

Form 3160-3
(June 2015)

FORM APPROVED
OMB No. 1004-0137
Expires: January 31, 2018

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No.
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No.
2. Name of Operator		8. Lease Name and Well No.
3a. Address		9. API Well No. 30-015-55076
3b. Phone No. (include area code)		10. Field and Pool, or Exploratory
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		11. Sec., T. R. M. or Blk. and Survey or Area
14. Distance in miles and direction from nearest town or post office*		12. County or Parish
		13. State
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No of acres in lease	17. Spacing Unit dedicated to this well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth	20. BLM/BIA Bond No. in file
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work will start*	23. Estimated duration
24. Attachments		

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). | 6. Such other site specific information and/or plans as may be requested by the BLM. |

25. Signature	Name (Printed/Typed)	Date
Title		
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	

Application approval 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.
Conditions of approval, if any, are attached.

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.



(Continued on page 2)

*(Instructions on page 2)

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 537 FNL / 1452 FEL / TWSP: 25S / RANGE: 31E / SECTION: 29 / LAT: 32.107089 / LONG: -103.796396 (TVD: 0 feet, MD: 0 feet)

PPP: SENW / 2115 FNL / 1645 FWL / TWSP: 25S / RANGE: 31E / SECTION: 28 / LAT: 32.102752 / LONG: -103.786415 (TVD: 10211 feet, MD: 11900 feet)

PPP: SENW / 2115 FNL / 1631 FWL / TWSP: 25S / RANGE: 31E / SECTION: 21 / LAT: 32.110431 / LONG: -103.786351 (TVD: 10211 feet, MD: 17200 feet)

BHL: NESW / 2658 FNL / 1645 FWL / TWSP: 25S / RANGE: 31E / SECTION: 16 / LAT: 32.130435 / LONG: -103.786285 (TVD: 10211 feet, MD: 21872 feet)

BLM Point of Contact

Name: MARIAH HUGHES

Title: Land Law Examiner

Phone: (575) 234-5972

Email: mhughes@blm.gov

State of New Mexico
 Energy, Minerals and Natural Resources Department

Submit Electronically
 Via E-permitting

Oil Conservation Division
 1220 South St. Francis Dr.
 Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

Section 1 – Plan Description Effective May 25, 2021

I. Operator: _____XTO Permian Operating LLC_____ **OGRID:** _____373075_____ **Date:** 5/24/2024

II. Type: Original Amendment due to 19.15.27.9.D(6)(a) NMAC 19.15.27.9.D(6)(b) NMAC Other.

If Other, please describe: _____

III. Well(s): Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Poker Lake Unit 28-21 BS 155H		B-28-25S-31E	549' FNL & 1915' FEL	1848	9240	5544
Poker Lake Unit 29-20 BS 105H		B-29-25S-31E	537' FNL & 1422' FEL	1848	9240	5544
Poker Lake Unit 29-20 BS 121H		C-29-25S-31E	531' FNL & 1515' FWL	1848	9240	5544
Poker Lake Unit 29-20 BS 122H		C-29-25S-31E	531' FNL & 1545' FWL	1848	9240	5544
Poker Lake Unit 29-20 BS 126H		B-29-25S-31E	537' FNL & 1452' FEL	1848	9240	5544

IV. Central Delivery Point Name: _____Cowboy CDP_____ [See 19.15.27.9(D)(1) NMAC]

V. Anticipated Schedule: Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Poker Lake Unit 28-21 BS 155H		TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 29-20 BS 105H		TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 29-20 BS 121H		TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 29-20 BS 122H		TBD	TBD	TBD	TBD	TBD
Poker Lake Unit 29-20 BS 126H		TBD	TBD	TBD	TBD	TBD

VI. Separation Equipment: Attach a complete description of how Operator will size separation equipment to optimize gas capture.

VII. Operational Practices: Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

VIII. Best Management Practices: Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

Section 2 – Enhanced Plan
EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system will will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

XIII. Line Pressure. Operator does does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

Attach Operator’s plan to manage production in response to the increased line pressure.

XIV. Confidentiality: Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.

Section 3 - Certifications

Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Terra Sebastian
Printed Name: Terra Sebastian
Title: Regulatory Coordinator
E-mail Address: terra.b.sebastian@exxonmobil.com
Date: 5/24/2024
Phone: 432-999-3107
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

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(June 2015)

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		12. County or Parish
		13. State
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Approved by (Signature)	Name (Printed/Typed)	Date
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(Continued on page 2)

*(Instructions on page 2)



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

Drilling Plan Data Report

05/24/2024

APD ID: 10400096627

Submission Date: 01/10/2024

Highlighted data reflects the most recent changes

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
13482198	QUATERNARY	3359	0	0	ALLUVIUM	USEABLE WATER	N
13482199	RUSTLER	2524	835	835	ANHYDRITE, SANDSTONE	USEABLE WATER	N
13482200	SALADO	2145	1214	1214	SALT	POTASH	N
13482201	BASE OF SALT	-639	3998	3998	SALT	POTASH	N
13482202	DELAWARE	-848	4207	4207	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13482197	BRUSHY CANYON	-3527	6886	6886	SANDSTONE, SHALE, SILTSTONE	NATURAL GAS, OIL, USEABLE WATER	N
13482203	BONE SPRING	-4804	8163	8163	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	Y
13482204	BONE SPRING 1ST	-5661	9020	9020	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	Y
13482205	BONE SPRING 2ND	-6242	9601	9601	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, USEABLE WATER	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M

Rating Depth: 10211

Equipment: Multibowl Wellhead will be installed by manufacturer's representative. Manufacturer will monitor welding process to ensure appropriate temperature of seal. Operator will test 9 5/8" casing.

Requesting Variance? YES

Variance request: 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

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

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.

Testing Procedure: 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 surface casing, 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When nipping up on the intermediate casing, the BOP will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

Choke Diagram Attachment:

PLU_29_20_BS_5MCM_20240109063608.pdf

BOP Diagram Attachment:

9.625_7.625_5.5_3_String_Slimhole_HBE0000479_4_20240512174209.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	12.25	9.625	NEW	API	N	0	935	0	935	3359	2424	935	J-55	40	OTHER - BTC	6.73	1.38	DRY	16.84	DRY	16.84
2	INTERMEDIATE	8.75	7.625	NEW	API	Y	0	10476	0	9286	3358	-5927	10476	L-80	29.7	OTHER - FLUSH JOINT	1.98	2.07	DRY	2.11	DRY	2.11
3	PRODUCTION	6.75	5.5	NEW	API	Y	0	21872	0	10211	3358	-6852	21872	P-110	20	OTHER - SEMI-FLUSH	1.99	1.26	DRY	2.09	DRY	2.09

Casing Attachments

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_29_20_BS_126H_Csg_20240109115052.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

PLU_29_20_BS_126H_Csg_20240109115224.pdf

Casing Design Assumptions and Worksheet(s):

PLU_29_20_BS_126H_Csg_20240109115231.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

PLU_29_20_BS_126H_Csg_20240109115437.pdf

Casing Design Assumptions and Worksheet(s):

PLU_29_20_BS_126H_Csg_20240109115444.pdf

Section 4 - Cement

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	935	210	1.87	10.5	392.7	100	EconoCem-HLTRRC	NA
SURFACE	Tail		0	935	130	1.35	14.8	175.5	100	Class C	2% CaCl
INTERMEDIATE	Lead		0	6886	700	1.35	14.8	945	100	Class C	NA
INTERMEDIATE	Tail		6886	1047 6	780	1.33	14.8	1037. 4	100	Class C	NA
PRODUCTION	Lead		1017 6	1067 6	20	2.69	11.5	53.8	20	NeoCem	NA
PRODUCTION	Tail		1067 6	2187 2	800	1.51	13.2	1208	20	VersaCem	NA

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: The necessary mud products for weight addition and fluid loss control will be on location at all times.

Describe the mud monitoring system utilized: Spud with fresh water/native mud. Drill out from under surface casing with saturated salt solution. A saturated Salt 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.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
935	4207	SALT SATURATED	10.5	11							

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4207	1047 6	OTHER : BDE/OBM or FW/Brine	8.6	9.1							
1047 6	2187 2	OIL-BASED MUD	10.5	11							
0	935	OTHER : FW/Native	8.4	8.9							

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Mud Logger: Mud Logging Unit (2 man) below intermediate casing.

Open hole logging will not be done on this well.

List of open and cased hole logs run in the well:

GAMMA RAY LOG, CEMENT BOND LOG, DIRECTIONAL SURVEY, MEASUREMENT WHILE DRILLING, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No coring is planned for the well.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 5575

Anticipated Surface Pressure: 3328

Anticipated Bottom Hole Temperature(F): 185

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

PLU_29_20_BS_H2S_Dia_20240109071057.pdf

PLU_29_20_BS_H2S_Plan_20240109071057.pdf

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PLU_29_20_BS_126H_DD_20240109120341.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

PLU_29_20_BS_126H_Cmt_20240503131859.pdf

Other Variance attachment:

PLU_29_20_BS_BOP_BTV_20240109071504.pdf

PLU_29_20_BS_FH_20240109071504.pdf

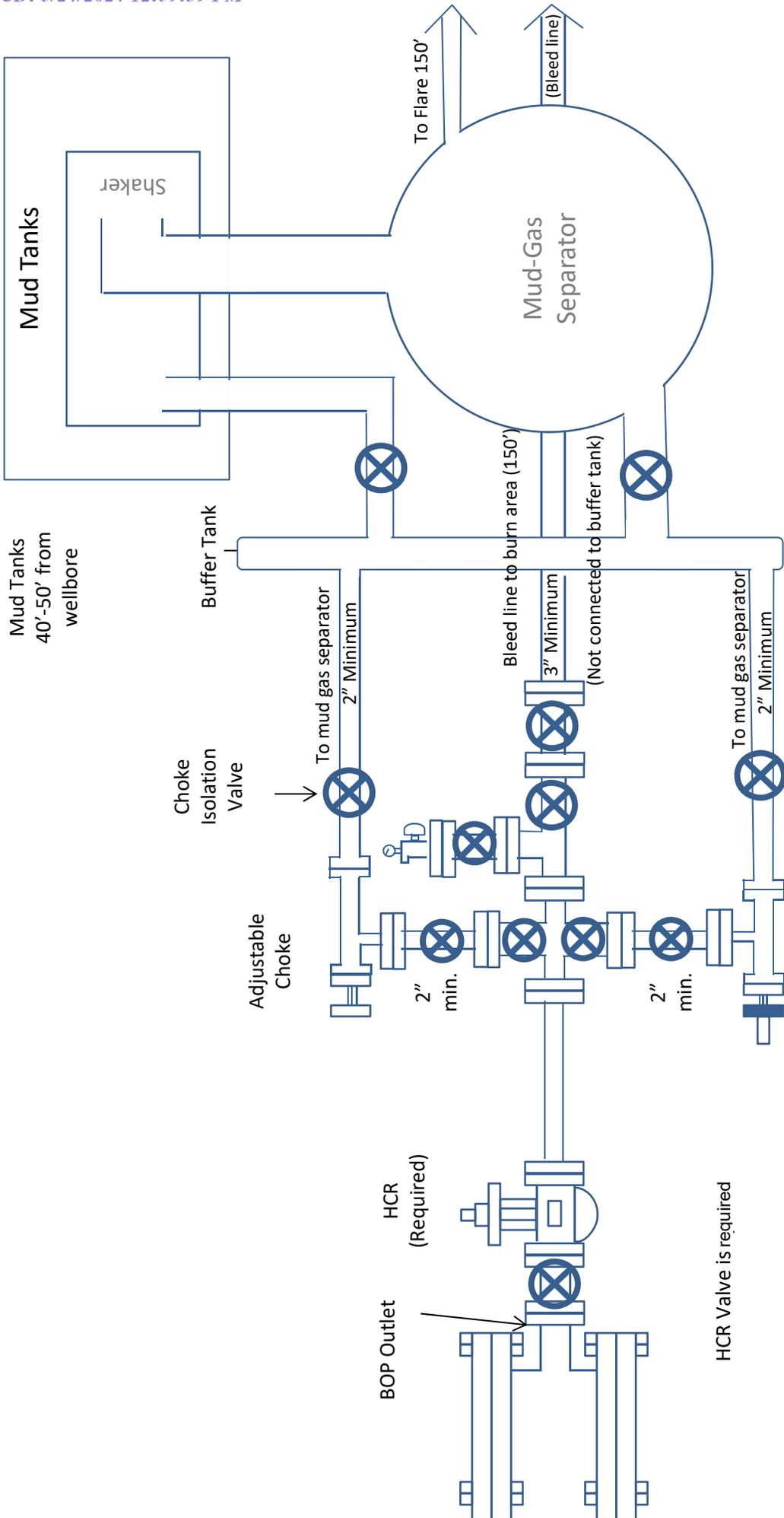
PLU_29_20_BS_MBS_20240109071505.pdf

PLU_29_20_BS_OLCV_20240109071505.pdf

PLU_29_20_BS_Spud_20240109071503.pdf

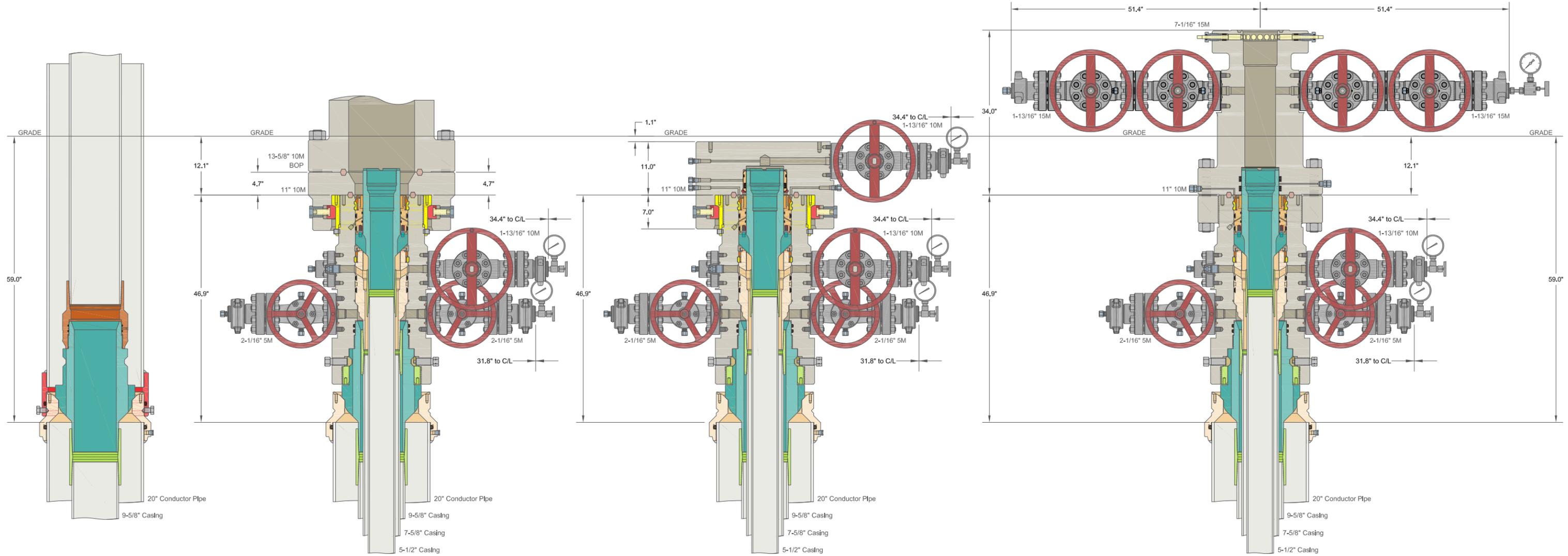
CONFIDENTIAL

Bleed line will discharge 100' from wellhead for non-H2S situations and 150' from wellhead for H2S situations.



5M Choke Manifold Diagram XTO

Drilling Operations Choke Manifold 5M Service



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC		XTO ENERGY INC DELAWARE BASIN	
20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers		DRAWN	VJK
		APPRV	31MAR22
		DRAWING NO.	HBE0000479

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 935'	9.625	40	J-55	BTC	New	1.38	6.73	16.84
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.84	2.71	1.79
8.75	4000' – 10475.98'	7.625	29.7	HC L-80	Flush Joint	New	2.07	1.98	2.11
6.75	0' – 10375.98'	5.5	20	RY P-110	Semi-Premium	New	1.26	1.96	2.09
6.75	10375.98' - 21871.5'	5.5	20	RY P-110	Semi-Flush	New	1.26	1.99	2.09

Cement Variance Request

Intermediate Casing:

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 (6886') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement 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:

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.

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

Description of Operations:

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

XTO Permian Operating, LLC Offline Cementing Variance Request

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

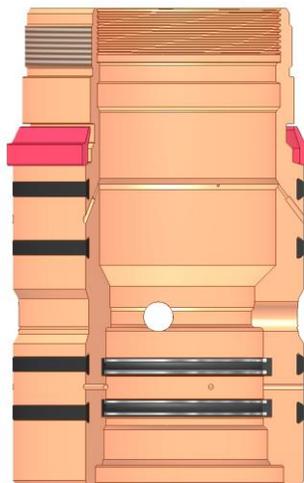
1. Cement Program

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

2. Offline Cementing Procedure

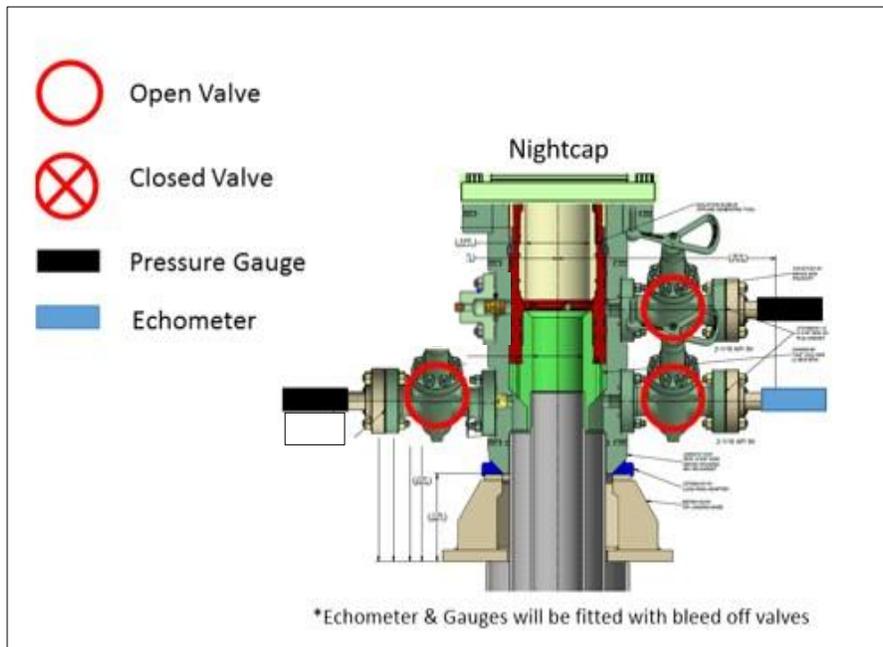
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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



Annular packoff with both external and internal seals

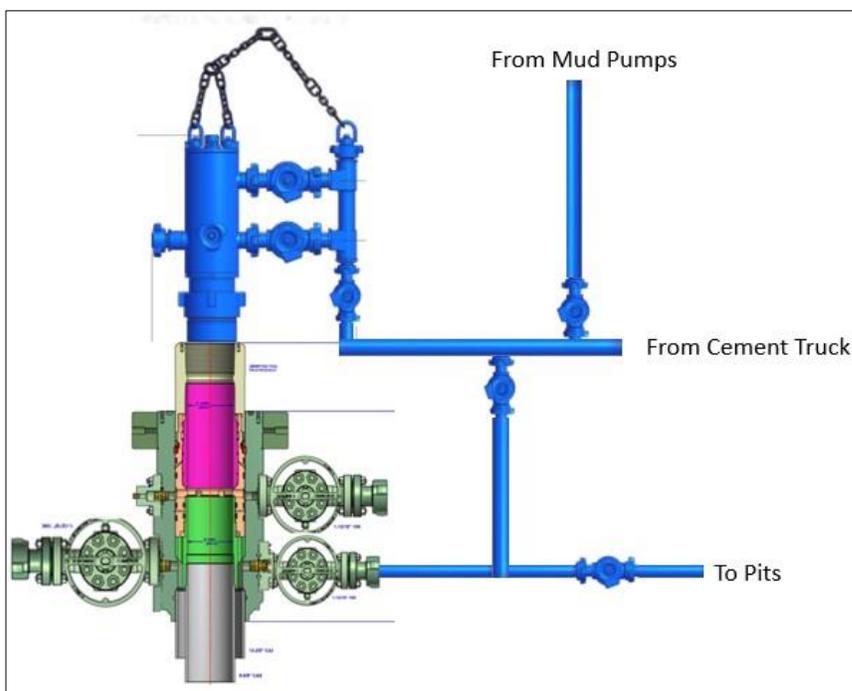
XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during skidding operations

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

XTO Permian Operating, LLC Offline Cementing Variance Request



Wellhead diagram during offline cementing operations

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



GATES E & S NORTH AMERICA, INC
 DU-TEX
 134 44TH STREET
 CORPUS CHRISTI, TEXAS 78405

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 FAX: 361-887-0812
 EMAIL: crpe&s@gates.com
 WEB: www.gates.com

GRADE D PRESSURE TEST CERTIFICATE

Customer :	AUSTIN DISTRIBUTING	Test Date:	6/8/2014
Customer Ref. :	PENDING	Hose Serial No.:	D-060814-1
Invoice No. :	201709	Created By:	NORMA

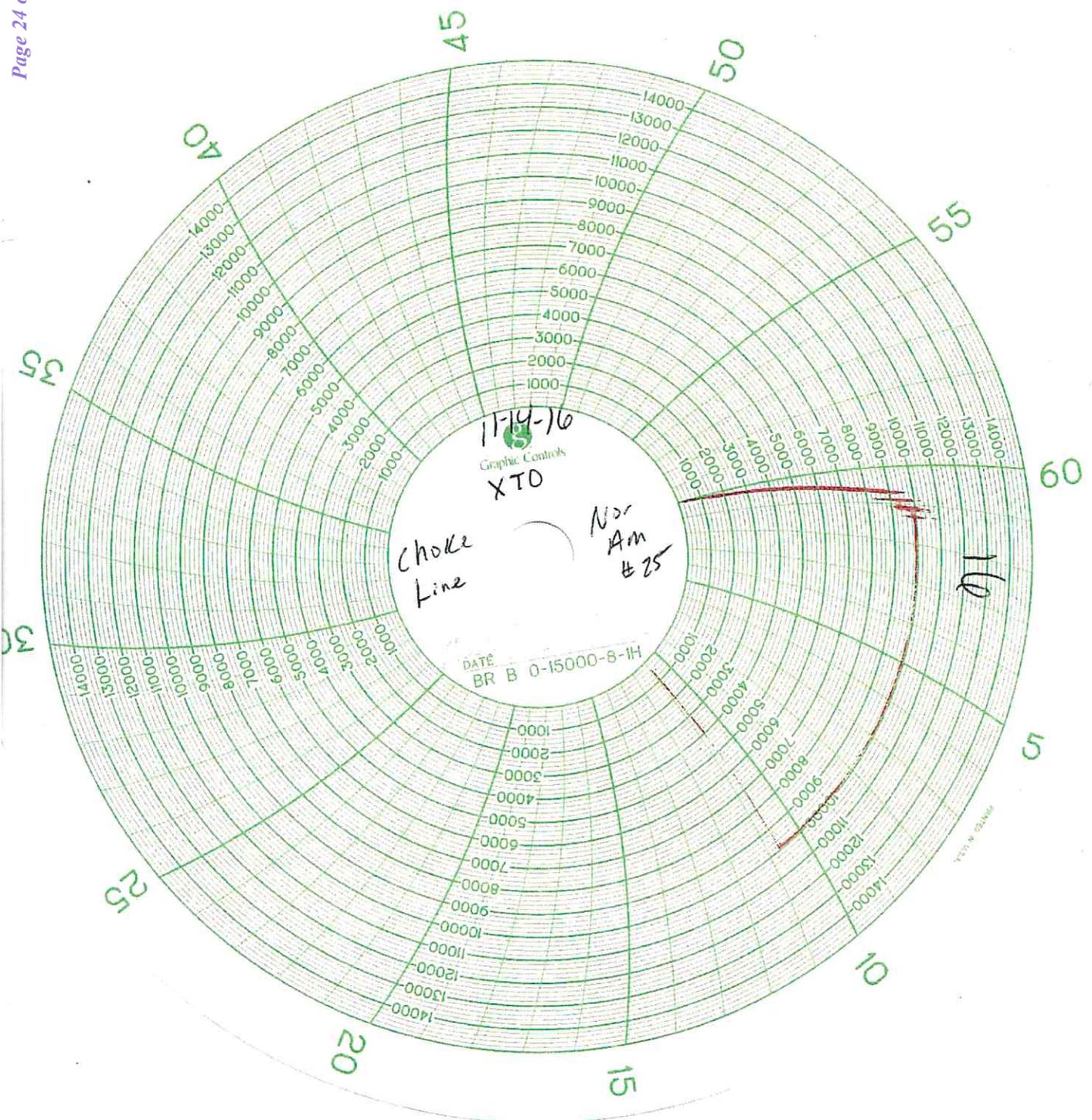
Product Description: FD3.042.0R41/16.5KFLGE/E LE

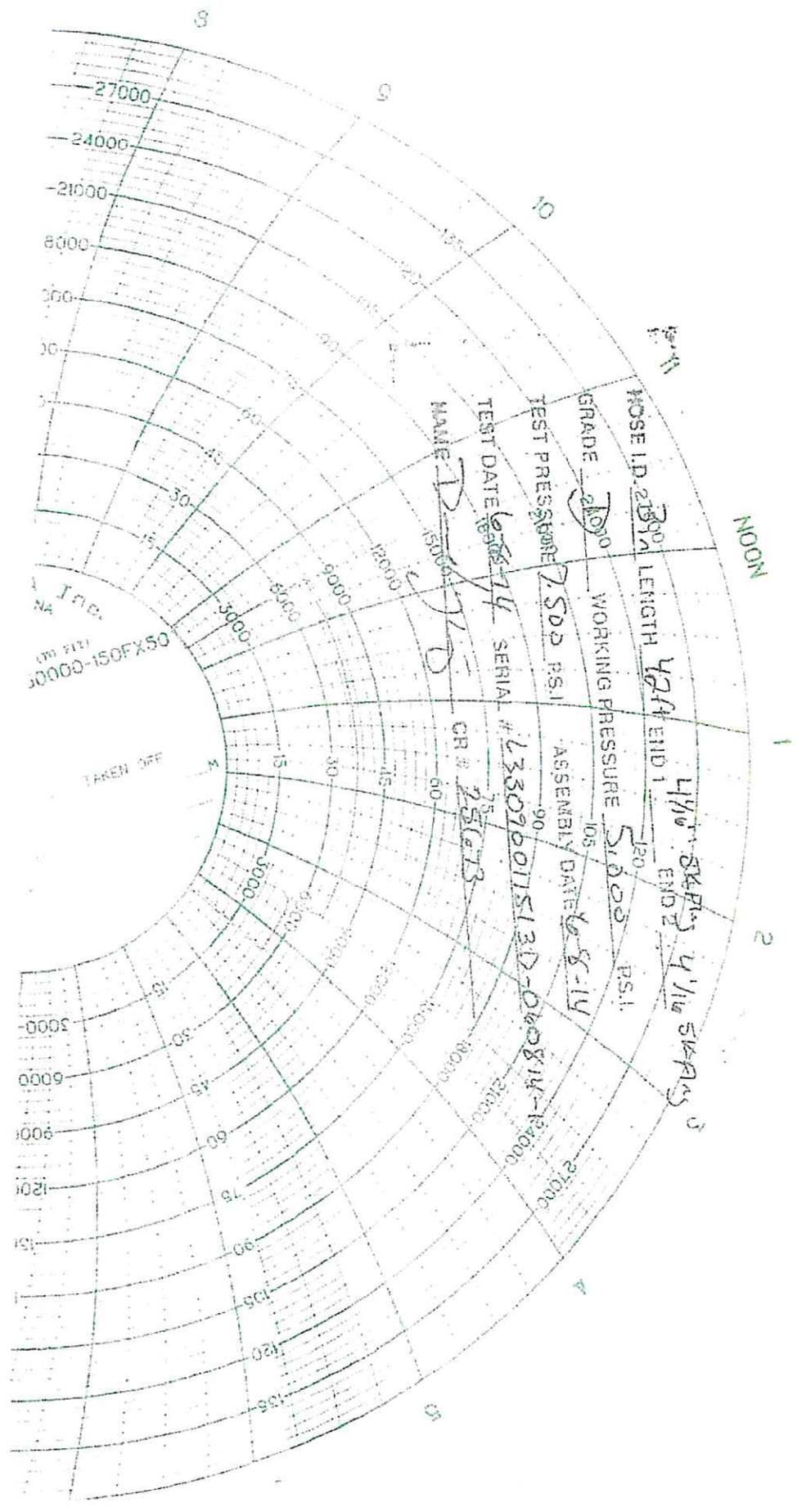
End Fitting 1 :	4 1/16 in.5K FLG	End Fitting 2 :	4 1/16 in.5K FLG
Gates Part No. :	4774-6001	Assembly Code :	L33090011513D-060814-1
Working Pressure :	5,000 PSI	Test Pressure :	7,500 PSI

Gates E & S North America, Inc. certifies that the following hose assembly has been tested to the Gates Oilfield Roughneck Agreement/Specification requirements and passed the 15 minute hydrostatic test per API Spec 7K/Q1, Fifth Edition, June 2010, Test pressure 9.6.7 and per Table 9 to 7,500 psi in accordance with this product number. Hose burst pressure 9.6.7.2 exceeds the minimum of 2.5 times the working pressure per Table 9.

Quality:	QUALITY	Technical Supervisor :	PRODUCTION
Date :	6/8/2014	Date :	6/8/2014
Signature :	<i>[Signature]</i>	Signature :	<i>[Signature]</i>

Form PTC - 01 Rev.0 2





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.

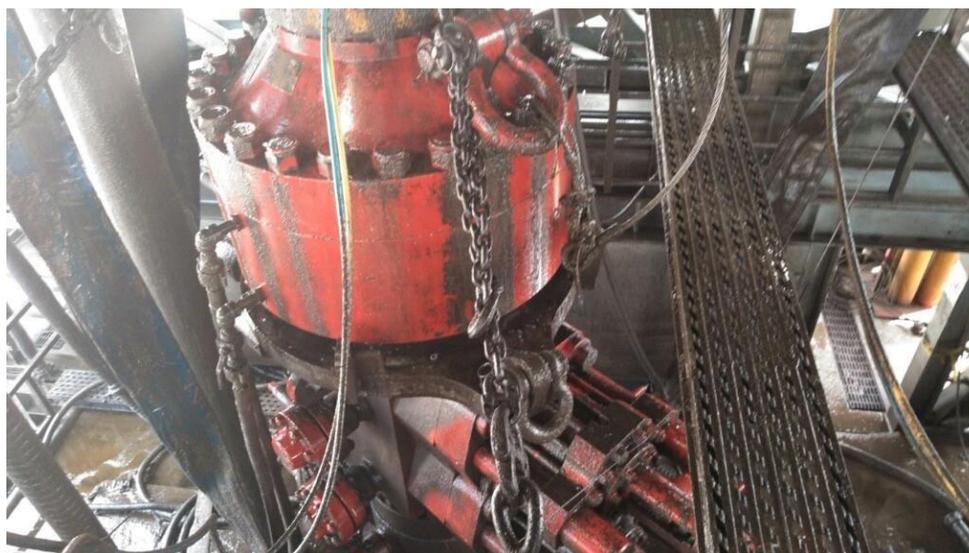


Figure 1: Winch System attached to BOP Stack

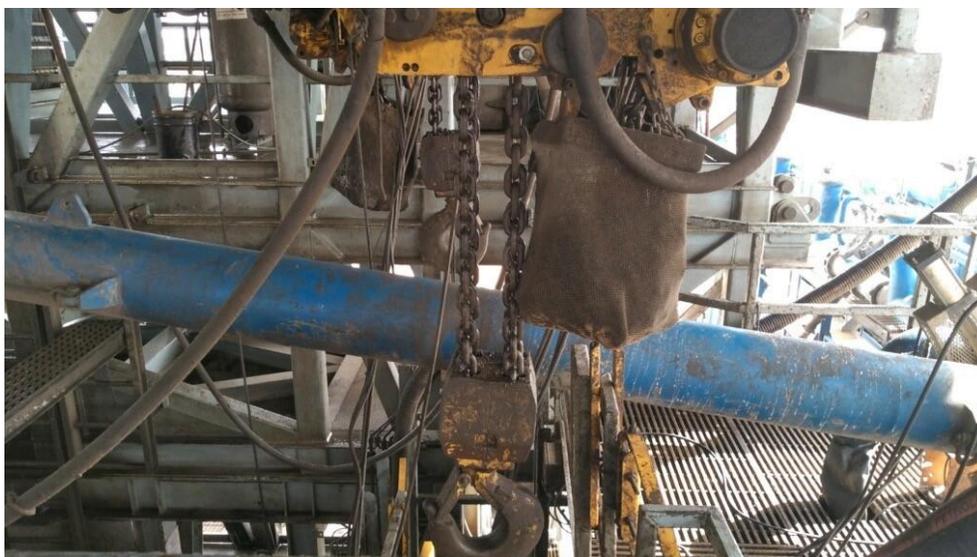


Figure 2: BOP Winch System

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 ^b	250 to 350 (1.72 to 2.41)	RWP of annular preventer	MASP or 70% annular RWP, whichever is lower.
Fixed pipe, variable bore, blind, and BSR preventers ^{bd}	250 to 350 (1.72 to 2.41)	RWP of ram preventer or wellhead system, whichever is lower	ITP
Choke and kill line and BOP side outlet valves below ram preventers (both sides)	250 to 350 (1.72 to 2.41)	RWP of side outlet valve or wellhead system, whichever is lower	ITP
Choke manifold—upstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of ram preventers or wellhead system, whichever is lower	ITP
Choke manifold—downstream of chokes ^e	250 to 350 (1.72 to 2.41)	RWP of valve(s), line(s), or MASP for the well program, whichever is lower	
Kelly, kelly valves, drill pipe safety valves, IBOPs	250 to 350 (1.72 to 2.41)	MASP for the well program	

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

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

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

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

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

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

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

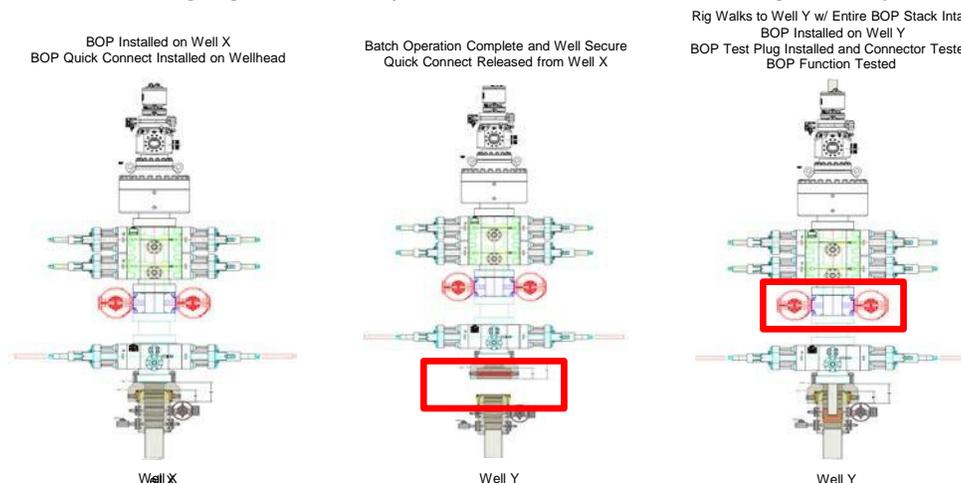
XTO Energy feels break testing and our current procedures meet the intent of CFR Title 43 Part 317 0and often exceed it. There has been no evidence that break testing results in more components failing than seen on full BOP tests. XTO Energy's internal standards requires complete BOPE tests more often 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.

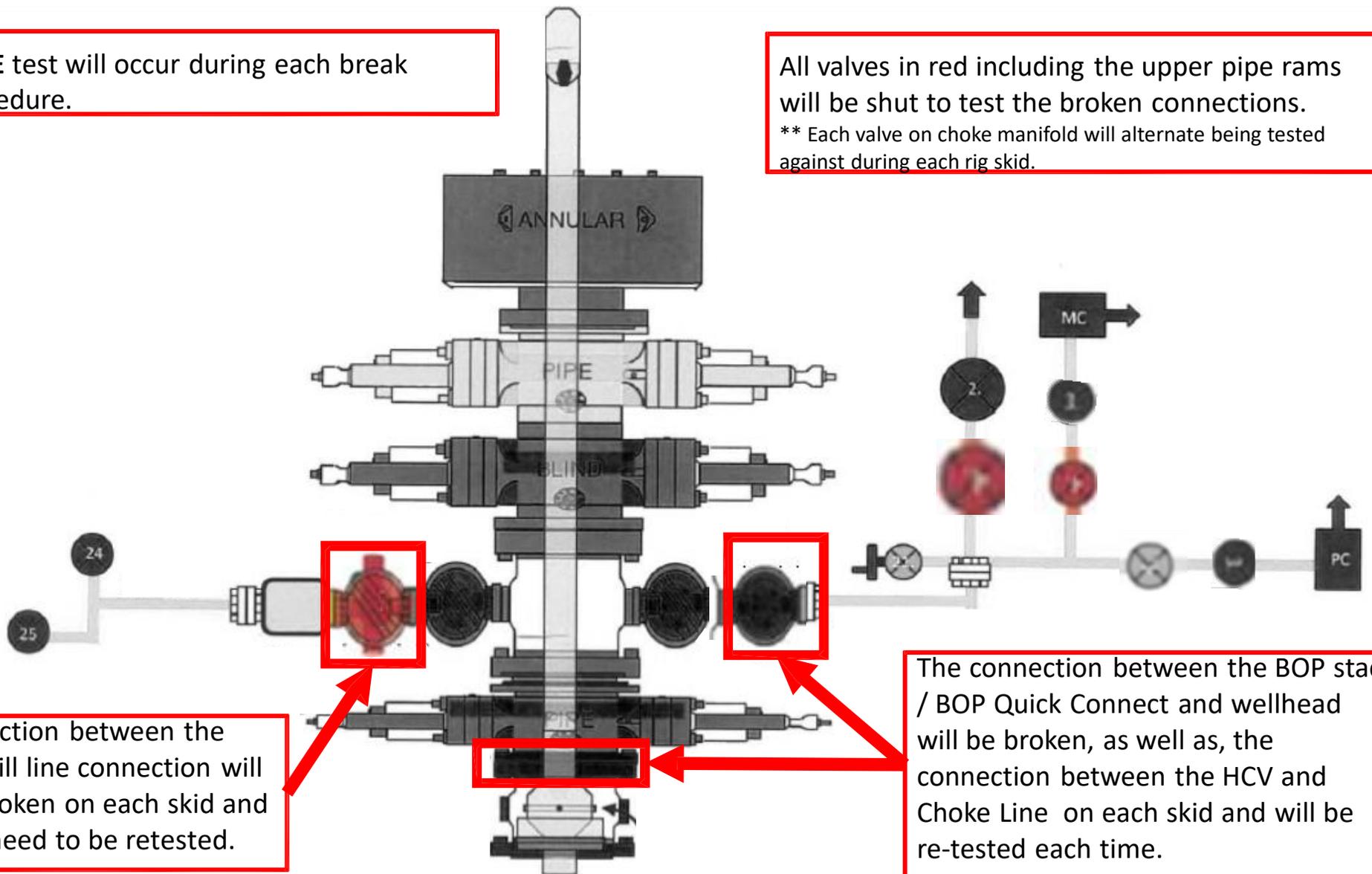
The BOP will be secured by a hydraulic carrier or cradle. The BLM will be contacted if a Well Control event occurs prior to the commencement of a BOPE Break Testing operation.

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.

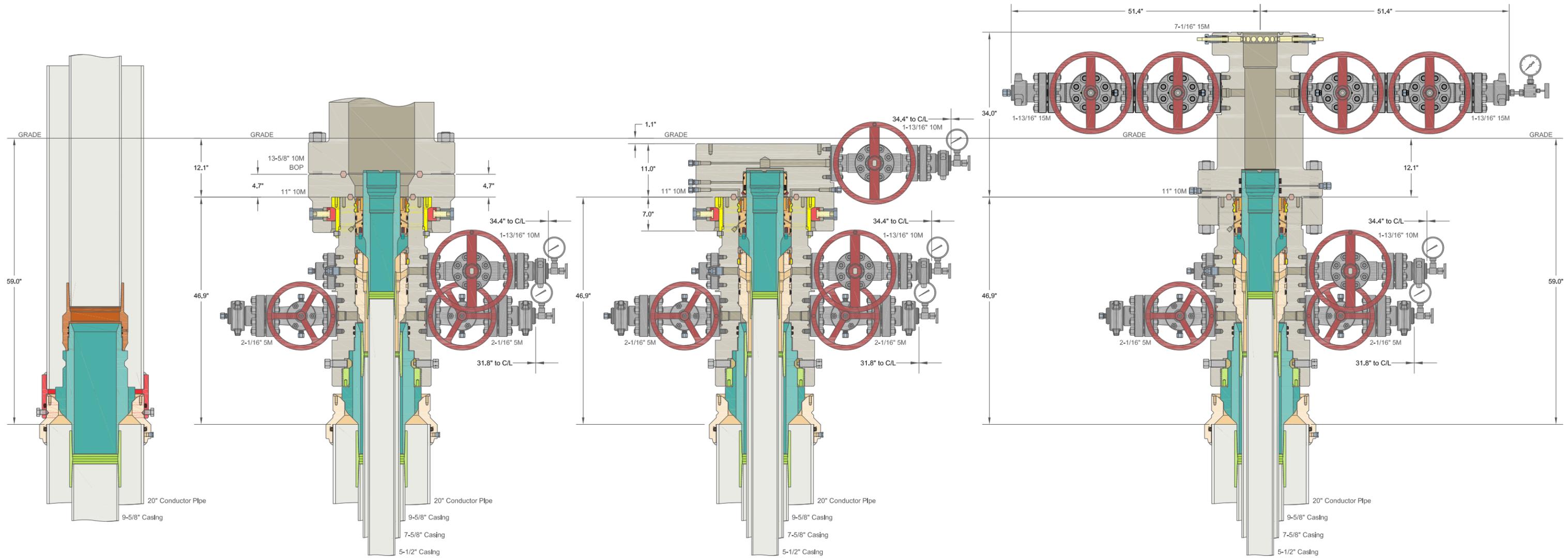
Only **ONE** test will occur during each break test procedure.

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 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.



ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC

XTO ENERGY INC
DELAWARE BASIN

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

DRAWN	VJK	31MAR22
APPRV		
DRAWING NO.		HBE0000479

Well Plan Report - PLU 29-20 126H

Measured Depth: 21871.50 ft

Site: A

TVD RKB: 10211.00 ft

Slot: PLU 29-20 126H

Location

Cartographic Reference System: New Mexico East - NAD 27

Northing: 403051.50 ft

Easting: 666403.30 ft

RKB: 3391.00 ft

Ground Level: 3363.00 ft

North Reference: Grid

Convergence Angle: 0.29 Deg

Plan Sections PLU 29-20 126H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD			Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
			RKB (ft)	Y Offset (ft)	X Offset (ft)				
0.00	0.00	0.00	-4.00	0.00	-0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1096.00	0.00	-0.00	0.00	0.00	0.00	
2996.84	37.94	126.32	2857.25	-358.58	487.73	2.00	0.00	2.00	
7284.34	37.94	126.32	6238.75	-1919.92	2611.47	0.00	0.00	0.00	
9181.17	0.00	0.00	8000.00	-2278.50	3099.20	-2.00	0.00	2.00	
10675.98	0.00	0.00	9494.80	-2278.50	3099.20	0.00	0.00	0.00	
11800.98	90.00	359.94	10211.00	-1562.30	3098.50	8.00	0.00	8.00	FTP 6
21772.68	90.00	359.94	10211.00	8409.40	3088.70	0.00	0.00	0.00	LTP 6
21871.50	90.00	359.94	10211.00	8508.22	3088.60	0.00	0.00	0.00	BHL 6

Position Uncertainty PLU 29-20 126H

Measured	TVD	Highside	Lateral	Vertical	Magnitude	Semi-major	Semi-minor	Semi-minor	Tool
----------	-----	----------	---------	----------	-----------	------------	------------	------------	------

Depth (ft)	Inclination (°)	Azimuth (°)	RKB (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	Error (ft)	Bias (ft)	of Bias (ft)	Error (ft)	Error (ft)	Azimuth (°)	Used
0.000	0.000	0.000	-4.000	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	96.000	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	196.000	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	296.000	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	396.000	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	496.000	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	596.000	2.607	0.000	2.405	0.000	2.406	0.000	0.000	2.888	2.059	127.873	MWD+IFR1+MS
700.000	0.000	0.000	696.000	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	796.000	3.334	0.000	3.138	0.000	2.485	0.000	0.000	3.642	2.775	128.423	MWD+IFR1+MS
900.000	0.000	0.000	896.000	3.696	0.000	3.502	0.000	2.531	0.000	0.000	4.014	3.133	128.602	MWD+IFR1+MS
1000.000	0.000	0.000	996.000	4.058	0.000	3.865	0.000	2.581	0.000	0.000	4.384	3.491	128.744	MWD+IFR1+MS
1100.000	0.000	0.000	1096.000	4.419	0.000	4.228	0.000	2.634	0.000	0.000	4.752	3.849	128.859	MWD+IFR1+MS
1200.000	2.000	126.323	1195.980	4.368	0.000	5.037	-0.000	2.691	0.000	0.000	5.040	4.366	130.210	MWD+IFR1+MS
1300.000	4.000	126.323	1295.838	5.229	0.000	5.355	-0.000	2.751	0.000	0.000	5.409	5.180	96.952	MWD+IFR1+MS
1400.000	6.000	126.323	1395.452	5.982	0.000	5.678	-0.000	2.816	0.000	0.000	6.102	5.567	62.954	MWD+IFR1+MS
1500.000	8.000	126.323	1494.702	6.663	0.000	6.008	-0.000	2.889	0.000	0.000	6.804	5.878	57.549	MWD+IFR1+MS
1600.000	10.000	126.323	1593.465	7.291	0.000	6.344	-0.000	2.972	0.000	0.000	7.460	6.192	55.693	MWD+IFR1+MS
1700.000	12.000	126.323	1691.623	7.877	0.000	6.686	-0.000	3.067	0.000	0.000	8.077	6.512	54.810	MWD+IFR1+MS
1800.000	14.000	126.323	1789.055	8.428	0.000	7.036	-0.000	3.175	0.000	0.000	8.661	6.842	54.338	MWD+IFR1+MS
1900.000	16.000	126.323	1885.643	8.952	0.000	7.395	-0.000	3.298	0.000	0.000	9.219	7.181	54.087	MWD+IFR1+MS
2000.000	18.000	126.323	1981.268	9.452	0.000	7.763	-0.000	3.438	0.000	0.000	9.755	7.532	53.977	MWD+IFR1+MS
2100.000	20.000	126.323	2075.816	9.931	0.000	8.142	-0.000	3.596	0.000	0.000	10.272	7.895	53.973	MWD+IFR1+MS
2200.000	22.000	126.323	2169.169	10.393	0.000	8.534	-0.000	3.773	0.000	0.000	10.773	8.271	54.058	MWD+IFR1+MS
2300.000	24.000	126.323	2261.215	10.838	0.000	8.941	-0.000	3.969	0.000	0.000	11.259	8.663	54.228	MWD+IFR1+MS
2400.000	26.000	126.323	2351.841	11.270	0.000	9.362	-0.000	4.187	0.000	0.000	11.733	9.070	54.486	MWD+IFR1+MS
2500.000	28.000	126.323	2440.937	11.690	0.000	9.802	-0.000	4.426	0.000	0.000	12.196	9.496	54.843	MWD+IFR1+MS
2600.000	30.000	126.323	2528.394	12.099	0.000	10.260	-0.000	4.687	0.000	0.000	12.650	9.939	55.315	MWD+IFR1+MS
2700.000	32.000	126.323	2614.107	12.498	0.000	10.740	-0.000	4.970	0.000	0.000	13.095	10.403	55.926	MWD+IFR1+MS
2800.000	34.000	126.323	2697.970	12.889	0.000	11.242	-0.000	5.276	0.000	0.000	13.532	10.888	56.711	MWD+IFR1+MS
2900.000	36.000	126.323	2779.881	13.273	0.000	11.768	-0.000	5.605	0.000	0.000	13.964	11.393	57.717	MWD+IFR1+MS
2996.839	37.937	126.323	2857.248	13.626	0.000	12.300	-0.000	5.935	0.000	0.000	14.370	11.903	58.979	MWD+IFR1+MS

3000.000	37.937	126.323	2859.741	13.637	0.000	12.317	-0.000	5.934	0.000	0.000	14.381	11.920	59.006	MWD+IFR1+MS
3100.000	37.937	126.323	2938.610	13.991	0.000	12.879	-0.000	6.150	0.000	0.000	14.685	12.461	61.086	MWD+IFR1+MS
3200.000	37.937	126.323	3017.479	14.368	0.000	13.465	-0.000	6.386	0.000	0.000	15.017	13.010	63.883	MWD+IFR1+MS
3300.000	37.937	126.323	3096.348	14.757	0.000	14.062	-0.000	6.634	0.000	0.000	15.370	13.558	67.368	MWD+IFR1+MS
3400.000	37.937	126.323	3175.217	15.157	0.000	14.671	-0.000	6.890	0.000	0.000	15.748	14.098	71.659	MWD+IFR1+MS
3500.000	37.937	126.323	3254.086	15.567	0.000	15.288	-0.000	7.156	0.000	0.000	16.156	14.624	76.785	MWD+IFR1+MS
3600.000	37.937	126.323	3332.955	15.986	0.000	15.914	-0.000	7.429	0.000	0.000	16.600	15.129	82.573	MWD+IFR1+MS
3700.000	37.937	126.323	3411.824	16.414	0.000	16.546	-0.000	7.710	0.000	0.000	17.082	15.609	88.613	MWD+IFR1+MS
3800.000	37.937	126.323	3490.693	16.850	0.000	17.186	-0.000	7.996	0.000	0.000	17.603	16.062	94.380	MWD+IFR1+MS
3900.000	37.937	126.323	3569.562	17.293	0.000	17.831	-0.000	8.289	0.000	0.000	18.158	16.493	99.474	MWD+IFR1+MS
4000.000	37.937	126.323	3648.431	17.743	0.000	18.481	-0.000	8.586	0.000	0.000	18.740	16.905	103.739	MWD+IFR1+MS
4100.000	37.937	126.323	3727.300	18.199	0.000	19.135	-0.000	8.888	0.000	0.000	19.343	17.306	107.211	MWD+IFR1+MS
4200.000	37.937	126.323	3806.169	18.661	0.000	19.794	-0.000	9.194	0.000	0.000	19.963	17.699	110.011	MWD+IFR1+MS
4300.000	37.937	126.323	3885.038	19.129	0.000	20.457	-0.000	9.504	0.000	0.000	20.596	18.088	112.273	MWD+IFR1+MS
4400.000	37.937	126.323	3963.907	19.601	0.000	21.123	-0.000	9.817	0.000	0.000	21.238	18.473	114.115	MWD+IFR1+MS
4500.000	37.937	126.323	4042.776	20.078	0.000	21.792	-0.000	10.134	0.000	0.000	21.889	18.858	115.630	MWD+IFR1+MS
4600.000	37.937	126.323	4121.645	20.560	0.000	22.463	-0.000	10.453	0.000	0.000	22.546	19.243	116.890	MWD+IFR1+MS
4700.000	37.937	126.323	4200.513	21.045	0.000	23.138	-0.000	10.775	0.000	0.000	23.208	19.628	117.950	MWD+IFR1+MS
4800.000	37.937	126.323	4279.382	21.534	0.000	23.815	-0.000	11.100	0.000	0.000	23.875	20.014	118.851	MWD+IFR1+MS
4900.000	37.937	126.323	4358.251	22.027	0.000	24.493	-0.000	11.427	0.000	0.000	24.545	20.402	119.623	MWD+IFR1+MS
5000.000	37.937	126.323	4437.120	22.523	0.000	25.174	-0.000	11.756	0.000	0.000	25.219	20.791	120.292	MWD+IFR1+MS
5100.000	37.937	126.323	4515.989	23.022	0.000	25.857	-0.000	12.087	0.000	0.000	25.896	21.182	120.875	MWD+IFR1+MS
5200.000	37.937	126.323	4594.858	23.524	0.000	26.541	-0.000	12.420	0.000	0.000	26.575	21.575	121.388	MWD+IFR1+MS
5300.000	37.937	126.323	4673.727	24.029	0.000	27.227	-0.000	12.754	0.000	0.000	27.256	21.969	121.841	MWD+IFR1+MS
5400.000	37.937	126.323	4752.596	24.536	0.000	27.915	-0.000	13.091	0.000	0.000	27.940	22.365	122.245	MWD+IFR1+MS
5500.000	37.937	126.323	4831.465	25.046	0.000	28.603	-0.000	13.428	0.000	0.000	28.625	22.763	122.606	MWD+IFR1+MS
5600.000	37.937	126.323	4910.334	25.558	0.000	29.293	-0.000	13.768	0.000	0.000	29.313	23.163	122.930	MWD+IFR1+MS
5700.000	37.937	126.323	4989.203	26.072	0.000	29.984	-0.000	14.108	0.000	0.000	30.001	23.564	123.224	MWD+IFR1+MS
5800.000	37.937	126.323	5068.072	26.588	0.000	30.677	-0.000	14.450	0.000	0.000	30.691	23.967	123.490	MWD+IFR1+MS
5900.000	37.937	126.323	5146.941	27.105	0.000	31.370	-0.000	14.793	0.000	0.000	31.382	24.372	123.733	MWD+IFR1+MS
6000.000	37.937	126.323	5225.810	27.625	0.000	32.064	-0.000	15.138	0.000	0.000	32.075	24.778	123.954	MWD+IFR1+MS
6100.000	37.937	126.323	5304.679	28.146	0.000	32.759	-0.000	15.483	0.000	0.000	32.768	25.185	124.158	MWD+IFR1+MS
6200.000	37.937	126.323	5383.548	28.669	0.000	33.455	-0.000	15.830	0.000	0.000	33.463	25.594	124.345	MWD+IFR1+MS

6300.000	37.937	126.323	5462.417	29.193	0.000	34.151	-0.000	16.177	0.000	0.000	34.158	26.005	124.518	MWD+IFR1+MS
6400.000	37.937	126.323	5541.286	29.719	0.000	34.849	-0.000	16.526	0.000	0.000	34.855	26.417	124.678	MWD+IFR1+MS
6500.000	37.937	126.323	5620.155	30.246	0.000	35.547	-0.000	16.875	0.000	0.000	35.552	26.830	124.826	MWD+IFR1+MS
6600.000	37.937	126.323	5699.024	30.775	0.000	36.245	-0.000	17.226	0.000	0.000	36.250	27.245	124.964	MWD+IFR1+MS
6700.000	37.937	126.323	5777.893	31.304	0.000	36.945	-0.000	17.577	0.000	0.000	36.948	27.661	125.093	MWD+IFR1+MS
6800.000	37.937	126.323	5856.762	31.835	0.000	37.644	-0.000	17.930	0.000	0.000	37.647	28.078	125.213	MWD+IFR1+MS
6900.000	37.937	126.323	5935.630	32.366	0.000	38.345	-0.000	18.283	0.000	0.000	38.347	28.496	125.326	MWD+IFR1+MS
7000.000	37.937	126.323	6014.499	32.899	0.000	39.046	-0.000	18.637	0.000	0.000	39.048	28.915	125.431	MWD+IFR1+MS
7100.000	37.937	126.323	6093.368	33.433	0.000	39.747	-0.000	18.992	0.000	0.000	39.749	29.336	125.530	MWD+IFR1+MS
7200.000	37.937	126.323	6172.237	33.968	0.000	40.449	-0.000	19.348	0.000	0.000	40.450	29.758	125.623	MWD+IFR1+MS
7284.335	37.937	126.323	6238.752	34.418	0.000	41.040	-0.000	19.647	0.000	0.000	41.041	30.113	125.703	MWD+IFR1+MS
7300.000	37.623	126.323	6251.133	34.522	0.000	41.149	-0.000	19.703	0.000	0.000	41.150	30.179	125.719	MWD+IFR1+MS
7400.000	35.623	126.323	6331.386	35.180	0.000	41.831	-0.000	20.062	0.000	0.000	41.831	30.618	125.793	MWD+IFR1+MS
7500.000	33.623	126.323	6413.672	35.836	0.000	42.488	-0.000	20.430	0.000	0.000	42.489	31.097	125.806	MWD+IFR1+MS
7600.000	31.623	126.323	6497.891	36.437	0.000	43.118	-0.000	20.773	0.000	0.000	43.119	31.577	125.814	MWD+IFR1+MS
7700.000	29.623	126.323	6583.940	36.981	0.000	43.720	-0.000	21.092	0.000	0.000	43.720	32.057	125.819	MWD+IFR1+MS
7800.000	27.623	126.323	6671.714	37.468	0.000	44.292	-0.000	21.387	0.000	0.000	44.293	32.536	125.819	MWD+IFR1+MS
7900.000	25.623	126.323	6761.106	37.897	0.000	44.837	-0.000	21.660	0.000	0.000	44.838	33.010	125.816	MWD+IFR1+MS
8000.000	23.623	126.323	6852.008	38.267	0.000	45.352	-0.000	21.910	0.000	0.000	45.353	33.480	125.808	MWD+IFR1+MS
8100.000	21.623	126.323	6944.309	38.577	0.000	45.840	-0.000	22.140	0.000	0.000	45.841	33.942	125.797	MWD+IFR1+MS
8200.000	19.623	126.323	7037.896	38.829	0.000	46.299	-0.000	22.351	0.000	0.000	46.300	34.396	125.781	MWD+IFR1+MS
8300.000	17.623	126.323	7132.655	39.020	0.000	46.731	-0.000	22.543	0.000	0.000	46.732	34.841	125.761	MWD+IFR1+MS
8400.000	15.623	126.323	7228.470	39.152	0.000	47.136	-0.000	22.719	0.000	0.000	47.138	35.274	125.737	MWD+IFR1+MS
8500.000	13.623	126.323	7325.226	39.224	0.000	47.516	-0.000	22.878	0.000	0.000	47.517	35.695	125.708	MWD+IFR1+MS
8600.000	11.623	126.323	7422.804	39.237	0.000	47.869	-0.000	23.024	0.000	0.000	47.871	36.103	125.675	MWD+IFR1+MS
8700.000	9.623	126.323	7521.085	39.191	0.000	48.199	-0.000	23.157	0.000	0.000	48.200	36.496	125.638	MWD+IFR1+MS
8800.000	7.623	126.323	7619.949	39.086	0.000	48.504	-0.000	23.279	0.000	0.000	48.506	36.874	125.597	MWD+IFR1+MS
8900.000	5.623	126.323	7719.277	38.923	0.000	48.788	-0.000	23.391	0.000	0.000	48.790	37.236	125.551	MWD+IFR1+MS
9000.000	3.623	126.323	7818.946	38.703	0.000	49.050	-0.000	23.495	0.000	0.000	49.052	37.581	125.501	MWD+IFR1+MS
9100.000	1.623	126.323	7918.836	38.428	0.000	49.292	-0.000	23.592	0.000	0.000	49.295	37.908	125.447	MWD+IFR1+MS
9181.174	0.000	0.000	8000.000	45.959	0.000	42.271	0.000	23.668	0.000	0.000	49.469	38.104	125.460	MWD+IFR1+MS
9200.000	0.000	0.000	8018.826	45.998	0.000	42.309	0.000	23.685	0.000	0.000	49.506	38.145	125.452	MWD+IFR1+MS
9300.000	0.000	0.000	8118.826	46.209	0.000	42.513	0.000	23.778	0.000	0.000	49.705	38.367	125.415	MWD+IFR1+MS

9400.000	0.000	0.000	8218.826	46.424	0.000	42.722	0.000	23.874	0.000	0.000	49.911	38.591	125.382	MWD+IFR1+MS
9500.000	0.000	0.000	8318.826	46.641	0.000	42.932	0.000	23.973	0.000	0.000	50.118	38.817	125.350	MWD+IFR1+MS
9600.000	0.000	0.000	8418.826	46.859	0.000	43.145	0.000	24.074	0.000	0.000	50.326	39.045	125.317	MWD+IFR1+MS
9700.000	0.000	0.000	8518.826	47.079	0.000	43.359	0.000	24.179	0.000	0.000	50.537	39.274	125.285	MWD+IFR1+MS
9800.000	0.000	0.000	8618.826	47.301	0.000	43.575	0.000	24.287	0.000	0.000	50.749	39.506	125.253	MWD+IFR1+MS
9900.000	0.000	0.000	8718.826	47.525	0.000	43.793	0.000	24.397	0.000	0.000	50.963	39.740	125.221	MWD+IFR1+MS
10000.000	0.000	0.000	8818.826	47.750	0.000	44.013	0.000	24.511	0.000	0.000	51.178	39.975	125.190	MWD+IFR1+MS
10100.000	0.000	0.000	8918.826	47.977	0.000	44.235	0.000	24.628	0.000	0.000	51.395	40.212	125.159	MWD+IFR1+MS
10200.000	0.000	0.000	9018.826	48.205	0.000	44.459	0.000	24.748	0.000	0.000	51.614	40.452	125.127	MWD+IFR1+MS
10300.000	0.000	0.000	9118.826	48.435	0.000	44.684	0.000	24.872	0.000	0.000	51.834	40.692	125.096	MWD+IFR1+MS
10400.000	0.000	0.000	9218.826	48.667	0.000	44.911	0.000	24.998	0.000	0.000	52.056	40.935	125.066	MWD+IFR1+MS
10500.000	0.000	0.000	9318.826	48.900	0.000	45.140	0.000	25.128	0.000	0.000	52.279	41.179	125.035	MWD+IFR1+MS
10600.000	0.000	0.000	9418.826	49.135	0.000	45.370	0.000	25.261	0.000	0.000	52.504	41.425	125.005	MWD+IFR1+MS
10675.977	0.000	0.000	9494.803	49.313	0.000	45.545	0.000	25.365	0.000	0.000	52.674	41.613	124.980	MWD+IFR1+MS
10700.000	1.922	359.944	9518.821	49.041	0.000	45.610	0.000	25.398	0.000	0.000	52.727	41.671	124.970	MWD+IFR1+MS
10800.000	9.922	359.944	9618.207	47.839	0.000	45.821	0.000	25.548	0.000	0.000	53.159	41.990	124.183	MWD+IFR1+MS
10900.000	17.922	359.944	9715.190	46.546	0.000	46.008	0.000	25.792	0.000	0.000	53.917	42.397	122.379	MWD+IFR1+MS
11000.000	25.922	359.944	9807.884	44.729	0.000	46.165	0.000	26.194	0.000	0.000	54.605	42.717	120.917	MWD+IFR1+MS
11100.000	33.922	359.944	9894.485	42.536	0.000	46.292	0.000	26.806	0.000	0.000	55.196	42.959	119.790	MWD+IFR1+MS
11200.000	41.922	359.944	9973.306	40.163	0.000	46.390	0.000	27.657	0.000	0.000	55.674	43.132	118.963	MWD+IFR1+MS
11300.000	49.922	359.944	10042.813	37.853	0.000	46.460	0.000	28.747	0.000	0.000	56.032	43.250	118.388	MWD+IFR1+MS
11400.000	57.922	359.944	10101.654	35.891	0.000	46.504	0.000	30.055	0.000	0.000	56.271	43.326	118.012	MWD+IFR1+MS
11500.000	65.922	359.944	10148.683	34.581	0.000	46.524	0.000	31.537	0.000	0.000	56.401	43.372	117.772	MWD+IFR1+MS
11600.000	73.922	359.944	10182.986	34.178	0.000	46.523	0.000	33.139	0.000	0.000	56.440	43.403	117.605	MWD+IFR1+MS
11700.000	81.922	359.944	10203.893	34.817	0.000	46.503	0.000	34.801	0.000	0.000	56.410	43.432	117.438	MWD+IFR1+MS
11800.977	90.000	359.944	10211.000	36.502	0.000	46.466	0.000	36.502	0.000	0.000	56.341	43.471	117.195	MWD+IFR1+MS
11900.000	90.000	359.944	10211.000	37.288	0.000	46.429	0.000	37.288	0.000	0.000	56.266	43.524	116.902	MWD+IFR1+MS
12000.000	90.000	359.944	10211.000	37.759	0.000	46.409	0.000	37.759	0.000	0.000	56.194	43.591	116.628	MWD+IFR1+MS
12100.000	90.000	359.944	10211.000	38.241	0.000	46.406	0.000	38.241	0.000	0.000	56.125	43.672	116.376	MWD+IFR1+MS
12200.000	90.000	359.944	10211.000	38.732	0.000	46.419	0.000	38.732	0.000	0.000	56.060	43.766	116.146	MWD+IFR1+MS
12300.000	90.000	359.944	10211.000	39.233	0.000	46.449	0.000	39.233	0.000	0.000	55.997	43.874	115.938	MWD+IFR1+MS
12400.000	90.000	359.944	10211.000	39.743	0.000	46.496	0.000	39.743	0.000	0.000	55.938	43.996	115.752	MWD+IFR1+MS
12500.000	90.000	359.944	10211.000	40.261	0.000	46.559	0.000	40.261	0.000	0.000	55.882	44.132	115.590	MWD+IFR1+MS

12600.000	90.000	359.944	10211.000	40.789	0.000	46.639	0.000	40.789	0.000	0.000	55.829	44.281	115.451	MWD+IFR1+MS
12700.000	90.000	359.944	10211.000	41.324	0.000	46.735	0.000	41.324	0.000	0.000	55.779	44.444	115.337	MWD+IFR1+MS
12800.000	90.000	359.944	10211.000	41.868	0.000	46.848	0.000	41.868	0.000	0.000	55.732	44.621	115.249	MWD+IFR1+MS
12900.000	90.000	359.944	10211.000	42.418	0.000	46.977	0.000	42.418	0.000	0.000	55.688	44.811	115.188	MWD+IFR1+MS
13000.000	90.000	359.944	10211.000	42.977	0.000	47.122	0.000	42.977	0.000	0.000	55.647	45.014	115.156	MWD+IFR1+MS
13100.000	90.000	359.944	10211.000	43.542	0.000	47.283	0.000	43.542	0.000	0.000	55.609	45.231	115.153	MWD+IFR1+MS
13200.000	90.000	359.944	10211.000	44.114	0.000	47.460	0.000	44.114	0.000	0.000	55.573	45.461	115.184	MWD+IFR1+MS
13300.000	90.000	359.944	10211.000	44.692	0.000	47.652	0.000	44.692	0.000	0.000	55.540	45.703	115.249	MWD+IFR1+MS
13400.000	90.000	359.944	10211.000	45.277	0.000	47.860	0.000	45.277	0.000	0.000	55.511	45.958	115.352	MWD+IFR1+MS
13500.000	90.000	359.944	10211.000	45.867	0.000	48.083	0.000	45.867	0.000	0.000	55.484	46.226	115.497	MWD+IFR1+MS
13600.000	90.000	359.944	10211.000	46.463	0.000	48.321	0.000	46.463	0.000	0.000	55.460	46.505	115.687	MWD+IFR1+MS
13700.000	90.000	359.944	10211.000	47.065	0.000	48.574	0.000	47.065	0.000	0.000	55.440	46.796	115.928	MWD+IFR1+MS
13800.000	90.000	359.944	10211.000	47.672	0.000	48.842	0.000	47.672	0.000	0.000	55.422	47.098	116.225	MWD+IFR1+MS
13900.000	90.000	359.944	10211.000	48.285	0.000	49.124	0.000	48.285	0.000	0.000	55.409	47.411	116.586	MWD+IFR1+MS
14000.000	90.000	359.944	10211.000	48.902	0.000	49.420	0.000	48.902	0.000	0.000	55.399	47.734	117.020	MWD+IFR1+MS
14100.000	90.000	359.944	10211.000	49.524	0.000	49.730	0.000	49.524	0.000	0.000	55.394	48.067	117.537	MWD+IFR1+MS
14200.000	90.000	359.944	10211.000	50.150	0.000	50.053	0.000	50.150	0.000	0.000	55.393	48.408	118.149	MWD+IFR1+MS
14300.000	90.000	359.944	10211.000	50.781	0.000	50.390	0.000	50.781	0.000	0.000	55.397	48.758	118.872	MWD+IFR1+MS
14400.000	90.000	359.944	10211.000	51.416	0.000	50.740	0.000	51.416	0.000	0.000	55.408	49.115	119.725	MWD+IFR1+MS
14500.000	90.000	359.944	10211.000	52.056	0.000	51.102	0.000	52.056	0.000	0.000	55.425	49.477	120.729	MWD+IFR1+MS
14600.000	90.000	359.944	10211.000	52.699	0.000	51.477	0.000	52.699	0.000	0.000	55.450	49.844	121.913	MWD+IFR1+MS
14700.000	90.000	359.944	10211.000	53.346	0.000	51.865	0.000	53.346	0.000	0.000	55.485	50.214	123.308	MWD+IFR1+MS
14800.000	90.000	359.944	10211.000	53.996	0.000	52.264	0.000	53.996	0.000	0.000	55.532	50.584	124.952	MWD+IFR1+MS
14900.000	90.000	359.944	10211.000	54.650	0.000	52.675	0.000	54.650	0.000	0.000	55.592	50.951	126.888	MWD+IFR1+MS
15000.000	90.000	359.944	10211.000	55.308	0.000	53.098	0.000	55.308	0.000	0.000	55.670	51.313	129.158	MWD+IFR1+MS
15100.000	90.000	359.944	10211.000	55.969	0.000	53.531	0.000	55.969	0.000	0.000	55.769	51.665	131.800	MWD+IFR1+MS
15200.000	90.000	359.944	10211.000	56.633	0.000	53.976	0.000	56.633	0.000	0.000	55.893	52.003	134.838	MWD+IFR1+MS
15300.000	90.000	359.944	10211.000	57.300	0.000	54.431	0.000	57.300	0.000	0.000	56.048	52.320	-41.738	MWD+IFR1+MS
15400.000	90.000	359.944	10211.000	57.970	0.000	54.896	0.000	57.970	0.000	0.000	56.239	52.611	-37.989	MWD+IFR1+MS
15500.000	90.000	359.944	10211.000	58.643	0.000	55.372	0.000	58.643	0.000	0.000	56.470	52.873	-34.029	MWD+IFR1+MS
15600.000	90.000	359.944	10211.000	59.318	0.000	55.858	0.000	59.318	0.000	0.000	56.744	53.102	-30.019	MWD+IFR1+MS
15700.000	90.000	359.944	10211.000	59.996	0.000	56.353	0.000	59.996	0.000	0.000	57.059	53.299	-26.129	MWD+IFR1+MS
15800.000	90.000	359.944	10211.000	60.677	0.000	56.857	0.000	60.677	0.000	0.000	57.416	53.464	-22.502	MWD+IFR1+MS

15900.000	90.000	359.944	10211.000	61.360	0.000	57.370	0.000	61.360	0.000	0.000	57.809	53.601	-19.228	MWD+IFR1+MS
16000.000	90.000	359.944	10211.000	62.046	0.000	57.893	0.000	62.046	0.000	0.000	58.235	53.715	-16.341	MWD+IFR1+MS
16100.000	90.000	359.944	10211.000	62.734	0.000	58.424	0.000	62.734	0.000	0.000	58.690	53.809	-13.835	MWD+IFR1+MS
16200.000	90.000	359.944	10211.000	63.424	0.000	58.963	0.000	63.424	0.000	0.000	59.168	53.888	-11.678	MWD+IFR1+MS
16300.000	90.000	359.944	10211.000	64.117	0.000	59.511	0.000	64.117	0.000	0.000	59.667	53.953	-9.828	MWD+IFR1+MS
16400.000	90.000	359.944	10211.000	64.811	0.000	60.066	0.000	64.811	0.000	0.000	60.185	54.009	-8.241	MWD+IFR1+MS
16500.000	90.000	359.944	10211.000	65.508	0.000	60.629	0.000	65.508	0.000	0.000	60.718	54.057	-6.878	MWD+IFR1+MS
16600.000	90.000	359.944	10211.000	66.207	0.000	61.200	0.000	66.207	0.000	0.000	61.265	54.099	-5.704	MWD+IFR1+MS
16700.000	90.000	359.944	10211.000	66.907	0.000	61.778	0.000	66.907	0.000	0.000	61.825	54.135	-4.687	MWD+IFR1+MS
16800.000	90.000	359.944	10211.000	67.609	0.000	62.363	0.000	67.609	0.000	0.000	62.395	54.168	-3.803	MWD+IFR1+MS
16900.000	90.000	359.944	10211.000	68.313	0.000	62.954	0.000	68.313	0.000	0.000	62.976	54.197	-3.032	MWD+IFR1+MS
17000.000	90.000	359.944	10211.000	69.019	0.000	63.553	0.000	69.019	0.000	0.000	63.567	54.224	-2.356	MWD+IFR1+MS
17100.000	90.000	359.944	10211.000	69.727	0.000	64.158	0.000	69.727	0.000	0.000	64.166	54.249	-1.761	MWD+IFR1+MS
17200.000	90.000	359.944	10211.000	70.436	0.000	64.770	0.000	70.436	0.000	0.000	64.774	54.272	-1.235	MWD+IFR1+MS
17300.000	90.000	359.944	10211.000	71.147	0.000	65.387	0.000	71.147	0.000	0.000	65.389	54.293	-0.768	MWD+IFR1+MS
17400.000	90.000	359.944	10211.000	71.859	0.000	66.011	0.000	71.859	0.000	0.000	66.011	54.314	-0.353	MWD+IFR1+MS
17500.000	90.000	359.944	10211.000	72.573	0.000	66.640	0.000	72.573	0.000	0.000	66.640	54.334	0.018	MWD+IFR1+MS
17600.000	90.000	359.944	10211.000	73.288	0.000	67.275	0.000	73.288	0.000	0.000	67.276	54.353	0.350	MWD+IFR1+MS
17700.000	90.000	359.944	10211.000	74.005	0.000	67.915	0.000	74.005	0.000	0.000	67.917	54.372	0.647	MWD+IFR1+MS
17800.000	90.000	359.944	10211.000	74.723	0.000	68.561	0.000	74.723	0.000	0.000	68.565	54.391	0.915	MWD+IFR1+MS
17900.000	90.000	359.944	10211.000	75.442	0.000	69.212	0.000	75.442	0.000	0.000	69.218	54.409	1.157	MWD+IFR1+MS
18000.000	90.000	359.944	10211.000	76.163	0.000	69.868	0.000	76.163	0.000	0.000	69.877	54.428	1.375	MWD+IFR1+MS
18100.000	90.000	359.944	10211.000	76.885	0.000	70.529	0.000	76.885	0.000	0.000	70.541	54.446	1.573	MWD+IFR1+MS
18200.000	90.000	359.944	10211.000	77.608	0.000	71.195	0.000	77.608	0.000	0.000	71.210	54.464	1.752	MWD+IFR1+MS
18300.000	90.000	359.944	10211.000	78.332	0.000	71.865	0.000	78.332	0.000	0.000	71.883	54.483	1.915	MWD+IFR1+MS
18400.000	90.000	359.944	10211.000	79.058	0.000	72.540	0.000	79.058	0.000	0.000	72.562	54.501	2.063	MWD+IFR1+MS
18500.000	90.000	359.944	10211.000	79.784	0.000	73.219	0.000	79.784	0.000	0.000	73.245	54.520	2.198	MWD+IFR1+MS
18600.000	90.000	359.944	10211.000	80.512	0.000	73.903	0.000	80.512	0.000	0.000	73.932	54.539	2.320	MWD+IFR1+MS
18700.000	90.000	359.944	10211.000	81.241	0.000	74.591	0.000	81.241	0.000	0.000	74.623	54.558	2.432	MWD+IFR1+MS
18800.000	90.000	359.944	10211.000	81.970	0.000	75.282	0.000	81.970	0.000	0.000	75.319	54.577	2.534	MWD+IFR1+MS
18900.000	90.000	359.944	10211.000	82.701	0.000	75.978	0.000	82.701	0.000	0.000	76.018	54.597	2.627	MWD+IFR1+MS
19000.000	90.000	359.944	10211.000	83.433	0.000	76.677	0.000	83.433	0.000	0.000	76.721	54.617	2.712	MWD+IFR1+MS
19100.000	90.000	359.944	10211.000	84.166	0.000	77.380	0.000	84.166	0.000	0.000	77.428	54.638	2.790	MWD+IFR1+MS

19200.000	90.000	359.944	10211.000	84.899	0.000	78.087	0.000	84.899	0.000	0.000	78.139	54.658	2.861	MWD+IFR1+MS
19300.000	90.000	359.944	10211.000	85.634	0.000	78.797	0.000	85.634	0.000	0.000	78.852	54.680	2.926	MWD+IFR1+MS
19400.000	90.000	359.944	10211.000	86.369	0.000	79.511	0.000	86.369	0.000	0.000	79.570	54.701	2.985	MWD+IFR1+MS
19500.000	90.000	359.944	10211.000	87.106	0.000	80.228	0.000	87.106	0.000	0.000	80.290	54.723	3.039	MWD+IFR1+MS
19600.000	90.000	359.944	10211.000	87.843	0.000	80.948	0.000	87.843	0.000	0.000	81.014	54.746	3.088	MWD+IFR1+MS
19700.000	90.000	359.944	10211.000	88.581	0.000	81.671	0.000	88.581	0.000	0.000	81.741	54.768	3.133	MWD+IFR1+MS
19800.000	90.000	359.944	10211.000	89.320	0.000	82.397	0.000	89.320	0.000	0.000	82.471	54.792	3.174	MWD+IFR1+MS
19900.000	90.000	359.944	10211.000	90.059	0.000	83.127	0.000	90.059	0.000	0.000	83.203	54.815	3.211	MWD+IFR1+MS
20000.000	90.000	359.944	10211.000	90.799	0.000	83.859	0.000	90.799	0.000	0.000	83.939	54.839	3.245	MWD+IFR1+MS
20100.000	90.000	359.944	10211.000	91.541	0.000	84.594	0.000	91.541	0.000	0.000	84.677	54.864	3.275	MWD+IFR1+MS
20200.000	90.000	359.944	10211.000	92.282	0.000	85.332	0.000	92.282	0.000	0.000	85.418	54.889	3.303	MWD+IFR1+MS
20300.000	90.000	359.944	10211.000	93.025	0.000	86.073	0.000	93.025	0.000	0.000	86.162	54.914	3.328	MWD+IFR1+MS
20400.000	90.000	359.944	10211.000	93.768	0.000	86.816	0.000	93.768	0.000	0.000	86.908	54.940	3.350	MWD+IFR1+MS
20500.000	90.000	359.944	10211.000	94.512	0.000	87.562	0.000	94.512	0.000	0.000	87.657	54.966	3.371	MWD+IFR1+MS
20600.000	90.000	359.944	10211.000	95.256	0.000	88.310	0.000	95.256	0.000	0.000	88.408	54.993	3.389	MWD+IFR1+MS
20700.000	90.000	359.944	10211.000	96.001	0.000	89.061	0.000	96.001	0.000	0.000	89.161	55.020	3.405	MWD+IFR1+MS
20800.000	90.000	359.944	10211.000	96.747	0.000	89.814	0.000	96.747	0.000	0.000	89.917	55.048	3.419	MWD+IFR1+MS
20900.000	90.000	359.944	10211.000	97.494	0.000	90.569	0.000	97.494	0.000	0.000	90.675	55.076	3.431	MWD+IFR1+MS
21000.000	90.000	359.944	10211.000	98.240	0.000	91.326	0.000	98.240	0.000	0.000	91.435	55.104	3.442	MWD+IFR1+MS
21100.000	90.000	359.944	10211.000	98.988	0.000	92.086	0.000	98.988	0.000	0.000	92.197	55.133	3.451	MWD+IFR1+MS
21200.000	90.000	359.944	10211.000	99.736	0.000	92.848	0.000	99.736	0.000	0.000	92.961	55.163	3.459	MWD+IFR1+MS
21300.000	90.000	359.944	10211.000	100.485	0.000	93.612	0.000	100.485	0.000	0.000	93.728	55.193	3.466	MWD+IFR1+MS
21400.000	90.000	359.944	10211.000	101.234	0.000	94.378	0.000	101.234	0.000	0.000	94.496	55.223	3.471	MWD+IFR1+MS
21500.000	90.000	359.944	10211.000	101.984	0.000	95.146	0.000	101.984	0.000	0.000	95.266	55.254	3.475	MWD+IFR1+MS
21600.000	90.000	359.944	10211.000	102.734	0.000	95.916	0.000	102.734	0.000	0.000	96.038	55.285	3.479	MWD+IFR1+MS
21700.000	90.000	359.944	10211.000	103.485	0.000	96.688	0.000	103.485	0.000	0.000	96.812	55.317	3.481	MWD+IFR1+MS
21772.682	90.000	359.944	10211.000	104.030	0.000	97.249	0.000	104.030	0.000	0.000	97.375	55.340	3.482	MWD+IFR1+MS
21800.000	90.000	359.944	10211.000	104.235	0.000	97.460	0.000	104.235	0.000	0.000	97.586	55.349	3.482	MWD+IFR1+MS
21871.497	90.000	359.944	10211.000	104.772	0.000	98.012	0.000	104.772	0.000	0.000	98.140	55.372	3.483	MWD+IFR1+MS

Plan Targets

PLU 29-20 126H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
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FTP 6	11800.89	401489.20	669501.80	6820.00 RECTANGLE
LTP 6	21772.68	411460.90	669492.00	6820.00 RECTANGLE
BHL 6	21872.03	411559.90	669491.40	6820.00 RECTANGLE

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO Energy Incorporated
WELL NAME & NO.:	Poker Lake Unit 29-20 BS 126H
LOCATION:	Sec 29-25S-31E-NMP
COUNTY:	Eddy County, New Mexico

COA

H₂S	<input checked="" type="radio"/> No	<input type="radio"/> Yes		
Potash / WIPP	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P	<input type="checkbox"/> WIPP
Cave / Karst	<input type="radio"/> Low	<input type="radio"/> Medium	<input checked="" type="radio"/> High	<input type="radio"/> Critical
Wellhead	<input type="radio"/> Conventional	<input checked="" type="radio"/> Multibowl	<input type="radio"/> Both	<input type="radio"/> Diverter
Cementing	<input type="checkbox"/> Primary Squeeze	<input checked="" type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input checked="" type="checkbox"/> Break Testing	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Variance	<input checked="" type="checkbox"/> Flex Hose	<input type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input type="checkbox"/> Capitan Reef
Variance	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	<input type="checkbox"/> Open Annulus
<input type="checkbox"/> Batch APD / Sundry				

A. HYDROGEN SULFIDE

Hydrogen Sulfide (H₂S) monitors shall be installed prior to drilling out the surface shoe. If H₂S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet 43 CFR 3176 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

1. The **9-5/8** inch surface casing shall be set at approximately 935 feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is:

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the **Brushy Canyon at 6885'**
- b. Second stage:
- Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**
- ❖ In High Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run Echo-meter to verify Cement Slurry/Fluid top in the annulus OR operator shall run a CBL from TD of the 7-5/8" casing to surface after the second stage BH to verify TOC. Submit results to the BLM. No displacement fluid/wash out shall be utilized at the top of the cement slurry between second stage BH and top out.

If cement does not reach surface, the next casing string must come to surface. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:
- Cement should tie-back at least **300 feet** into previous casing string (tieback increased due to not meeting 0.422" clearance requirement.) Operator shall provide method of verification. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst, Capitan Reef, or potash.**

C. PRESSURE CONTROL

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

BOPE Break Testing Variance

- BOPE Break Testing is **ONLY** permitted for 5M BOPE or less. (**Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP**)
- BOPE Break Testing is **NOT** permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (**575-706-2779**) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted Choose an item. 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.

- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Eddy County (API No. / US Well No. contains 30-015-#####)

Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
BLM_NM_CFO_DrillingNotifications@blm.gov; (575) 361-2822

Lea County (API No. / US Well No. contains 30-025-#####)

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240; (575) 689-5981

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
 - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
 - b. When the operator proposes to set surface casing with Spudder Rig
 - Notify the BLM when moving in and removing the Spudder Rig.
 - Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
 - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. **Wait on cement (WOC) for Potash Areas:** After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. **Wait on cement (WOC) for Water Basin:** After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR part 3170 Subpart 3172** and **API STD 53 Sec. 5.3**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. Whenever any seal subject to test pressure is broken, all the tests in **43 CFR part 3170 Subpart 3172** must be followed.
 - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
 - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For

all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR part 3170 Subpart 3172**.

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

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

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



HYDROGEN SULFIDE (H₂S) CONTINGENCY PLAN

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the "buddy system" to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - o Detection of H₂S, and
 - o Measures for protection against the gas,
 - o Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally, the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever this is an ignition of the gas.

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

All XTO location personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available including directions to site. The following call list of essential and potential responders has been prepared for use during a release. (Operator Name)'s response must be in coordination with the State of New Mexico's "Hazardous Materials Emergency Response Plan" (HMER).

CARLSBAD OFFICE – EDDY & LEA COUNTIES

3104 E. Greene St., Carlsbad, NM 88220
Carlsbad, NM

575-887-7329

XTO PERSONNEL:

Kendall Decker, Drilling Manager	903-521-6477
Milton Turman, Drilling Superintendent	817-524-5107
Jeff Raines, Construction Foreman	432-557-3159
Toady Sanders, EH & S Manager	903-520-1601
Wes McSpadden, Production Foreman	575-441-1147

SHERIFF DEPARTMENTS:

Eddy County	575-887-7551
Lea County	575-396-3611

NEW MEXICO STATE POLICE:

575-392-5588

FIRE DEPARTMENTS:

Carlsbad	911
Eunice	575-885-2111
Hobbs	575-394-2111
Jal	575-397-9308
Lovington	575-395-2221
	575-396-2359

HOSPITALS:

Carlsbad Medical Emergency	911
Eunice Medical Emergency	575-885-2111
Hobbs Medical Emergency	575-394-2112
Jal Medical Emergency	575-397-9308
Lovington Medical Emergency	575-395-2221
	575-396-2359

AGENT NOTIFICATIONS:

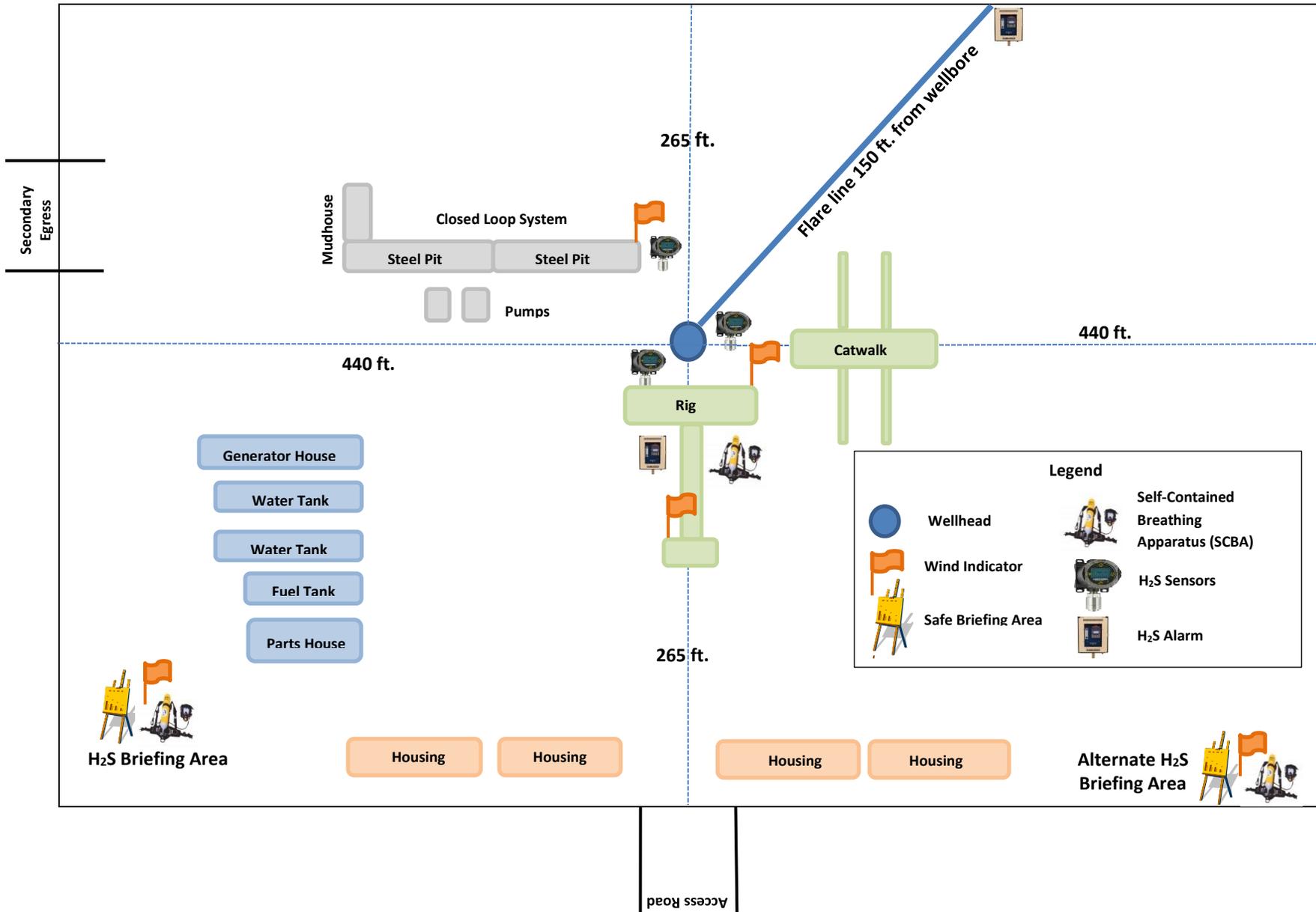
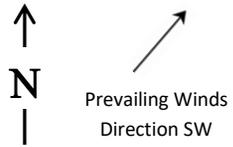
For Lea County:

Bureau of Land Management – Hobbs	575-393-3612
New Mexico Oil Conservation Division – Hobbs	575-393-6161

For Eddy County:

Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283

H2S Briefing Areas and Alarm Locations



Operator Name: XTO ENERGY INCORPORATED	
Well Name: POKER LAKE UNIT 29-20 BS	Well Number: 126H

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** COMMERCIAL

Disposal type description:

Disposal location description: A licensed 3rd party contractor will be used to haul and dispose of garbage.

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? Y

Description of cuttings location Cuttings. The well will be drilled utilizing a closed-loop mud system. Drill cuttings will be held in roll-off style mud boxes and taken to a New Mexico Oil Conservation Division (NMOCD) approved disposal site. Drilling Fluids. These will be contained in steel mud pits and then taken to a NMOCD approved commercial disposal facility. Produced Fluids. Water produced from the well during completion will be held temporarily in steel tanks and then taken to a NMOCD approved commercial disposal facility. Oil produced during operations will be stored in tanks until sold.

Cuttings area length (ft.) **Cuttings area width (ft.)**

Cuttings area depth (ft.) **Cuttings area volume (cu. yd.)**

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Operator Name: XTO ENERGY INCORPORATED

Well Name: POKER LAKE UNIT 29-20 BS

Well Number: 126H

Section 9 - Well Site

Well Site Layout Diagram:

PLU_29_20_BS_126H_Well_20240109120708.pdf

PLU_29_20_BS_126H_RL_20240109120708.pdf

Comments: Multi-well pad.

Section 10 - Plans for Surface Reclamation

Type of disturbance: No New Surface Disturbance **Multiple Well Pad Name:** PLU 29-20 BS

Multiple Well Pad Number: C

Recontouring

PLU_29_20_BS_IR1_20240109074933.pdf

PLU_29_20_BS_IR2_20240109074933.pdf

PLU_29_20_BS_IR3_20240109074933.pdf

PLU_29_20_BS_IR4_20240109074933.pdf

Drainage/Erosion control construction: Initial seedbed preparation will consist of recontouring to the appropriate interim or final reclamation standard. All compacted areas to be seeded will be ripped to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil. Prior to seeding, the seedbed will be scarified to a depth of no less than 4-6 inches.

Drainage/Erosion control reclamation: Erosion features are equal to or less than surrounding area and erosion control is sufficient so that water naturally infiltrates into the soil and gulying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.

Well pad proposed disturbance (acres):	Well pad interim reclamation (acres): 0	Well pad long term disturbance (acres): 0
Road proposed disturbance (acres):	Road interim reclamation (acres): 0	Road long term disturbance (acres): 0
Powerline proposed disturbance (acres):	Powerline interim reclamation (acres): 0	Powerline long term disturbance (acres): 0
Pipeline proposed disturbance (acres):	Pipeline interim reclamation (acres): 0	Pipeline long term disturbance (acres): 0
Other proposed disturbance (acres):	Other interim reclamation (acres): 0	Other long term disturbance (acres): 0
Total proposed disturbance: 0	Total interim reclamation: 0	Total long term disturbance: 0

Disturbance Comments:

Reconstruction method: The original stock piled topsoil will be spread over the areas being reclaimed and the original landform will be restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors as close as possible to the original topography. The location will then be ripped and seeded.

Topsoil redistribution: The original stock piled topsoil will be spread over the areas being reclaimed and the original landform will be restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors as close as possible to the original topography. The location will then be ripped and seeded.

Soil treatment: A self-sustaining, vigorous, diverse, native (or otherwise approved) plant community will be established on the site with a density sufficient to control erosion and invasion by non-native plants and to re-establish wildlife habitat or forage production. At a minimum, the established plant community will consist of

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 347819

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 347819
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
ward.rikala	Notify OCD 24 hours prior to casing & cement	5/30/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	5/30/2024
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	5/30/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	5/30/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	5/30/2024
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	5/30/2024