0.000	0.000	9176.106	33.450	0.000	34.231	0.000	13.825	0.000	0.000	34.349	33.329	-20.045	MWD+IFR1+MS

9400.000	0.000	0.000	9276.106	33.798	0.000	34.564	0.000	14.043	0.000	0.000	34.685	33.675	-20.337	MWD+IFR1+MS
9500.000	0.000	0.000	9376.106	34.147	0.000	34.898	0.000	14.263	0.000	0.000	35.021	34.021	-20.630	MWD+IFR1+MS
9600.000	0.000	0.000	9476.106	34.496	0.000	35.233	0.000	14.487	0.000	0.000	35.357	34.368	-20.922	MWD+IFR1+MS
9700.000	0.000	0.000	9576.106	34.845	0.000	35.568	0.000	14.714	0.000	0.000	35.695	34.715	-21.215	MWD+IFR1+MS
9800.000	0.000	0.000	9676.106	35.194	0.000	35.903	0.000	14.944	0.000	0.000	36.032	35.062	-21.507	MWD+IFR1+MS
9900.000	0.000	0.000	9776.106	35.543	0.000	36.239	0.000	15.177	0.000	0.000	36.370	35.409	-21.800	MWD+IFR1+MS
10000.000	0.000	0.000	9876.106	35.893	0.000	36.575	0.000	15.414	0.000	0.000	36.709	35.757	-22.093	MWD+IFR1+MS
10100.000	0.000	0.000	9976.106	36.242	0.000	36.912	0.000	15.653	0.000	0.000	37.047	36.104	-22.386	MWD+IFR1+MS
10200.000	0.000	0.000	10076.106	36.592	0.000	37.249	0.000	15.896	0.000	0.000	37.387	36.452	-22.678	MWD+IFR1+MS
10300.000	0.000	0.000	10176.106	36.942	0.000	37.587	0.000	16.141	0.000	0.000	37.726	36.800	-22.970	MWD+IFR1+MS
10400.000	0.000	0.000	10276.106	37.293	0.000	37.925	0.000	16.390	0.000	0.000	38.066	37.148	-23.262	MWD+IFR1+MS
10467.694	0.000	0.000	10343.800	37.528	0.000	38.152	0.000	16.560	0.000	0.000	38.294	37.383	-23.387	MWD+IFR1+MS
10500.000	2.584	179.641	10376.095	37.659	0.000	38.261	-0.000	16.642	0.000	0.000	38.399	37.494	-23.445	MWD+IFR1+MS
10600.000	10.584	179.641	10475.354	38.172	0.000	38.584	-0.000	16.922	0.000	0.000	38.874	38.156	-39.929	MWD+IFR1+MS
10700.000	18.584	179.641	10572.054	38.726	0.000	38.908	-0.000	17.334	0.000	0.000	39.963	38.743	111.041	MWD+IFR1+MS
10800.000	26.584	179.641	10664.310	38.700	0.000	39.226	-0.000	17.938	0.000	0.000	41.127	39.106	103.558	MWD+IFR1+MS
10900.000	34.584	179.641	10750.328	38.144	0.000	39.534	-0.000	18.777	0.000	0.000	42.154	39.427	100.910	MWD+IFR1+MS
11000.000	42.584	179.641	10828.434	37.132	0.000	39.829	-0.000	19.862	0.000	0.000	43.007	39.724	99.720	MWD+IFR1+MS
11100.000	50.584	179.641	10897.106	35.762	0.000	40.108	-0.000	21.175	0.000	0.000	43.676	40.003	99.148	MWD+IFR1+MS
11200.000	58.584	179.641	10955.009	34.166	0.000	40.367	-0.000	22.674	0.000	0.000	44.165	40.262	98.887	MWD+IFR1+MS
11300.000	66.584	179.641	11001.016	32.511	0.000	40.606	-0.000	24.306	0.000	0.000	44.489	40.501	98.787	MWD+IFR1+MS
11400.000	74.584	179.641	11034.231	30.996	0.000	40.822	-0.000	26.011	0.000	0.000	44.674	40.718	98.740	MWD+IFR1+MS
11500.000	82.584	179.641	11054.007	29.845	0.000	41.012	-0.000	27.731	0.000	0.000	44.753	40.914	98.646	MWD+IFR1+MS
11592.694	90.000	179.641	11059.997	29.100	0.000	41.162	-0.000	29.100	0.000	0.000	44.766	41.073	98.402	MWD+IFR1+MS
11600.000	90.000	179.641	11059.997	29.114	0.000	41.173	-0.000	29.114	0.000	0.000	44.767	41.084	98.372	MWD+IFR1+MS
11700.000	90.000	179.641	11059.997	29.298	0.000	41.327	-0.000	29.298	0.000	0.000	44.765	41.250	97.991	MWD+IFR1+MS
11800.000	90.000	179.641	11059.997	29.506	0.000	41.498	-0.000	29.506	0.000	0.000	44.765	41.431	97.611	MWD+IFR1+MS
11900.000	90.000	179.641	11059.997	29.733	0.000	41.682	-0.000	29.733	0.000	0.000	44.765	41.625	97.220	MWD+IFR1+MS
12000.000	90.000	179.641	11059.997	29.979	0.000	41.879	-0.000	29.979	0.000	0.000	44.767	41.832	96.811	MWD+IFR1+MS
12100.000	90.000	179.641	11059.997	30.243	0.000	42.090	-0.000	30.243	0.000	0.000	44.770	42.051	96.375	MWD+IFR1+MS
12200.000	90.000	179.641	11059.997	30.525	0.000	42.313	-0.000	30.525	0.000	0.000	44.774	42.283	95.898	MWD+IFR1+MS
12300.000	90.000	179.641	11059.997	30.825	0.000	42.549	-0.000	30.825	0.000	0.000	44.779	42.526	95.361	MWD+IFR1+MS
12400.000	90.000	179.641	11059.997	31.141	0.000	42.797	-0.000	31.141	0.000	0.000	44.785	42.781	94.733	MWD+IFR1+MS

12500.000	90.000	179.641	11059.997	31.474	0.000	43.057	-0.000	31.474	0.000	0.000	44.793	43.047	93.965	MWD+IFR1+MS
12600.000	90.000	179.641	11059.997	31.823	0.000	43.330	-0.000	31.823	0.000	0.000	44.802	43.325	92.967	MWD+IFR1+MS
12700.000	90.000	179.641	11059.997	32.187	0.000	43.614	-0.000	32.187	0.000	0.000	44.812	43.613	91.559	MWD+IFR1+MS
12800.000	90.000	179.641	11059.997	32.566	0.000	43.910	-0.000	32.566	0.000	0.000	44.826	43.910	89.330	MWD+IFR1+MS
12900.000	90.000	179.641	11059.997	32.959	0.000	44.217	-0.000	32.959	0.000	0.000	44.845	44.213	85.118	MWD+IFR1+MS
13000.000	90.000	179.641	11059.997	33.366	0.000	44.534	-0.000	33.366	0.000	0.000	44.883	44.509	74.520	MWD+IFR1+MS
13100.000	90.000	179.641	11059.997	33.786	0.000	44.863	-0.000	33.786	0.000	0.000	45.007	44.730	45.780	MWD+IFR1+MS
13200.000	90.000	179.641	11059.997	34.220	0.000	45.203	-0.000	34.220	0.000	0.000	45.286	44.807	24.382	MWD+IFR1+MS
13300.000	90.000	179.641	11059.997	34.665	0.000	45.552	-0.000	34.665	0.000	0.000	45.623	44.838	17.156	MWD+IFR1+MS
13400.000	90.000	179.641	11059.997	35.123	0.000	45.912	-0.000	35.123	0.000	0.000	45.980	44.858	13.941	MWD+IFR1+MS
13500.000	90.000	179.641	11059.997	35.592	0.000	46.282	-0.000	35.592	0.000	0.000	46.350	44.877	12.129	MWD+IFR1+MS
13600.000	90.000	179.641	11059.997	36.071	0.000	46.661	-0.000	36.071	0.000	0.000	46.730	44.894	10.952	MWD+IFR1+MS
13700.000	90.000	179.641	11059.997	36.562	0.000	47.050	-0.000	36.562	0.000	0.000	47.121	44.911	10.113	MWD+IFR1+MS
13800.000	90.000	179.641	11059.997	37.062	0.000	47.448	-0.000	37.062	0.000	0.000	47.521	44.929	9.477	MWD+IFR1+MS
13900.000	90.000	179.641	11059.997	37.573	0.000	47.854	-0.000	37.573	0.000	0.000	47.930	44.947	8.971	MWD+IFR1+MS
14000.000	90.000	179.641	11059.997	38.092	0.000	48.270	-0.000	38.092	0.000	0.000	48.348	44.966	8.554	MWD+IFR1+MS
14100.000	90.000	179.641	11059.997	38.621	0.000	48.694	-0.000	38.621	0.000	0.000	48.775	44.985	8.201	MWD+IFR1+MS
14200.000	90.000	179.641	11059.997	39.158	0.000	49.126	-0.000	39.158	0.000	0.000	49.209	45.004	7.897	MWD+IFR1+MS
14300.000	90.000	179.641	11059.997	39.704	0.000	49.567	-0.000	39.704	0.000	0.000	49.652	45.025	7.629	MWD+IFR1+MS
14400.000	90.000	179.641	11059.997	40.257	0.000	50.015	-0.000	40.257	0.000	0.000	50.102	45.046	7.389	MWD+IFR1+MS
14500.000	90.000	179.641	11059.997	40.818	0.000	50.471	-0.000	40.818	0.000	0.000	50.560	45.067	7.174	MWD+IFR1+MS
14600.000	90.000	179.641	11059.997	41.386	0.000	50.934	-0.000	41.386	0.000	0.000	51.025	45.089	6.977	MWD+IFR1+MS
14700.000	90.000	179.641	11059.997	41.961	0.000	51.404	-0.000	41.961	0.000	0.000	51.497	45.112	6.797	MWD+IFR1+MS
14800.000	90.000	179.641	11059.997	42.543	0.000	51.882	-0.000	42.543	0.000	0.000	51.977	45.135	6.630	MWD+IFR1+MS
14900.000	90.000	179.641	11059.997	43.131	0.000	52.366	-0.000	43.131	0.000	0.000	52.463	45.160	6.474	MWD+IFR1+MS
15000.000	90.000	179.641	11059.997	43.726	0.000	52.857	-0.000	43.726	0.000	0.000	52.955	45.184	6.329	MWD+IFR1+MS
15100.000	90.000	179.641	11059.997	44.326	0.000	53.355	-0.000	44.326	0.000	0.000	53.454	45.210	6.193	MWD+IFR1+MS
15200.000	90.000	179.641	11059.997	44.932	0.000	53.859	-0.000	44.932	0.000	0.000	53.959	45.236	6.064	MWD+IFR1+MS
15300.000	90.000	179.641	11059.997	45.544	0.000	54.368	-0.000	45.544	0.000	0.000	54.470	45.262	5.942	MWD+IFR1+MS
15400.000	90.000	179.641	11059.997	46.161	0.000	54.884	-0.000	46.161	0.000	0.000	54.987	45.289	5.827	MWD+IFR1+MS
15500.000	90.000	179.641	11059.997	46.783	0.000	55.406	-0.000	46.783	0.000	0.000	55.510	45.317	5.717	MWD+IFR1+MS
15600.000	90.000	179.641	11059.997	47.409	0.000	55.933	-0.000	47.409	0.000	0.000	56.038	45.346	5.612	MWD+IFR1+MS
15700.000	90.000	179.641	11059.997	48.041	0.000	56.466	-0.000	48.041	0.000	0.000	56.571	45.375	5.512	MWD+IFR1+MS

15800.000	90.000	179.641	11059.997	48.676	0.000	57.004	-0.000	48.676	0.000	0.000	57.110	45.404	5.416	MWD+IFR1+MS
15900.000	90.000	179.641	11059.997	49.316	0.000	57.547	-0.000	49.316	0.000	0.000	57.654	45.435	5.324	MWD+IFR1+MS
16000.000	90.000	179.641	11059.997	49.961	0.000	58.095	-0.000	49.961	0.000	0.000	58.203	45.466	5.235	MWD+IFR1+MS
16100.000	90.000	179.641	11059.997	50.609	0.000	58.648	-0.000	50.609	0.000	0.000	58.757	45.497	5.150	MWD+IFR1+MS
16200.000	90.000	179.641	11059.997	51.261	0.000	59.206	-0.000	51.261	0.000	0.000	59.315	45.529	5.068	MWD+IFR1+MS
16300.000	90.000	179.641	11059.997	51.916	0.000	59.768	-0.000	51.916	0.000	0.000	59.878	45.562	4.989	MWD+IFR1+MS
16400.000	90.000	179.641	11059.997	52.576	0.000	60.335	-0.000	52.576	0.000	0.000	60.445	45.595	4.913	MWD+IFR1+MS
16500.000	90.000	179.641	11059.997	53.238	0.000	60.906	-0.000	53.238	0.000	0.000	61.017	45.629	4.839	MWD+IFR1+MS
16600.000	90.000	179.641	11059.997	53.904	0.000	61.482	-0.000	53.904	0.000	0.000	61.593	45.663	4.767	MWD+IFR1+MS
16700.000	90.000	179.641	11059.997	54.573	0.000	62.061	-0.000	54.573	0.000	0.000	62.172	45.698	4.698	MWD+IFR1+MS
16800.000	90.000	179.641	11059.997	55.245	0.000	62.645	-0.000	55.245	0.000	0.000	62.756	45.734	4.631	MWD+IFR1+MS
16900.000	90.000	179.641	11059.997	55.920	0.000	63.232	-0.000	55.920	0.000	0.000	63.344	45.770	4.566	MWD+IFR1+MS
17000.000	90.000	179.641	11059.997	56.598	0.000	63.823	-0.000	56.598	0.000	0.000	63.935	45.807	4.503	MWD+IFR1+MS
17100.000	90.000	179.641	11059.997	57.279	0.000	64.418	-0.000	57.279	0.000	0.000	64.530	45.844	4.442	MWD+IFR1+MS
17200.000	90.000	179.641	11059.997	57.962	0.000	65.017	-0.000	57.962	0.000	0.000	65.129	45.882	4.382	MWD+IFR1+MS
17300.000	90.000	179.641	11059.997	58.648	0.000	65.619	-0.000	58.648	0.000	0.000	65.731	45.921	4.324	MWD+IFR1+MS
17400.000	90.000	179.641	11059.997	59.336	0.000	66.224	-0.000	59.336	0.000	0.000	66.336	45.960	4.268	MWD+IFR1+MS
17500.000	90.000	179.641	11059.997	60.026	0.000	66.833	-0.000	60.026	0.000	0.000	66.945	46.000	4.213	MWD+IFR1+MS
17600.000	90.000	179.641	11059.997	60.719	0.000	67.444	-0.000	60.719	0.000	0.000	67.557	46.040	4.159	MWD+IFR1+MS
17700.000	90.000	179.641	11059.997	61.414	0.000	68.059	-0.000	61.414	0.000	0.000	68.172	46.081	4.107	MWD+IFR1+MS
17800.000	90.000	179.641	11059.997	62.112	0.000	68.677	-0.000	62.112	0.000	0.000	68.789	46.122	4.056	MWD+IFR1+MS
17900.000	90.000	179.641	11059.997	62.811	0.000	69.298	-0.000	62.811	0.000	0.000	69.410	46.164	4.006	MWD+IFR1+MS
18000.000	90.000	179.641	11059.997	63.512	0.000	69.922	-0.000	63.512	0.000	0.000	70.034	46.206	3.958	MWD+IFR1+MS
18100.000	90.000	179.641	11059.997	64.215	0.000	70.548	-0.000	64.215	0.000	0.000	70.660	46.249	3.911	MWD+IFR1+MS
18200.000	90.000	179.641	11059.997	64.920	0.000	71.178	-0.000	64.920	0.000	0.000	71.290	46.293	3.865	MWD+IFR1+MS
18300.000	90.000	179.641	11059.997	65.627	0.000	71.810	-0.000	65.627	0.000	0.000	71.921	46.337	3.820	MWD+IFR1+MS
18400.000	90.000	179.641	11059.997	66.336	0.000	72.444	-0.000	66.336	0.000	0.000	72.556	46.381	3.775	MWD+IFR1+MS
18500.000	90.000	179.641	11059.997	67.046	0.000	73.081	-0.000	67.046	0.000	0.000	73.192	46.427	3.732	MWD+IFR1+MS
18600.000	90.000	179.641	11059.997	67.758	0.000	73.720	-0.000	67.758	0.000	0.000	73.832	46.472	3.690	MWD+IFR1+MS
18700.000	90.000	179.641	11059.997	68.472	0.000	74.362	-0.000	68.472	0.000	0.000	74.473	46.519	3.649	MWD+IFR1+MS
18800.000	90.000	179.641	11059.997	69.187	0.000	75.006	-0.000	69.187	0.000	0.000	75.117	46.565	3.609	MWD+IFR1+MS
18900.000	90.000	179.641	11059.997	69.904	0.000	75.653	-0.000	69.904	0.000	0.000	75.763	46.613	3.569	MWD+IFR1+MS
19000.000	90.000	179.641	11059.997	70.622	0.000	76.302	-0.000	70.622	0.000	0.000	76.412	46.660	3.530	MWD+IFR1+MS

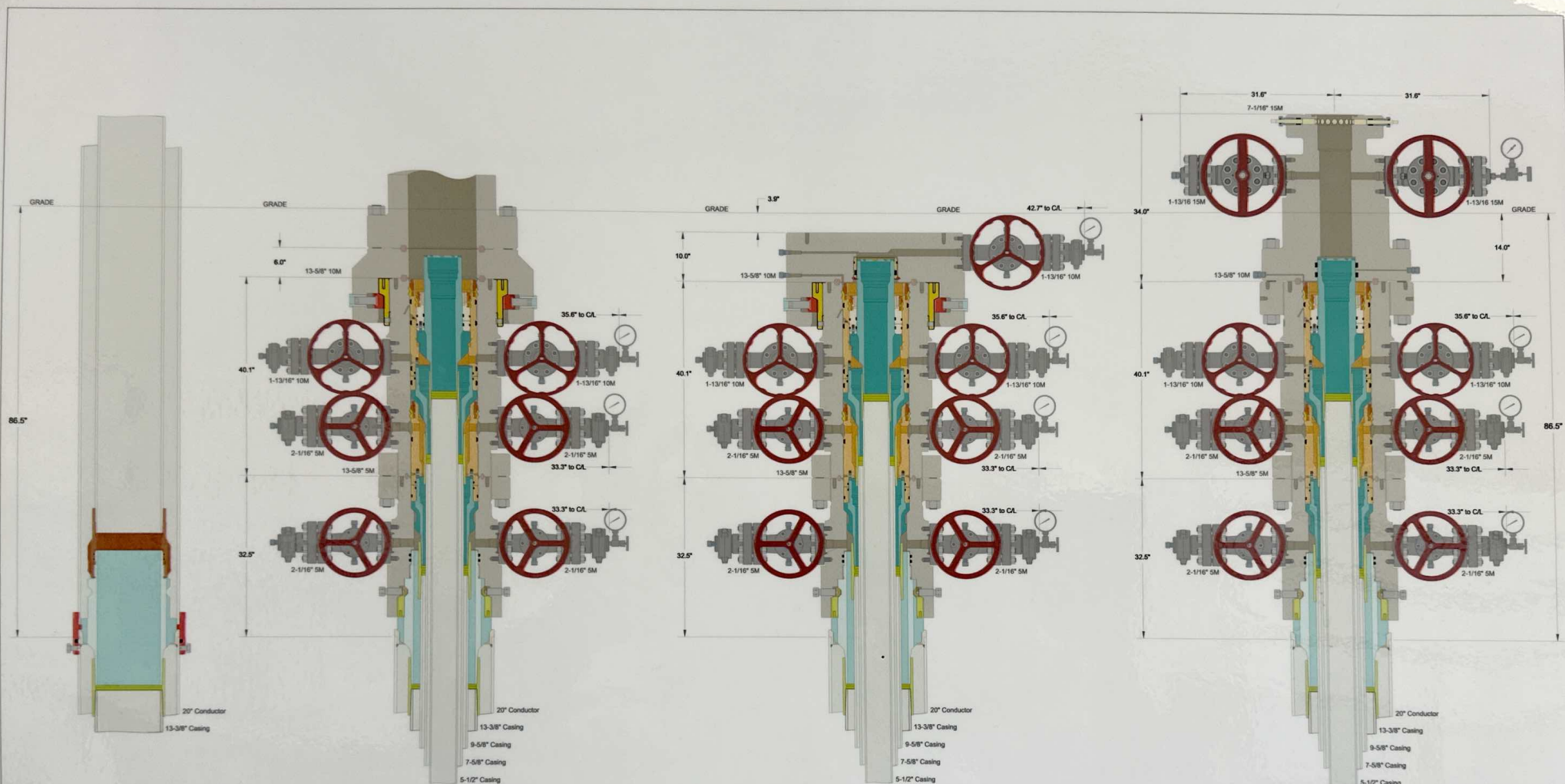
19100.000	90.000	179.641	11059.997	71.341	0.000	76.952	-0.000	71.341	0.000	0.000	77.062	46.709	3.493	MWD+IFR1+MS
19200.000	90.000	179.641	11059.997	72.062	0.000	77.605	-0.000	72.062	0.000	0.000	77.715	46.758	3.455	MWD+IFR1+MS
19300.000	90.000	179.641	11059.997	72.784	0.000	78.260	-0.000	72.784	0.000	0.000	78.370	46.807	3.419	MWD+IFR1+MS
19400.000	90.000	179.641	11059.997	73.508	0.000	78.917	-0.000	73.508	0.000	0.000	79.026	46.857	3.383	MWD+IFR1+MS
19500.000	90.000	179.641	11059.997	74.232	0.000	79.576	-0.000	74.232	0.000	0.000	79.685	46.908	3.348	MWD+IFR1+MS
19600.000	90.000	179.641	11059.997	74.958	0.000	80.237	-0.000	74.958	0.000	0.000	80.345	46.959	3.314	MWD+IFR1+MS
19700.000	90.000	179.641	11059.997	75.685	0.000	80.899	-0.000	75.685	0.000	0.000	81.008	47.010	3.281	MWD+IFR1+MS
19800.000	90.000	179.641	11059.997	76.414	0.000	81.564	-0.000	76.414	0.000	0.000	81.672	47.062	3.248	MWD+IFR1+MS
19900.000	90.000	179.641	11059.997	77.143	0.000	82.230	-0.000	77.143	0.000	0.000	82.338	47.115	3.215	MWD+IFR1+MS
20000.000	90.000	179.641	11059.997	77.873	0.000	82.898	-0.000	77.873	0.000	0.000	83.005	47.168	3.183	MWD+IFR1+MS
20100.000	90.000	179.641	11059.997	78.605	0.000	83.567	-0.000	78.605	0.000	0.000	83.674	47.221	3.152	MWD+IFR1+MS
20200.000	90.000	179.641	11059.997	79.337	0.000	84.238	-0.000	79.337	0.000	0.000	84.345	47.275	3.122	MWD+IFR1+MS
20300.000	90.000	179.641	11059.997	80.071	0.000	84.911	-0.000	80.071	0.000	0.000	85.018	47.330	3.092	MWD+IFR1+MS
20400.000	90.000	179.641	11059.997	80.805	0.000	85.586	-0.000	80.805	0.000	0.000	85.692	47.385	3.062	MWD+IFR1+MS
20500.000	90.000	179.641	11059.997	81.540	0.000	86.262	-0.000	81.540	0.000	0.000	86.367	47.440	3.033	MWD+IFR1+MS
20600.000	90.000	179.641	11059.997	82.277	0.000	86.939	-0.000	82.277	0.000	0.000	87.044	47.497	3.004	MWD+IFR1+MS
20700.000	90.000	179.641	11059.997	83.014	0.000	87.618	-0.000	83.014	0.000	0.000	87.723	47.553	2.976	MWD+IFR1+MS
20800.000	90.000	179.641	11059.997	83.752	0.000	88.298	-0.000	83.752	0.000	0.000	88.403	47.610	2.949	MWD+IFR1+MS
20900.000	90.000	179.641	11059.997	84.491	0.000	88.980	-0.000	84.491	0.000	0.000	89.084	47.668	2.922	MWD+IFR1+MS
21000.000	90.000	179.641	11059.997	85.230	0.000	89.663	-0.000	85.230	0.000	0.000	89.766	47.726	2.895	MWD+IFR1+MS
21100.000	90.000	179.641	11059.997	85.971	0.000	90.347	-0.000	85.971	0.000	0.000	90.450	47.784	2.869	MWD+IFR1+MS
21200.000	90.000	179.641	11059.997	86.712	0.000	91.033	-0.000	86.712	0.000	0.000	91.136	47.843	2.843	MWD+IFR1+MS
21300.000	90.000	179.641	11059.997	87.454	0.000	91.719	-0.000	87.454	0.000	0.000	91.822	47.903	2.818	MWD+IFR1+MS
21400.000	90.000	179.641	11059.997	88.197	0.000	92.407	-0.000	88.197	0.000	0.000	92.510	47.963	2.793	MWD+IFR1+MS
21500.000	90.000	179.641	11059.997	88.941	0.000	93.097	-0.000	88.941	0.000	0.000	93.199	48.023	2.768	MWD+IFR1+MS
21600.000	90.000	179.641	11059.997	89.685	0.000	93.787	-0.000	89.685	0.000	0.000	93.889	48.084	2.744	MWD+IFR1+MS
21700.000	90.000	179.641	11059.997	90.430	0.000	94.479	-0.000	90.430	0.000	0.000	94.580	48.145	2.720	MWD+IFR1+MS
21800.000	90.000	179.641	11059.997	91.175	0.000	95.172	-0.000	91.175	0.000	0.000	95.273	48.207	2.697	MWD+IFR1+MS
21900.000	90.000	179.641	11059.997	91.921	0.000	95.866	-0.000	91.921	0.000	0.000	95.966	48.270	2.674	MWD+IFR1+MS
22000.000	90.000	179.641	11059.997	92.668	0.000	96.561	-0.000	92.668	0.000	0.000	96.661	48.332	2.651	MWD+IFR1+MS
22100.000	90.000	179.641	11059.997	93.416	0.000	97.257	-0.000	93.416	0.000	0.000	97.356	48.396	2.629	MWD+IFR1+MS
22200.000	90.000	179.641	11059.997	94.164	0.000	97.954	-0.000	94.164	0.000	0.000	98.053	48.459	2.607	MWD+IFR1+MS
22300.000	90.000	179.641	11059.997	94.912	0.000	98.652	-0.000	94.912	0.000	0.000	98.751	48.524	2.585	MWD+IFR1+MS

22400.000	90.000	179.641	11059.997	95.662	0.000	99.351	-0.000	95.662	0.000	0.000	99.450	48.588	2.564	MWD+IFR1+MS
22500.000	90.000	179.641	11059.997	96.412	0.000	100.051	-0.000	96.412	0.000	0.000	100.149	48.653	2.543	MWD+IFR1+MS
22600.000	90.000	179.641	11059.997	97.162	0.000	100.752	-0.000	97.162	0.000	0.000	100.850	48.719	2.522	MWD+IFR1+MS
22700.000	90.000	179.641	11059.997	97.913	0.000	101.454	-0.000	97.913	0.000	0.000	101.551	48.785	2.502	MWD+IFR1+MS
22800.000	90.000	179.641	11059.997	98.664	0.000	102.157	-0.000	98.664	0.000	0.000	102.254	48.852	2.482	MWD+IFR1+MS
22900.000	90.000	179.641	11059.997	99.416	0.000	102.861	-0.000	99.416	0.000	0.000	102.957	48.919	2.462	MWD+IFR1+MS
23000.000	90.000	179.641	11059.997	100.169	0.000	103.565	-0.000	100.169	0.000	0.000	103.662	48.986	2.442	MWD+IFR1+MS
23100.000	90.000	179.641	11059.997	100.922	0.000	104.271	-0.000	100.922	0.000	0.000	104.367	49.054	2.423	MWD+IFR1+MS
23200.000	90.000	179.641	11059.997	101.675	0.000	104.977	-0.000	101.675	0.000	0.000	105.073	49.122	2.404	MWD+IFR1+MS
23300.000	90.000	179.641	11059.997	102.429	0.000	105.684	-0.000	102.429	0.000	0.000	105.779	49.191	2.385	MWD+IFR1+MS
23400.000	90.000	179.641	11059.997	103.183	0.000	106.392	-0.000	103.183	0.000	0.000	106.487	49.260	2.367	MWD+IFR1+MS
23500.000	90.000	179.641	11059.997	103.938	0.000	107.101	-0.000	103.938	0.000	0.000	107.195	49.329	2.348	MWD+IFR1+MS
23600.000	90.000	179.641	11059.997	104.693	0.000	107.811	-0.000	104.693	0.000	0.000	107.905	49.400	2.330	MWD+IFR1+MS
23700.000	90.000	179.641	11059.997	105.449	0.000	108.521	-0.000	105.449	0.000	0.000	108.615	49.470	2.312	MWD+IFR1+MS
23800.000	90.000	179.641	11059.997	106.205	0.000	109.232	-0.000	106.205	0.000	0.000	109.325	49.541	2.295	MWD+IFR1+MS
23865.609	90.000	179.641	11059.997	106.701	0.000	109.698	-0.000	106.701	0.000	0.000	109.791	49.588	2.284	MWD+IFR1+MS
23900.000	90.000	179.641	11059.997	106.960	0.000	109.942	-0.000	106.960	0.000	0.000	110.035	49.612	2.278	MWD+IFR1+MS
23955.562	90.000	179.641	11059.997	107.380	0.000	110.337	-0.000	107.380	0.000	0.000	110.429	49.652	2.268	MWD+IFR1+MS

Plan Targets

Poker Lake Unit 21 DTD South 158H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 4	11298.83	440445.70	640172.50	7631.00	RECTANGLE
SHL 9	13503.88	440101.49	637977.57	7713.00	RECTANGLE
LTP 4	23865.55	427456.90	640253.80	7631.00	RECTANGLE
BHL 4	23955.55	427366.90	640254.30	7631.00	RECTANGLE



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

(20") x 13-3/8" x 9-5/8" x 7-5/8" x 5-1/2" MBU-4T-CFL-R-DBLO
With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head
And Drilling & Skid Configurations

DRAWN	DLE	10SEP21
APPRV		
DRAWING NO.	SDT-3301	

INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.

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.

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 ^a	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

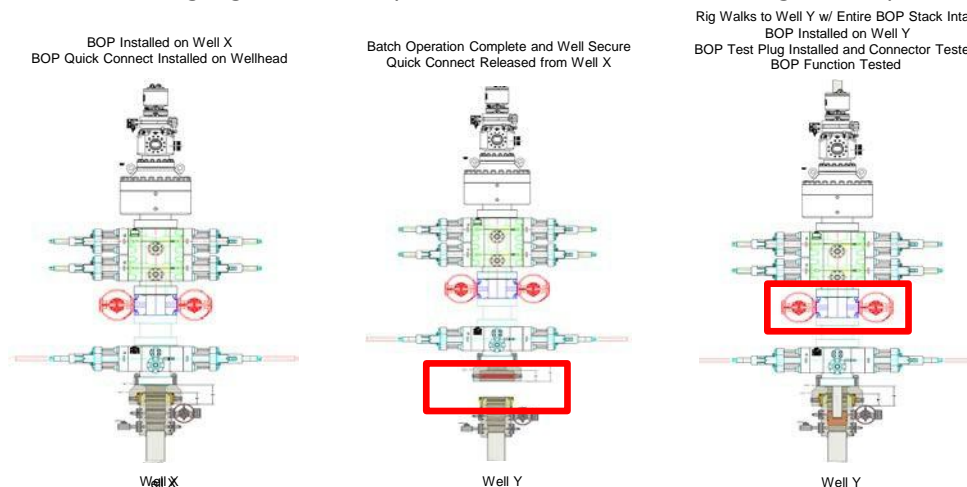
each BOP nipple up, XTO Energy performs a choke drill with the rig crew prior to drilling out every casing shoe. This is additional training for the rig crew that exceeds the requirements of the CFR Title 43 Part 3170.

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.

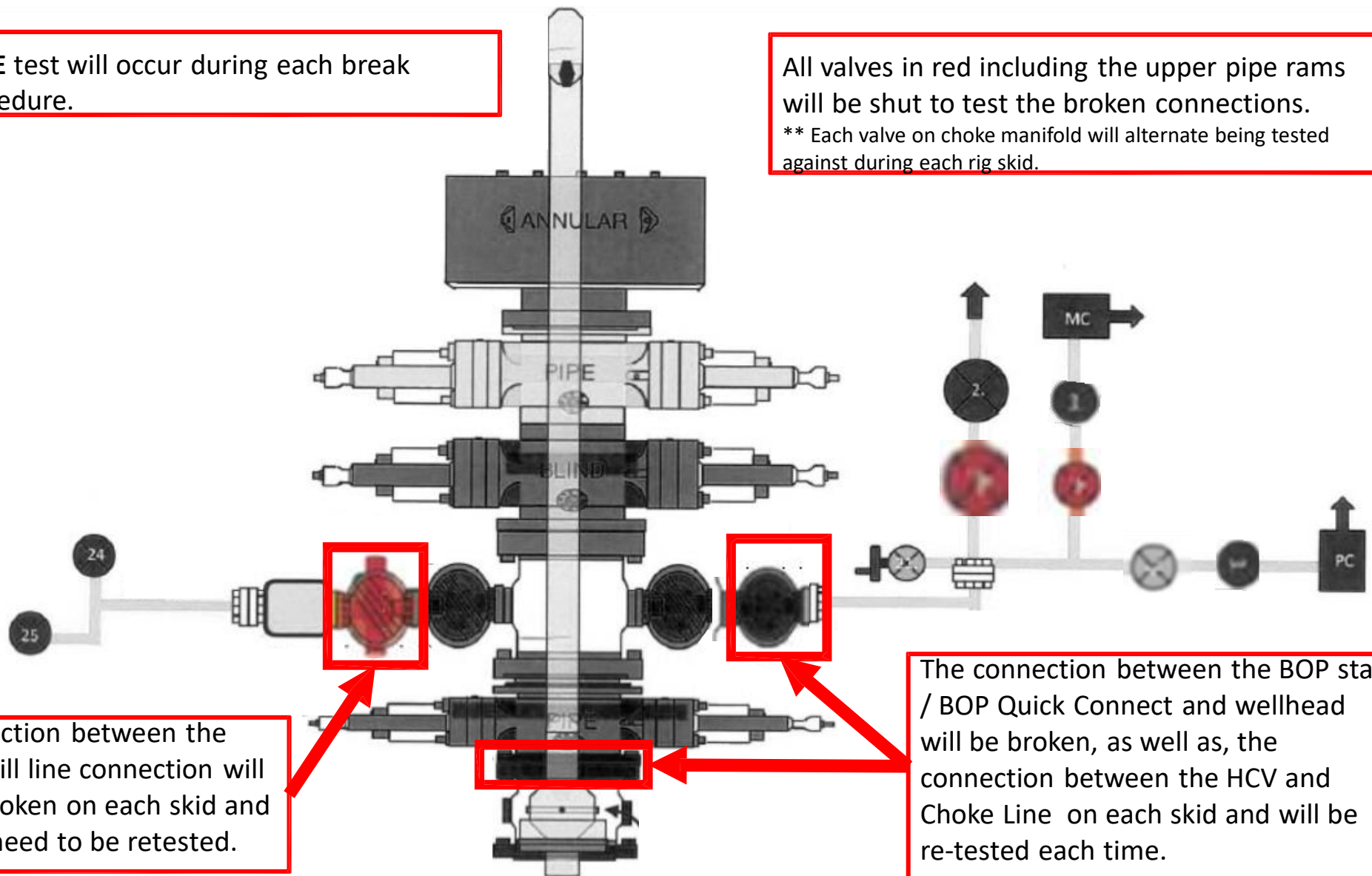
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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

- Released to Imaging: 7/12/2024 2:03:21 PM

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 360217

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 360217
	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