



U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

Date Printed: 10/18/2024 01:38 PM

APD ID: 10400097911

Well Status: AAPD

APD Received Date: 04/12/2024 07:10 AM

Well Name: POKER LAKE UNIT 22 DTD

Operator: XTO PERMIAN OPERATING LLC

Well Number: 145H

APD Package Report Contents

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
 - Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - Blowout Prevention Choke Diagram Attachment: 1 file(s)
 - Blowout Prevention BOP Diagram Attachment: 1 file(s)
 - Casing Spec Documents: 2 file(s)
 - Casing Taperd String Specs: 2 file(s)
 - Casing Design Assumptions and Worksheet(s): 3 file(s)
 - Hydrogen sulfide drilling operations plan: 1 file(s)
 - Proposed horizontal/directional/multi-lateral plan submission: 1 file(s)
 - Other Facets: 7 file(s)
 - Other Variances: 4 file(s)
- SUPO Report
- SUPO Attachments
 - Existing Road Map: 1 file(s)
 - Attach Well map: 1 file(s)
 - Water source and transportation map: 1 file(s)
 - Well Site Layout Diagram: 1 file(s)
 - Recontouring attachment: 4 file(s)
 - Other SUPO Attachment: 1 file(s)
- PWD Report
- PWD Attachments
 - None

- Bond Report
- Bond Attachments
 - None

Form 3160-3
(June 2015)UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMLC068431
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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 checked="" type="checkbox"/> Multiple Zone		7. If Unit or CA Agreement, Name and No. NMNM071016X/POKER LAKE UNIT
2. Name of Operator XTO PERMIAN OPERATING LLC		8. Lease Name and Well No. POKER LAKE UNIT 22 DTD 145H
3a. Address 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND, TX 79701	3b. Phone No. (include area code) (432) 683-2277	9. API Well No. 30-015-55581
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW / 916 FNL / 173 FWL / LAT 32.207983 / LONG -103.877029 At proposed prod. zone SWNW / 2627 FNL / 585 FWL / LAT 32.174297 / LONG -103.875619		10. Field and Pool, or Exploratory PURPLE SAGE/WOLFCAMP (GAS)
14. Distance in miles and direction from nearest town or post office*		11. Sec., T. R. M. or Blk. and Survey or Area SEC 22/T24S/R30E/NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 173 feet		12. County or Parish EDDY
16. No of acres in lease		13. State NM
17. Spacing Unit dedicated to this well 1600.0		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 30 feet		20. BLM/BIA Bond No. in file FED: COB000050
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3406 feet		22. Approximate date work will start* 03/13/2025
		23. Estimated duration 45 days
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 (Electronic Submission)	Name (Printed/Typed) RICHARD REDUS / Ph: (432) 682-8873	Date 04/12/2024
Title Permitting Manager		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) CODY LAYTON / Ph: (575) 234-5959	Date 10/18/2024
Title Assistant Field Manager Lands & Minerals		
Office Carlsbad Field 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)



INSTRUCTIONS

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

ITEM I: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

NOTICES

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

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

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.

ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

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

The BLM connects this information to an evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

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

Additional Operator Remarks

Location of Well

0. SHL: NWNW / 916 FNL / 173 FWL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.207983 / LONG: -103.877029 (TVD: 0 feet, MD: 0 feet)
PPP: NWNW / 100 FNL / 585 FWL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.210234 / LONG: -103.875695 (TVD: 11890 feet, MD: 12400 feet)
PPP: NWNW / 0 FSL / 598 FWL / TWSP: 24S / RANGE: 30E / SECTION: 27 / LAT: 32.196012 / LONG: -103.875665 (TVD: 11890 feet, MD: 17600 feet)
PPP: SWSW / 1317 FSL / 595 FWL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.199633 / LONG: -103.875673 (TVD: 11890 feet, MD: 16300 feet)
BHL: SWNW / 2627 FNL / 585 FWL / TWSP: 24S / RANGE: 30E / SECTION: 34 / LAT: 32.174297 / LONG: -103.875619 (TVD: 11890 feet, MD: 24736 feet)

BLM Point of Contact

Name: MARIAH HUGHES
Title: Land Law Examiner
Phone: (575) 234-5972
Email: mhughes@blm.gov

CONFIDENTIAL

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

CONFIDENTIAL

Santa Fe Main Office Phone: (505) 476-3441 Fax: (55) 476-3462 General Information Phone: (505) 629-6116 Online Phone Directory Visit: https://www.emnrd.nm.gov/ocd/contact-us/	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	C-102 Revised July 9, 2024 Submit Electronically via OCD Permitting
		Submittal Type: <input checked="" type="checkbox"/> Initial Submittal <input type="checkbox"/> Amended Report <input type="checkbox"/> As Drilled

WELL LOCATION INFORMATION

API Number 30-015-55581	Pool Code 98220	Pool Name PURPLE SAGE/WOLFCAMP (GAS)
Property Code 333192	Property Name POKER LAKE UNIT 22 DTD	Well Number 145H
OGRID No. 373075	Operator Name XTO PERMIAN OPERATING LLC	Ground Level Elevation 3,406 feet
Surface Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal		Mineral Owner: <input type="checkbox"/> State <input type="checkbox"/> Fee <input type="checkbox"/> Tribal <input checked="" type="checkbox"/> Federal

Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	22	24S	30E		916 FNL	173 FWL	32.207983	-103.877029	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
E	34	24S	30E		2627 FNL	585 FWL	32.174297	-103.875619	EDDY

Dedicated Acres 1,600	Infill or Defining Well Infill	Defining Well API 3001549881	Overlapping Spacing Unit (Y/N) N	Consolidation Code U
Order Numbers: N/A			Well setbacks are under Common Ownership: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	22	24S	30E		916 FNL	173 FWL	32.207983	-103.877029	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
D	22	24S	30E		100 FNL	585 FWL	32.210234	-103.875695	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
E	34	24S	30E		2,537 FNL	585 FWL	32.174544	-103.875621	EDDY

Unitized Area or Area of Uniform Interest NMNM105422429	Spacing Unit Type <input checked="" type="checkbox"/> Horizontal <input type="checkbox"/> Vertical	Ground Floor Elevation: 3406 feet
--	--	--------------------------------------

OPERATOR CERTIFICATIONS

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

If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Terra Sebastian

10/22/2024

Signature

Date

Terra Sebastian

Printed Name

terra.b.sebastian@exxonmobil.com

Email Address

SURVEYOR CERTIFICATIONS

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

Please See Below

Signature and Seal of Professional Surveyor

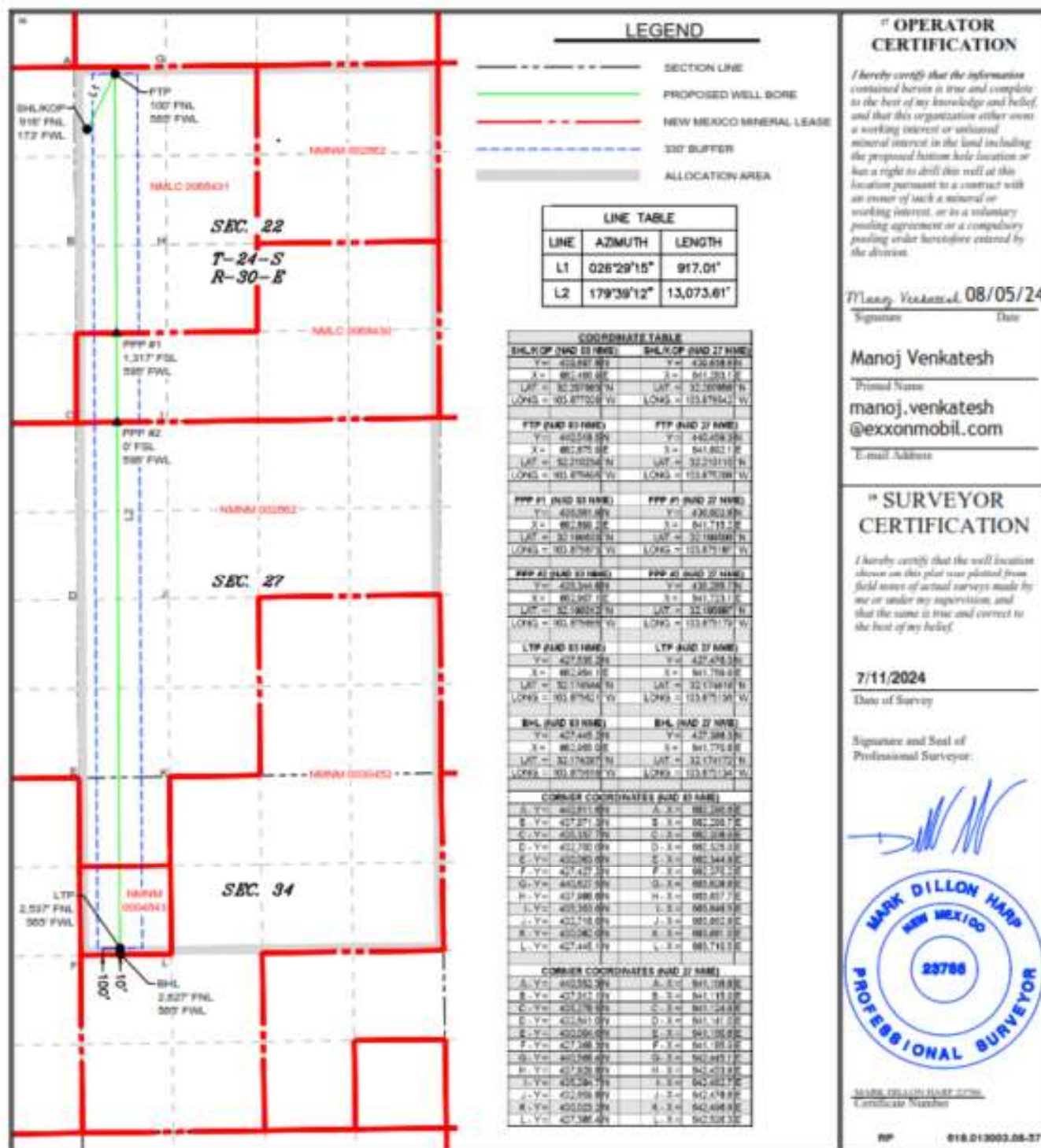
Certificate Number

Date of Survey

Note: No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



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:** 09 / 16 / 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	3 yr Anticipated decline Oil BBL/D	Anticipated Gas MCF/D	3 yr Anticipated decline Gas MCF/D	Anticipated Produced Water BBL/D	3 yr Anticipated decline Water BBL/D
Poker Lake Unit 22 DTD 103H	TBD	22 T24S R30E	916 FNL, 113 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 106H	TBD	22 T24S R30E	916 FNL, 203 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 907H	TBD	22 T24S R30E	916 FNL, 233 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 145H	TBD	22 T24S R30E	916 FNL, 173 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 153H	TBD	22 T24S R30E	414 FNL, 1946 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 194H	TBD	22 T24S R30E	916 FNL, 143 FWL	1,900	200	3,250	900	3,750	450
Poker Lake Unit 22 DTD 197H	TBD	22 T24S R30E	414 FNL, 2286 FEL	1,900	200	3,250	900	3,750	450
Poker Lake Unit 22 DTD 201H	TBD	22 T24S R30E	13 FNL, 1534 FWL	1,900	200	3,250	900	3,750	450
Poker Lake Unit 22 DTD 202H	TBD	22 T24S R30E	13 FNL, 1564 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 203H	TBD	22 T24S R30E	13 FNL, 1594 FWL	1,900	200	3,250	900	3,750	450
Poker Lake Unit 22 DTD 204H	TBD	22 T24S R30E	13 FNL, 1654 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 205H	TBD	22 T24S R30E	13 FNL, 1684 FWL	1,900	200	3,250	900	3,750	450

Poker Lake Unit 22 DTD 401H	TBD	22 T24S R30E	233 FNL, 1387 FEL	1,900	200	3,250	900	3,750	450
Poker Lake Unit 22 DTD 402H	TBD	22 T24S R30E	233 FNL, 1357 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 403H	TBD	22 T24S R30E	233 FNL, 1327 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 404H	TBD	22 T24S R30E	233 FNL, 1297 FEL	1,900	200	3,250	900	3,750	450
Poker Lake Unit 22 DTD 405H	TBD	22 T24S R30E	233 FNL, 1267 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 22 DTD 406H	TBD	22 T24S R30E	233 FNL, 1237 FEL	1,800	200	7,500	1,200	7,000	800

IV. Central Delivery Point Name: PLU 22 DTD CTB [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 22 DTD 103H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 106H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 907H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 145H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 153H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 194H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 197H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 201H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 202H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 203H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 204H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 205H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 401H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 402H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 403H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>

Poker Lake Unit 22 DTD 404H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 405H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>
Poker Lake Unit 22 DTD 406H	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>	<u>TBD</u>

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.

VI. Separation Equipment:

XTO Permian Operating LLC. utilizes a "stage separation" process in which oil and gas separation is carried out through a series of separators operating at successively reduced pressures. Hydrocarbon liquids are produced into a high-pressure inlet separator, then carried through one or more lower pressure separation vessels before entering the storage tanks. The purpose of this separation process is to attain maximum recovery of liquid hydrocarbons from the fluids and allow maximum capture of produced gas into the sales pipeline. XTO utilizes a series of Low-Pressure Compression units to capture gas off the staged separation and send it to the sales pipeline. This process minimizes the amount of flash gas that enters the end-stage storage tanks that is subsequently vented or flared.

VII. Operational Practices

XTO Permian Operating LLC will employ best management practices and control technologies to maximize the recovery and minimize waste of natural gas through venting and flaring.

- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.
- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO Permian Operating LLC will turn operations to onsite separation vessels and flow to the gathering pipeline.
- During production operations, XTO Permian Operating LLC will take every practical effort to minimize waste of natural gas through venting and flaring by:
 - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
 - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
 - Flaring in lieu of venting, where technically feasible
 - Utilizing auto-ignitors or continuous pilots, with thermocouples connected to Scada, to quickly detect and resolve issues related to malfunctioning flares/combustors
 - Employ the use of automatic tank gauging to minimize storage tank venting during loading events
 - Installing air-driven or electric-driven pneumatics & combustion engines, where technically feasible to minimize venting to the atmosphere
 - Confirm equipment is properly maintained and repaired through a preventative maintenance and repair program to ensure equipment meets all manufacturer specifications

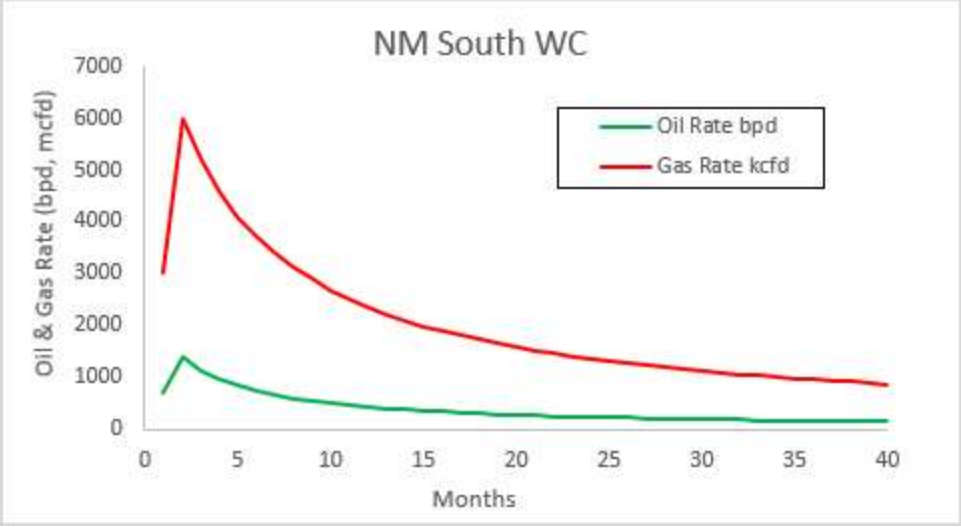
- Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible.

VIII. Best Management Practices during Maintenance

XTO Permian Operating LLC. will utilize best management practices to minimize venting during active and planned maintenance activities. XTO is operating under guidance that production facilities permitted under NOI permits have no provisions to allow high pressure flaring and high-pressure flaring is only allowed in disruption scenarios so long as the duration is less than eight hours. When technically feasible, flaring during maintenance activities will be utilized in lieu of venting to the atmosphere. XTO will work with third-party operators during scheduled maintenance of downstream pipeline or processing plants to address those events ahead of time to minimize venting. Actions considered include identifying alternative capture approaches or planning to temporarily reduce production or shut in the well to address these circumstances.

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: <i>Samantha Weis</i>
Printed Name: Samantha Weis
Title: Permitting Advisor
E-mail Address: samantha.r.bartnik@exxonmobil.com
Date: 10/23/2024
Phone: +1-832-625-7361
OIL CONSERVATION DIVISION (Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:





Drilling Plan Data Report

10/18/2024

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

APD ID: 10400097911

Submission Date: 04/12/2024

Operator Name: XTO PERMIAN OPERATING LLC

Highlighted data
reflects the most
recent changes

Well Name: POKER LAKE UNIT 22 DTD

Well Number: 145H

Well Type: CONVENTIONAL GAS 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
14338999	QUATERNARY	3406	0	0	ALLUVIUM	USEABLE WATER	N
14339000	RUSTLER	2338	1068	1068	ANHYDRITE, SANDSTONE	USEABLE WATER	N
14339001	SALADO	1935	1471	1471	SALT	NONE	N
14339002	BASE OF SALT	-258	3664	3664	SALT	NONE	N
14339003	DELAWARE	-452	3858	3858	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14339008	BRUSHY CANYON	-2998	6404	6404	SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14339004	BONE SPRING	-4322	7728	7728	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14339009	BONE SPRING 1ST	-5031	8437	8437	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14339010	BONE SPRING 2ND	-5616	9022	9022	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14339007	BONE SPRING 3RD	-6442	9848	9848	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14339012	WOLFCAMP	-7627	11033	11033	SANDSTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	Y
14339013	WOLFCAMP	-7729	11135	11135	SANDSTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	Y
14339011	WOLFCAMP	-8159	11565	11565	SANDSTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	Y
14338998	WOLFCAMP	-8364	11770	11770	SANDSTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	Y

Section 2 - Blowout Prevention

Operator Name: XTO PERMIAN OPERATING LLC**Well Name:** POKER LAKE UNIT 22 DTD**Well Number:** 145H**Pressure Rating (PSI):** 10M**Rating Depth:** 11890

Equipment: Once the permanent WH is installed on the Surface casing, the blow out preventer equipment (BOP) will consist of a 10M Triple Ram BOP consisting of 5M Annular, 10M Double Pipe RAM, 10M Blind RAM. XTO will use a Multi-Bowl system which is attached.

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.

Testing Procedure: All BOP testing will be done by an independent service company. Operator will test as per 43 CFR 3172

Choke Diagram Attachment:

PLU_22_DTD_10MCM_20240912120526.pdf

BOP Diagram Attachment:

PLU_22_DTD_5M10MBOP_20240912120551.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	1168	0	1168	3406	2238	1168	J-55	40	BUTT	5.39	1.5	DRY	13.48	DRY	13.48
2	INTERMEDIATE	8.75	7.625	NEW	API	Y	0	11053	0	10974	3411	-7568	11053	L-80	29.7	FJ	2.16	1.53	DRY	1.94	DRY	1.94
3	PRODUCTION	6.75	5.5	NEW	NON API	Y	0	24736	0	11890	3411	-8484	24736	P-110	20	OTHER - Freedom HTQ/Talon HTQ	1.56	1.05	DRY	1.92	DRY	1.92

Casing Attachments

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 22 DTDWell Number: 145H

Casing Attachments

Casing ID: 1	String	SURFACE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Casing Design Assumptions and Worksheet(s):		
Poker_Lake_Unit_22_DTD_145H_Csg_20240407150954.pdf		
Casing ID: 2	String	INTERMEDIATE
Inspection Document:		
Spec Document:		
Tapered String Spec:		
Poker_Lake_Unit_22_DTD_145H_Csg_20240407151436.pdf		
Casing Design Assumptions and Worksheet(s):		
Poker_Lake_Unit_22_DTD_145H_Csg_20240407151635.pdf		
Casing ID: 3	String	PRODUCTION
Inspection Document:		
Spec Document:		
Freedom_semi_premium_5.5_production_casing_20240805154234.pdf		
Talon__semiflush_5.5_production_casing_20240805154234.pdf		
Tapered String Spec:		
Poker_Lake_Unit_22_DTD_145H_Csg_20240407151122.pdf		
Casing Design Assumptions and Worksheet(s):		
Poker_Lake_Unit_22_DTD_145H_Csg_20240407151306.pdf		

Section 4 - Cement

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 22 DTD

Well Number: 145H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1168	290	1.87	10.5	542.3	100	EconoCem-HLTRRC	NA
SURFACE	Tail		0	1168	130	1.35	14.8	175.5	100	Class C	2% CaCl
INTERMEDIATE	Lead		0	6404	430	1.35	14.8	580.5	100	Class C	NA
INTERMEDIATE	Tail		6404	11053	720	1.33	14.8	957.6	100	Class C	NA
PRODUCTION	Lead		10753	11253	20	2.69	13.2	53.8	30	NeoCem	NA
PRODUCTION	Tail		11253	24736	960	1.51	14.5	1449.6	30	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. 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
1168	3858	SALT SATURATED	10.5	11							

Operator Name: XTO PERMIAN OPERATING LLC**Well Name:** POKER LAKE UNIT 22 DTD**Well Number:** 145H

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
1105 3	2473 6	OIL-BASED MUD	11.5	12							
0	1168	WATER-BASED MUD	8.4	8.9							
3858	1105 3	OTHER : BDE/OBM	9	9.5							

Section 6 - Test, Logging, Coring

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

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: 7419

Anticipated Surface Pressure: 4803

Anticipated Bottom Hole Temperature(F): 200

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

XTO_Energy_H2S_Plan_Updated_20240805153958.pdf

Operator Name: XTO PERMIAN OPERATING LLC**Well Name:** POKER LAKE UNIT 22 DTD**Well Number:** 145H**Section 8 - Other Information****Proposed horizontal/directional/multi-lateral plan submission:**

Poker_Lake_Unit_22_DTD_145H_DD_20240407152657.pdf

Other proposed operations facets description:**Other proposed operations facets attachment:**

Poker_Lake_Unit_22_DTD_145H_Cmt_20240407152715.pdf

PLU_22_DTD_H2S_DiaC_20240805154602.pdf

PLU_22_DTD_MBS_20240805154603.pdf

PLU_22_DTD_H2S_DiaD_20240805154603.pdf

PLU_22_DTD_H2S_DiaA_20240805154602.pdf

PLU_22_DTD_H2S_DiaB_20240805154604.pdf

Poker_Lake_Unit_22_DTD_145H_RL_20240805154620.pdf

Other Variance attachment:

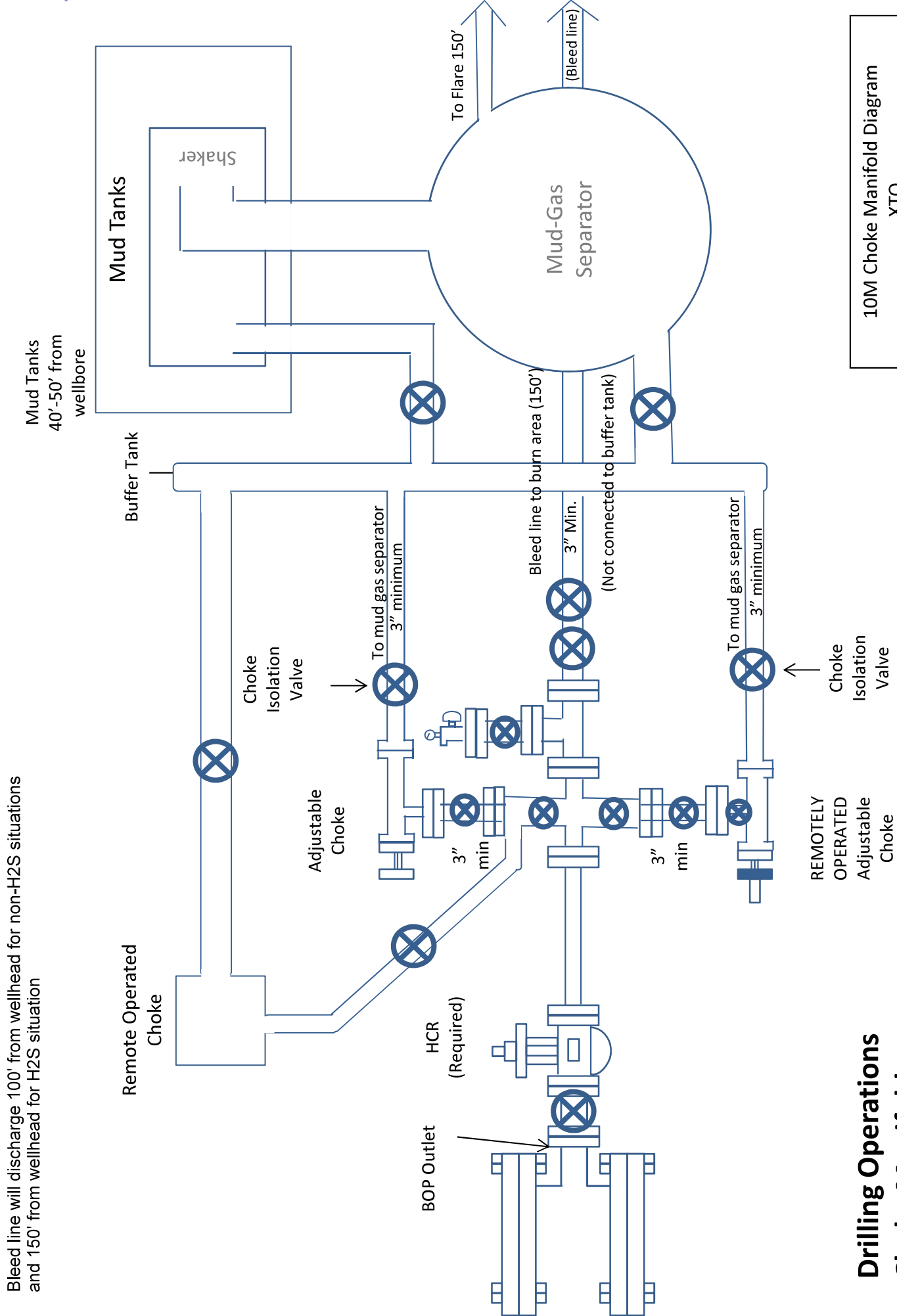
Offline_Cement_Variance_Surf___Interm_Csg_20240805154544.pdf

Spudder_Rig_Request_20240805154543.pdf

Updated_Flex_Hose_20240805154544.pdf

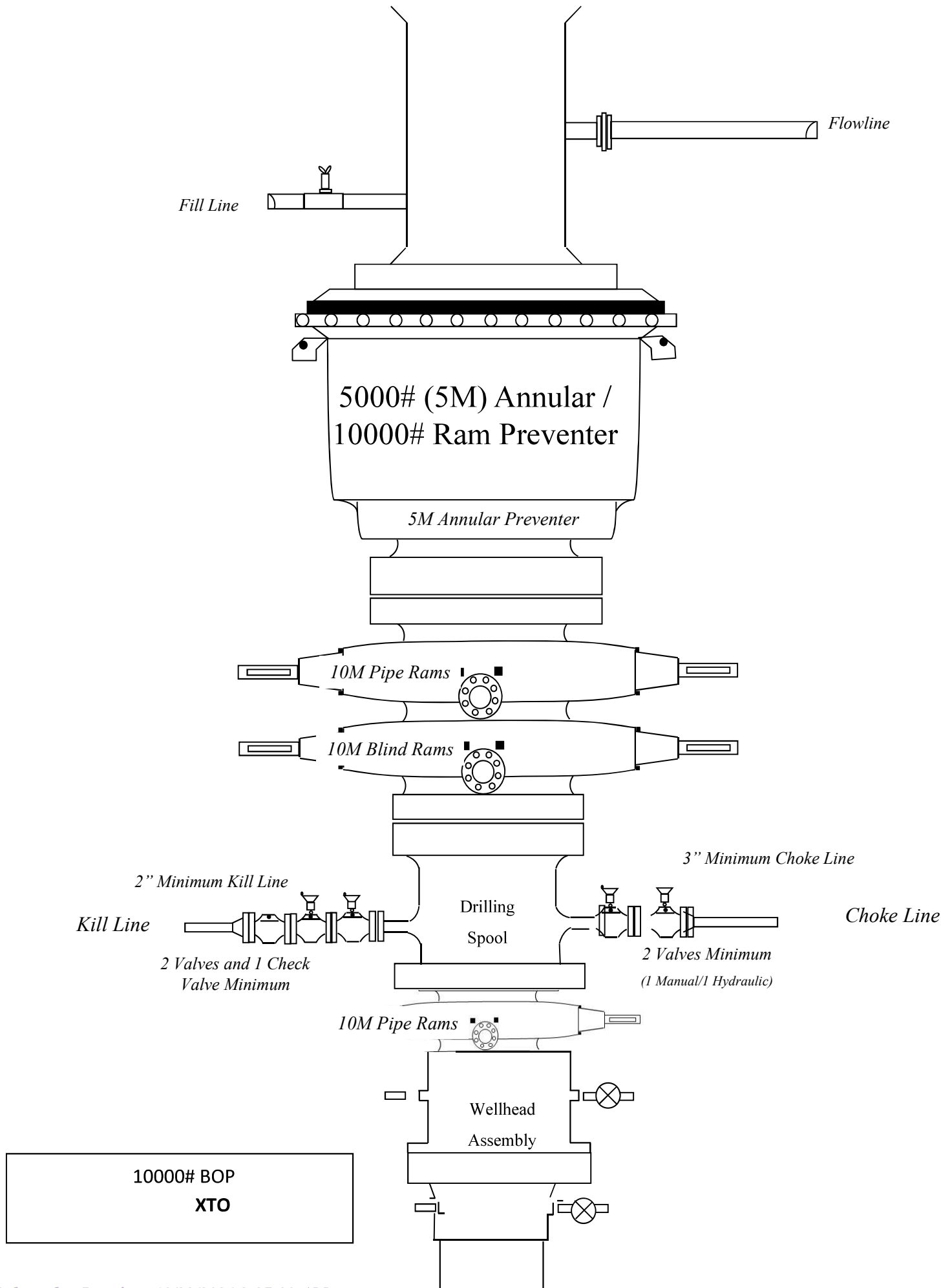
Wild_Well_Control_Plan_20240912123246.pdf

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



10M Choke Manifold Diagram
XTO

Drilling Operations
Choke Manifold
10M Service



Casing Assumptions

Casing Design									
Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1168'	9.625	40	J-55	BTC	New	1.50	5.39	13.48
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.10	2.92	1.70
8.75	4000' – 11053'	7.625	29.7	HC L-80	Flush Joint	New	1.53	2.16	1.94
6.75	0' – 10953'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.69	1.92
6.75	10953' - 24736'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.56	1.92

Cement Variance Request

Intermediate Casing:

TO requests to run a two stage cement job on the 5/8" intermediate casing string with the first stage being run conventionally with the calculated top of cement at the Brush Canyon 000 and the second stage performed as a gradenhead squeeze with planned cement from the Brush Canyon to surface. If cement is not usually confirmed to circulate to surface, the final cement top after the second stage job will be verified by a cho-meter. If necessary, a top out consisting of 1,500 sacks of Class C cement, 100 Salt, 100 reMag-M, 100 Bentonite Gel, 200 1201, 100 g will be executed as a contingency. If cement is still unable to circulate to surface, another cho-meter run will be performed for cement top verification.

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

TO requests to run 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 gradenhead squeeze and subsequent TOC verification will be negated.

TO requests the option to conduct the gradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and catch drilling is approved. In the event the gradenhead 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 catch drilling operations occur before moving off the rig. The TWC will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TWC as per standard catch drilling ops.

Production Casing:

TO requests the option to offline cement and remediate if needed, surface and intermediate casing strings where catch drilling is approved and if unplanned remediation is needed, TO will ensure well is static with no pressure on the csg annulus as with all other casing strings where catch drilling operations occur before moving off the rig. The TWC will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TWC as per standard catch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the catch 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 90 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.

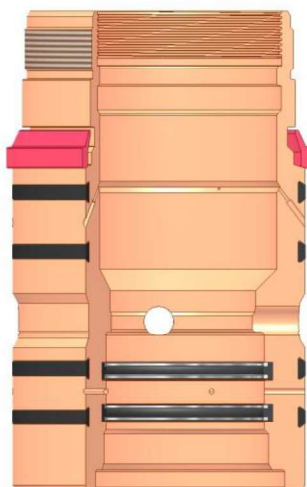
1. Cement Program

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

2. Offline Cementing Procedure

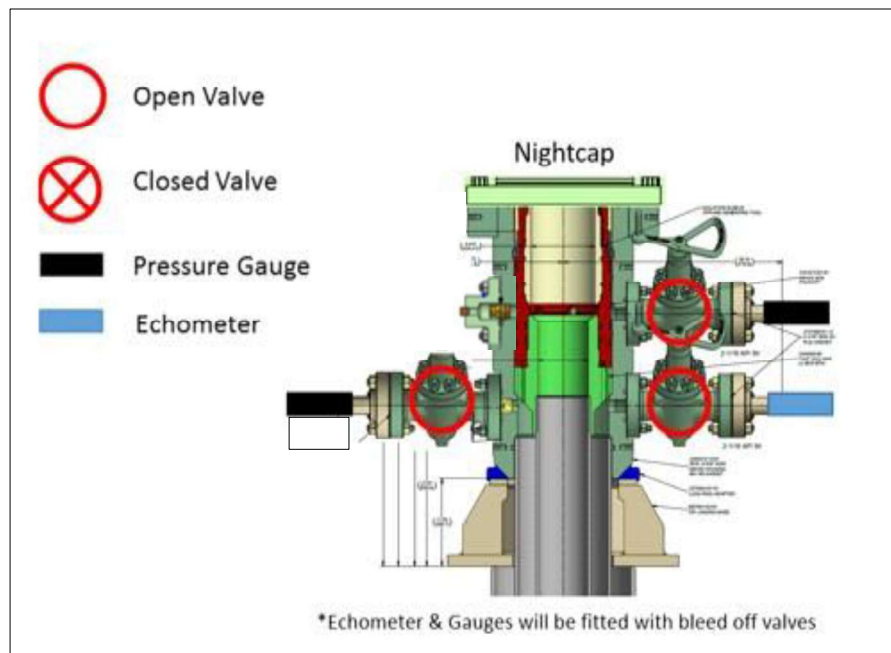
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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.



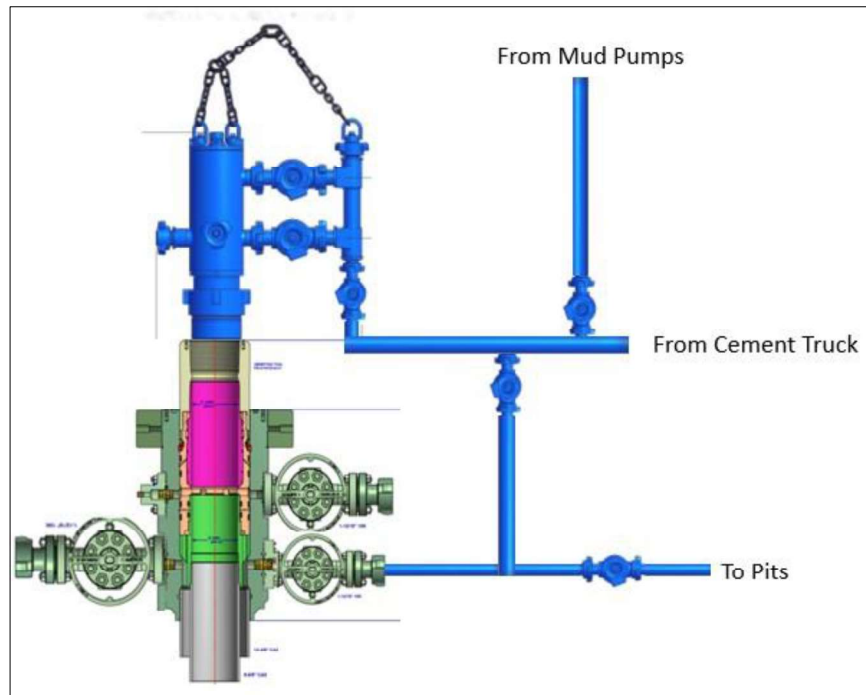
Annular packoff with both external and internal seals

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.

**BLACK GOLD®**

GATES ENGINEERING & SERVICES NORTH AMERICA
7603 Prairie Oak Dr.
Houston, TX. 77086

PHONE: +1 (281) 602-4100**FAX: +1 (281) 602-4147****EMAIL: gesna.quality@gates.com****WEB: www.gates.com/oilandgas**

*NEW CHOKE HOSE
INSTALLED 02-10-2024*

CERTIFICATE OF CONFORMANCE

This is to verify that the items detailed below meet the requirements of the Customer's Purchase Order referenced herein, and are in Conformance with applicable specifications, and that Records of Required Tests are on file and subject to examination. The following items were inspected and hydrostatically tested at **Gates Engineering & Services North America** facilities in Houston, TX, USA.

CUSTOMER: NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#: 15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N: IMR RETEST SN 74621 ASSET #66-1531

PART DESCRIPTION: RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES

SALES ORDER #: 529480
QUANTITY: 1
SERIAL #: 74621 H3-012524-1

SIGNATURE:*F. OSMOS***TITLE:****QUALITY ASSURANCE****DATE:****1/25/2024**



H3-15/16

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER

Company: Nabors Industries Inc.

Production description: 74621/66-1531

Sales order #: 529480

Customer reference: FG1213

TEST OBJECT

Serial number: H3-012524-1

Lot number:

Description: 74621/66-1531

Hose ID: 3" 16C CK

Part number:

TEST INFORMATION

Test procedure: GTS-04-053

Test pressure: 15000.00 psi

Test pressure hold: 3600.00 sec

Work pressure: 10000.00 psi

Work pressure hold: 900.00 sec

Length difference: 0.00 %

Length difference: 0.00 inch

Fitting 1: 3.0 x 4-1/16 10K

Part number:

Description:

Fitting 2: 3.0 x 4-1/16 10K

Part number:

Description:

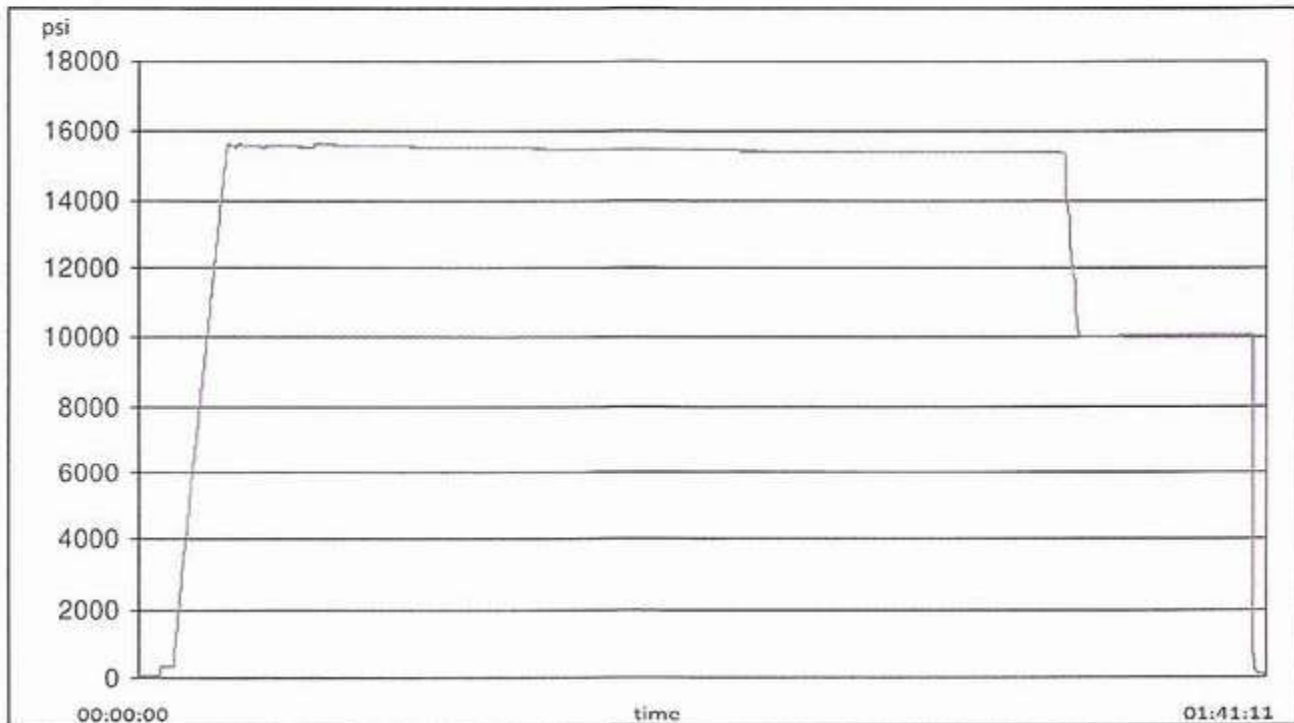
Visual check:

Pressure test result: PASS

Length measurement result:

Length: 45 feet

Test operator: Travis





H3-15/1b

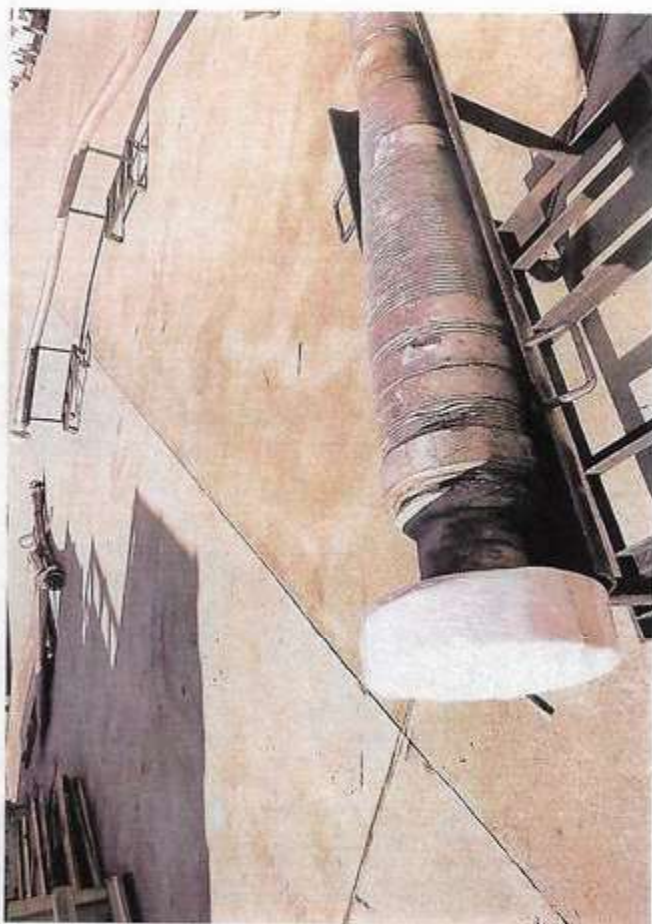
1/25/2024 11:48:06 AM

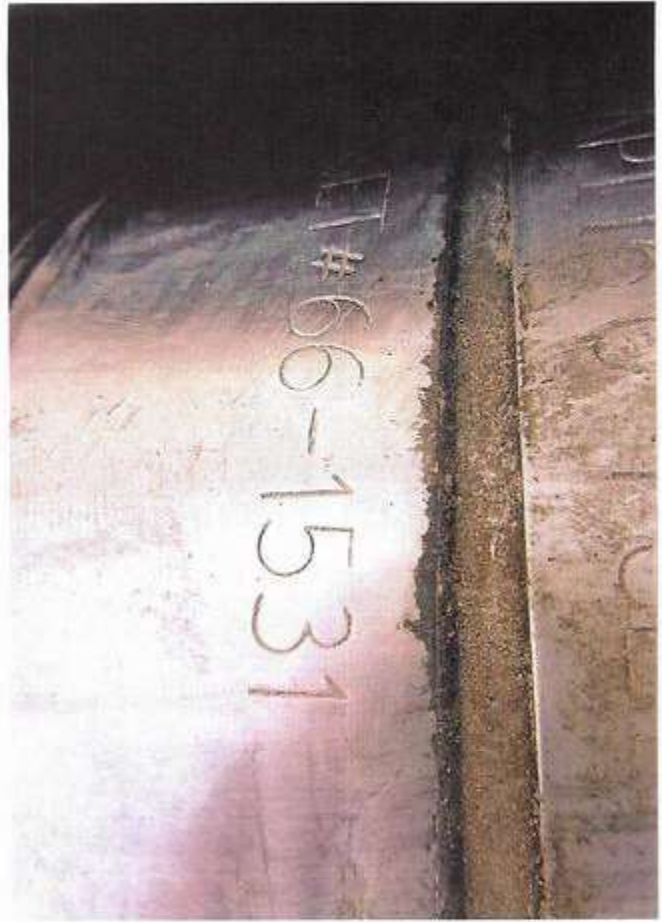
TEST REPORT

GAUGE TRACEABILITY

Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

Comment





10,000 PSI Annular BOP Variance Request

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

1. Component and Preventer Compatibility Tables

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

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

2. Well Control Procedures

Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the BHA through the BOPs. At least one well control drill will be performed weekly per crew to demonstrate compliance with the procedure and well control plan. The well control drill will be recorded in the daily drilling log. The type of drill will be determined by the ongoing operations, but reasonable attempts will be made to vary the type of drill conducted (pit, trip, open hole, choke, etc.). This well control plan will be available for review by rig personnel in the XTO Energy/Permian Operating drilling supervisor's office on location and on the rig floor. All BOP equipment will be tested as per Onshore O&G Order No. 2 with the exception of the 5000 psi annular which will be tested to 70% of its RWP.

General Procedure While Drilling

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

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

General Procedure While Tripping

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

General Procedure While Running Production Casing

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

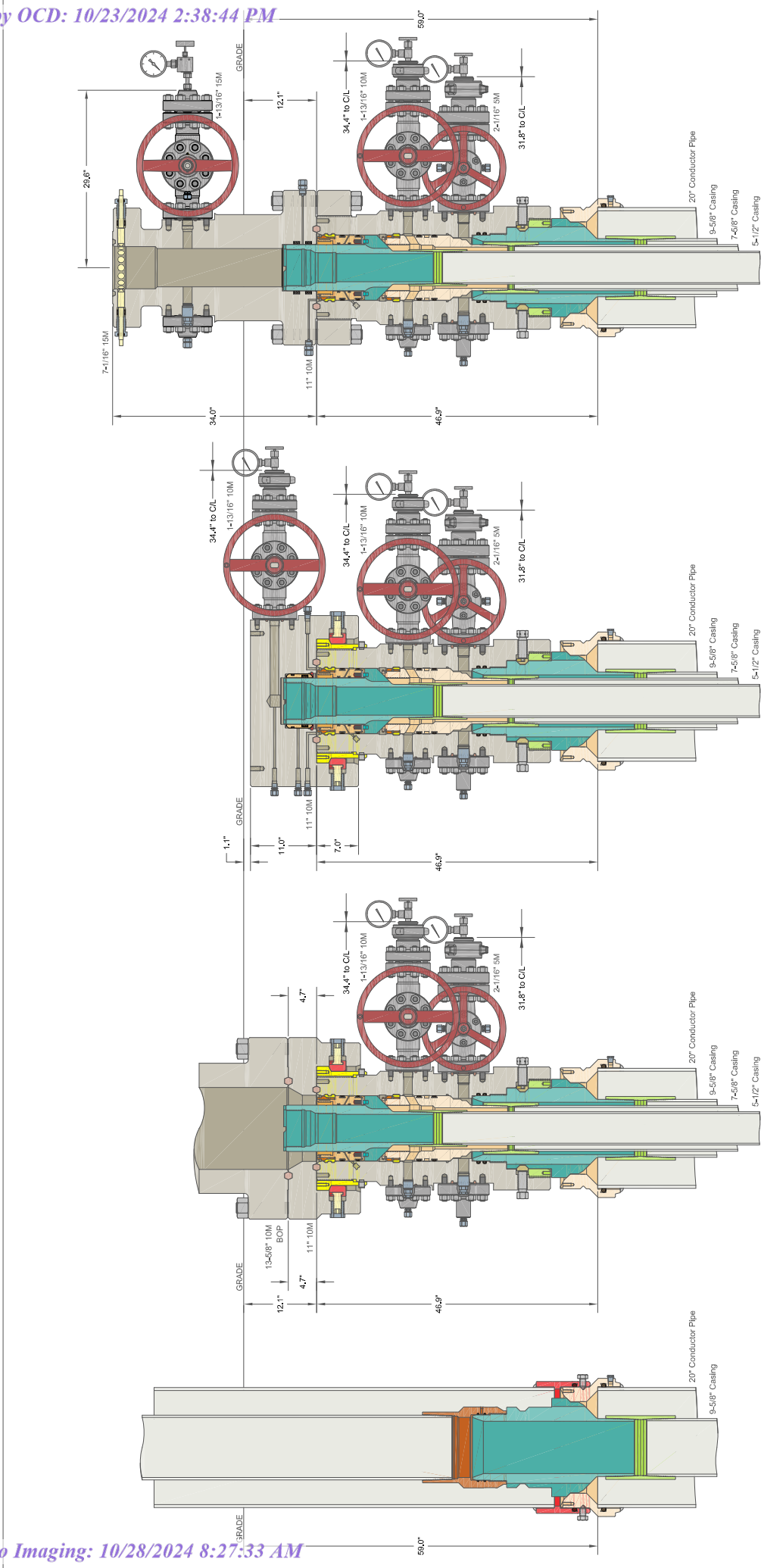
General Procedure With No Pipe In Hole (Open Hole)

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

General Procedures While Pulling BHA Through Stack

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

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



ALL DIMENSIONS APPROXIMATE		XTO ENERGY INC ICARUS PAD	
CACTUS WELLHEAD LLC		DRAWN	DLE
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		APPRV	18JAN21
INFORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, DISCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT GRANTS EXPRESSLY AUTHORIZED BY CACTUS WELLHEAD, LLC.		DRAWING NO. HBE0000479	

Well Plan Report - Poker Lake Unit 22 DTD South 145H

Measured Depth: 24735.65 ft
TVD RKB: 11890.00 ft
Location
Cartographic Reference System: New Mexico East - NAD 27
Northing: 439638.60 ft
Easting: 641283.10 ft
RKB: 3438.00 ft
Ground Level: 3406.00 ft
North Reference: Grid
Convergence Angle: 0.24 Deg

Plan Sections Poker Lake Unit 22 DTD South 145H

Measured		TVD		Build		Turn		Dogleg	
Depth	Inclination	Azimuth	RKB	X Offset	Rate	Y Offset	Rate	(Deg/100ft)	Rate
(ft)	(Deg)	(Deg)	(ft)	(ft)	(Deg/100ft)	(ft)	(Deg/100ft)	(Deg/100ft)	(Deg/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	0.00
1610.83	10.22	26.49	1608.13	20.26	2.00	40.65	0.00	0.00	2.00
6268.42	10.22	26.49	6191.87	388.74	0.00	780.05	0.00	0.00	0.00
6779.26	0.00	0.00	6700.00	409.00	-2.00	820.70	0.00	0.00	2.00
11253.05	0.00	0.00	11173.80	409.00	0.00	820.70	0.00	0.00	0.00
12378.05	90.00	179.66	11890.00	413.29	8.00	104.52	0.00	0.00	8.00
12804.35	90.00	179.66	11890.00	415.84	0.00	-321.77	0.00	0.00	0.00
24735.65	90.00	179.66	11890.00	487.27	0.00	-12252.86	0.00	0.00	0.00

Position Uncertainty Poker Lake Unit 22 DTD South 145H

Measured		TVD		Lateral		Vertical		Semi-major		Semi-minor		Tool	
Depth	Inclination	Azimuth	RKB	Error	Bias	Error	Bias	Error	Bias	Error	Azimuth	Used	Used

0.000	0.000	0.000	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
100.000	0.000	0.000	100.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
200.000	0.000	0.000	200.000	0.000	0.717	0.000	0.538	0.000	2.310	0.000	0.000	0.000	0.717	0.538	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
300.000	0.000	0.000	300.000	0.000	1.075	0.000	0.896	0.000	2.325	0.000	0.000	0.000	1.075	0.896	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
400.000	0.000	0.000	400.000	0.000	1.434	0.000	1.255	0.000	2.347	0.000	0.000	0.000	1.434	1.255	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
500.000	0.000	0.000	500.000	0.000	1.792	0.000	1.613	0.000	2.374	0.000	0.000	0.000	1.792	1.613	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
600.000	0.000	0.000	600.000	0.000	2.151	0.000	1.972	0.000	2.407	0.000	0.000	0.000	2.151	1.972	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
700.000	0.000	0.000	700.000	0.000	2.509	0.000	2.330	0.000	2.444	0.000	0.000	0.000	2.509	2.330	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
800.000	0.000	0.000	800.000	0.000	2.868	0.000	2.689	0.000	2.486	0.000	0.000	0.000	2.868	2.689	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
900.000	0.000	0.000	900.000	0.000	3.226	0.000	3.047	0.000	2.532	0.000	0.000	0.000	3.226	3.047	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1000.000	0.000	0.000	1000.000	0.000	3.585	0.000	3.405	0.000	2.582	0.000	0.000	0.000	3.585	3.405	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1100.000	0.000	0.000	1100.000	0.000	3.943	0.000	3.764	0.000	2.635	0.000	0.000	0.000	3.943	3.764	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1200.000	2.000	26.490	1199.980	0.000	4.264	0.000	4.157	0.000	2.692	0.000	0.000	0.000	4.301	4.121	90.071	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1300.000	4.000	26.490	1299.838	0.000	4.614	0.000	4.512	0.000	2.749	0.000	0.000	0.000	4.659	4.476	90.336	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1400.000	6.000	26.490	1399.452	0.000	4.959	0.000	4.867	0.000	2.807	0.000	0.000	0.000	5.017	4.831	90.615	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1500.000	8.000	26.490	1498.702	0.000	5.297	0.000	5.220	0.000	2.867	0.000	0.000	0.000	5.374	5.184	90.820	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1600.000	10.000	26.490	1597.465	0.000	5.630	0.000	5.573	0.000	2.928	0.000	0.000	0.000	5.729	5.536	90.877	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1610.832	10.217	26.490	1608.130	0.000	5.665	0.000	5.611	0.000	2.930	0.000	0.000	0.000	5.770	5.575	91.168	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1700.000	10.217	26.490	1695.884	0.000	5.981	0.000	5.925	0.000	2.995	0.000	0.000	0.000	6.083	5.887	90.563	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1800.000	10.217	26.490	1794.299	0.000	6.337	0.000	6.279	0.000	3.071	0.000	0.000	0.000	6.434	6.239	89.843	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
1900.000	10.217	26.490	1892.713	0.000	6.693	0.000	6.633	0.000	3.150	0.000	0.000	0.000	6.787	6.592	89.131	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2000.000	10.217	26.490	1991.127	0.000	7.050	0.000	6.988	0.000	3.232	0.000	0.000	0.000	7.140	6.945	88.425	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2100.000	10.217	26.490	2089.542	0.000	7.408	0.000	7.344	0.000	3.317	0.000	0.000	0.000	7.493	7.298	87.725	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2200.000	10.217	26.490	2187.956	0.000	7.765	0.000	7.700	0.000	3.403	0.000	0.000	0.000	7.848	7.653	87.030	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2300.000	10.217	26.490	2286.371	0.000	8.124	0.000	8.057	0.000	3.492	0.000	0.000	0.000	8.202	8.007	86.340	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2400.000	10.217	26.490	2384.785	0.000	8.483	0.000	8.414	0.000	3.583	0.000	0.000	0.000	8.558	8.362	85.656	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2500.000	10.217	26.490	2483.200	0.000	8.842	0.000	8.771	0.000	3.677	0.000	0.000	0.000	8.913	8.717	84.978	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2600.000	10.217	26.490	2581.614	0.000	9.201	0.000	9.129	0.000	3.771	0.000	0.000	0.000	9.269	9.073	84.305	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2700.000	10.217	26.490	2680.028	0.000	9.560	0.000	9.487	0.000	3.868	0.000	0.000	0.000	9.625	9.429	83.638	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2800.000	10.217	26.490	2778.443	0.000	9.920	0.000	9.845	0.000	3.967	0.000	0.000	0.000	9.982	9.785	82.978	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
2900.000	10.217	26.490	2876.857	0.000	10.280	0.000	10.204	0.000	4.067	0.000	0.000	0.000	10.339	10.141	82.324	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
3000.000	10.217	26.490	2975.272	0.000	10.640	0.000	10.562	0.000	4.168	0.000	0.000	0.000	10.696	10.497	81.677	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
3100.000	10.217	26.490	3073.686	0.000	11.001	0.000	10.921	0.000	4.272	0.000	0.000	0.000	11.053	10.853	81.038	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22

3200.000	10.217	26.490	3172.101	11.361	0.000	11.280	0.000	4.376	0.000	0.000	11.411	11.210	80.406	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3300.000	10.217	26.490	3270.515	11.722	0.000	11.639	0.000	4.483	0.000	0.000	11.768	11.567	79.783	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3400.000	10.217	26.490	3368.929	12.082	0.000	11.998	0.000	4.591	0.000	0.000	12.126	11.923	79.168	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3500.000	10.217	26.490	3467.344	12.443	0.000	12.358	0.000	4.700	0.000	0.000	12.484	12.280	78.562	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3600.000	10.217	26.490	3565.758	12.804	0.000	12.717	0.000	4.811	0.000	0.000	12.842	12.637	77.966	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3700.000	10.217	26.490	3664.173	13.165	0.000	13.077	0.000	4.923	0.000	0.000	13.200	12.994	77.379	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3800.000	10.217	26.490	3762.587	13.526	0.000	13.436	0.000	5.037	0.000	0.000	13.559	13.351	76.801	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
3900.000	10.217	26.490	3861.002	13.888	0.000	13.796	0.000	5.152	0.000	0.000	13.917	13.708	76.234	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4000.000	10.217	26.490	3959.416	14.249	0.000	14.156	0.000	5.268	0.000	0.000	14.276	14.065	75.677	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4100.000	10.217	26.490	4057.830	14.610	0.000	14.515	0.000	5.387	0.000	0.000	14.635	14.422	75.130	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4200.000	10.217	26.490	4156.245	14.972	0.000	14.875	0.000	5.506	0.000	0.000	14.994	14.779	74.594	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4300.000	10.217	26.490	4254.659	15.333	0.000	15.235	0.000	5.627	0.000	0.000	15.353	15.137	74.069	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4400.000	10.217	26.490	4353.074	15.694	0.000	15.595	0.000	5.750	0.000	0.000	15.712	15.494	73.555	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4500.000	10.217	26.490	4451.488	16.056	0.000	15.955	0.000	5.874	0.000	0.000	16.071	15.851	73.051	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4600.000	10.217	26.490	4549.903	16.418	0.000	16.316	0.000	6.000	0.000	0.000	16.430	16.208	72.559	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4700.000	10.217	26.490	4648.317	16.779	0.000	16.676	0.000	6.128	0.000	0.000	16.790	16.566	72.077	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4800.000	10.217	26.490	4746.731	17.141	0.000	17.036	0.000	6.257	0.000	0.000	17.149	16.923	71.607	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
4900.000	10.217	26.490	4845.146	17.503	0.000	17.396	0.000	6.388	0.000	0.000	17.509	17.280	71.147	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5000.000	10.217	26.490	4943.560	17.864	0.000	17.757	0.000	6.520	0.000	0.000	17.868	17.638	70.699	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5100.000	10.217	26.490	5041.975	18.226	0.000	18.117	0.000	6.654	0.000	0.000	18.228	17.995	70.261	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5200.000	10.217	26.490	5140.389	18.588	0.000	18.477	0.000	6.790	0.000	0.000	18.588	18.353	69.834	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5300.000	10.217	26.490	5238.804	18.950	0.000	18.838	0.000	6.928	0.000	0.000	18.948	18.710	69.418	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5400.000	10.217	26.490	5337.218	19.312	0.000	19.198	0.000	7.067	0.000	0.000	19.307	19.067	69.012	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5500.000	10.217	26.490	5435.632	19.674	0.000	19.559	0.000	7.209	0.000	0.000	19.667	19.425	68.617	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5600.000	10.217	26.490	5534.047	20.036	0.000	19.919	0.000	7.352	0.000	0.000	20.027	19.782	68.233	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5700.000	10.217	26.490	5632.461	20.398	0.000	20.280	0.000	7.497	0.000	0.000	20.387	20.140	67.859	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5800.000	10.217	26.490	5730.876	20.760	0.000	20.640	0.000	7.643	0.000	0.000	20.747	20.497	67.494	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
5900.000	10.217	26.490	5829.290	21.122	0.000	21.001	0.000	7.792	0.000	0.000	21.108	20.855	67.140	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6000.000	10.217	26.490	5927.704	21.484	0.000	21.361	0.000	7.943	0.000	0.000	21.468	21.212	66.795	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6100.000	10.217	26.490	6026.119	21.846	0.000	21.722	0.000	8.096	0.000	0.000	21.828	21.570	66.461	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6200.000	10.217	26.490	6124.533	22.208	0.000	22.083	0.000	8.250	0.000	0.000	22.188	21.928	66.135	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6268.423	10.217	26.490	6191.870	22.455	0.000	22.329	0.000	8.357	0.000	0.000	22.435	22.172	65.923	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6300.000	9.585	26.490	6222.977	22.577	0.000	22.443	0.000	8.407	0.000	0.000	22.548	22.285	65.817	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6400.000	7.585	26.490	6321.851	22.945	0.000	22.803	0.000	8.565	0.000	0.000	22.908	22.642	65.597	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22

6500.000	5.585	26.490	6421.186	23.287	0.000	23.160	0.000	8.722	0.000	0.000	23.266	22.999	65.539	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6600.000	3.585	26.490	6520.861	23.602	0.000	23.516	0.000	8.876	0.000	0.000	23.623	23.355	65.630	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6700.000	1.585	26.490	6620.754	23.889	0.000	23.870	0.000	9.027	0.000	0.000	23.977	23.709	65.815	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6779.255	0.000	0.000	6700.000	24.212	0.000	24.033	0.000	9.145	0.000	0.000	24.256	23.988	65.962	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6800.000	0.000	0.000	6720.745	24.284	0.000	24.105	0.000	9.175	0.000	0.000	24.329	24.060	65.993	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
6900.000	0.000	0.000	6820.745	24.636	0.000	24.455	0.000	9.325	0.000	0.000	24.680	24.411	66.142	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7000.000	0.000	0.000	6920.745	24.988	0.000	24.805	0.000	9.477	0.000	0.000	25.031	24.761	66.285	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7100.000	0.000	0.000	7020.745	25.339	0.000	25.155	0.000	9.631	0.000	0.000	25.383	25.111	66.423	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7200.000	0.000	0.000	7120.745	25.691	0.000	25.505	0.000	9.789	0.000	0.000	25.734	25.462	66.556	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7300.000	0.000	0.000	7220.745	26.044	0.000	25.856	0.000	9.949	0.000	0.000	26.086	25.813	66.685	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7400.000	0.000	0.000	7320.745	26.396	0.000	26.207	0.000	10.112	0.000	0.000	26.438	26.164	66.809	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7500.000	0.000	0.000	7420.745	26.749	0.000	26.558	0.000	10.278	0.000	0.000	26.791	26.515	66.930	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7600.000	0.000	0.000	7520.745	27.101	0.000	26.909	0.000	10.446	0.000	0.000	27.143	26.867	67.046	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7700.000	0.000	0.000	7620.745	27.454	0.000	27.261	0.000	10.618	0.000	0.000	27.496	27.219	67.159	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7800.000	0.000	0.000	7720.745	27.807	0.000	27.612	0.000	10.792	0.000	0.000	27.849	27.571	67.268	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
7900.000	0.000	0.000	7820.745	28.160	0.000	27.964	0.000	10.969	0.000	0.000	28.201	27.923	67.373	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8000.000	0.000	0.000	7920.745	28.514	0.000	28.316	0.000	11.149	0.000	0.000	28.554	28.275	67.476	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8100.000	0.000	0.000	8020.745	28.867	0.000	28.668	0.000	11.332	0.000	0.000	28.908	28.627	67.575	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8200.000	0.000	0.000	8120.745	29.221	0.000	29.020	0.000	11.518	0.000	0.000	29.261	28.980	67.672	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8300.000	0.000	0.000	8220.745	29.574	0.000	29.373	0.000	11.707	0.000	0.000	29.614	29.332	67.765	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8400.000	0.000	0.000	8320.745	29.928	0.000	29.725	0.000	11.898	0.000	0.000	29.968	29.685	67.856	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8500.000	0.000	0.000	8420.745	30.282	0.000	30.078	0.000	12.093	0.000	0.000	30.322	30.038	67.944	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8600.000	0.000	0.000	8520.745	30.636	0.000	30.431	0.000	12.291	0.000	0.000	30.675	30.391	68.030	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8700.000	0.000	0.000	8620.745	30.990	0.000	30.784	0.000	12.491	0.000	0.000	31.029	30.744	68.113	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8800.000	0.000	0.000	8720.745	31.344	0.000	31.137	0.000	12.695	0.000	0.000	31.383	31.098	68.194	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
8900.000	0.000	0.000	8820.745	31.698	0.000	31.490	0.000	12.901	0.000	0.000	31.737	31.451	68.273	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9000.000	0.000	0.000	8920.745	32.053	0.000	31.844	0.000	13.111	0.000	0.000	32.092	31.804	68.350	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9100.000	0.000	0.000	9020.745	32.407	0.000	32.197	0.000	13.324	0.000	0.000	32.446	32.158	68.425	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9200.000	0.000	0.000	9120.745	32.762	0.000	32.551	0.000	13.539	0.000	0.000	32.800	32.512	68.497	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9300.000	0.000	0.000	9220.745	33.116	0.000	32.904	0.000	13.758	0.000	0.000	33.155	32.866	68.568	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9400.000	0.000	0.000	9320.745	33.471	0.000	33.258	0.000	13.979	0.000	0.000	33.509	33.220	68.637	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9500.000	0.000	0.000	9420.745	33.826	0.000	33.612	0.000	14.204	0.000	0.000	33.864	33.574	68.705	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9600.000	0.000	0.000	9520.745	34.181	0.000	33.966	0.000	14.432	0.000	0.000	34.219	33.928	68.770	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22
9700.000	0.000	0.000	9620.745	34.536	0.000	34.320	0.000	14.663	0.000	0.000	34.573	34.282	68.834	MWD+IFR1+SAG+MS+GS_XTO_PLU	DTD_22

9800.000	0.000	0.000	9720.745	34.891	0.000	34.674	0.000	14.896	0.000	0.000	34.928	34.636	68.897	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
9900.000	0.000	0.000	9820.745	35.246	0.000	35.029	0.000	15.133	0.000	0.000	35.283	34.991	68.958	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10000.000	0.000	0.000	9920.745	35.601	0.000	35.383	0.000	15.373	0.000	0.000	35.638	35.345	69.017	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10100.000	0.000	0.000	10020.745	35.956	0.000	35.737	0.000	15.616	0.000	0.000	35.993	35.700	69.075	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10200.000	0.000	0.000	10120.745	36.311	0.000	36.092	0.000	15.863	0.000	0.000	36.348	36.054	69.132	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10300.000	0.000	0.000	10220.745	36.667	0.000	36.446	0.000	16.112	0.000	0.000	36.704	36.409	69.188	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10400.000	0.000	0.000	10320.745	37.022	0.000	36.801	0.000	16.364	0.000	0.000	37.059	36.764	69.242	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10500.000	0.000	0.000	10420.745	37.377	0.000	37.156	0.000	16.620	0.000	0.000	37.414	37.119	69.295	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10600.000	0.000	0.000	10520.745	37.733	0.000	37.510	0.000	16.878	0.000	0.000	37.770	37.474	69.347	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10700.000	0.000	0.000	10620.745	38.089	0.000	37.865	0.000	17.140	0.000	0.000	38.125	37.828	69.397	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10800.000	0.000	0.000	10720.745	38.444	0.000	38.220	0.000	17.404	0.000	0.000	38.481	38.184	69.447	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
10900.000	0.000	0.000	10820.745	38.800	0.000	38.575	0.000	17.672	0.000	0.000	38.836	38.539	69.496	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11000.000	0.000	0.000	10920.745	39.156	0.000	38.930	0.000	17.943	0.000	0.000	39.192	38.894	69.543	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11100.000	0.000	0.000	11020.745	39.511	0.000	39.285	0.000	18.217	0.000	0.000	39.548	39.249	69.590	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11200.000	0.000	0.000	11120.745	39.867	0.000	39.641	0.000	18.494	0.000	0.000	39.903	39.604	69.635	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11253.050	0.000	0.000	11173.800	40.056	0.000	39.829	0.000	18.642	0.000	0.000	40.092	39.793	69.659	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11300.000	3.756	179.657	11220.716	39.984	0.000	39.987	-0.000	18.773	0.000	0.000	40.250	39.951	69.591	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11400.000	11.756	179.657	11319.721	39.358	0.000	40.301	-0.000	19.043	0.000	0.000	40.559	40.265	69.128	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11500.000	19.756	179.657	11415.886	38.138	0.000	40.601	-0.000	19.296	0.000	0.000	40.850	40.563	68.283	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11600.000	27.756	179.657	11507.338	36.370	0.000	40.881	-0.000	19.526	0.000	0.000	41.112	40.840	66.636	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11700.000	35.756	179.657	11592.299	34.127	0.000	41.139	-0.000	19.732	0.000	0.000	41.340	41.091	63.695	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11800.000	43.756	179.657	11669.114	31.515	0.000	41.369	-0.000	19.911	0.000	0.000	41.531	41.310	58.739	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
11900.000	51.756	179.657	11736.288	28.682	0.000	41.569	-0.000	20.066	0.000	0.000	41.689	41.492	50.948	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12000.000	59.756	179.657	11792.514	25.836	0.000	41.737	-0.000	20.196	0.000	0.000	41.818	41.629	40.574	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12100.000	67.756	179.657	11836.698	23.258	0.000	41.871	-0.000	20.307	0.000	0.000	41.924	41.720	30.304	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12200.000	75.756	179.657	11867.979	21.313	0.000	41.969	-0.000	20.402	0.000	0.000	42.005	41.771	22.718	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12300.000	83.756	179.657	11885.749	20.388	0.000	42.031	-0.000	20.484	0.000	0.000	42.057	41.795	18.018	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12378.050	90.000	179.657	11889.997	20.542	0.000	42.052	-0.000	20.542	0.000	0.000	42.073	41.804	15.975	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12400.000	90.000	179.657	11889.997	20.558	0.000	42.054	-0.000	20.558	0.000	0.000	42.074	41.806	15.584	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12500.000	90.000	179.657	11889.997	20.637	0.000	42.073	-0.000	20.637	0.000	0.000	42.088	41.815	13.331	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12600.000	90.000	179.657	11889.997	20.726	0.000	42.100	-0.000	20.726	0.000	0.000	42.111	41.823	10.895	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12700.000	90.000	179.657	11889.997	20.825	0.000	42.134	-0.000	20.825	0.000	0.000	42.142	41.831	8.491	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12804.350	90.000	179.657	11889.997	20.938	0.000	42.179	-0.000	20.938	0.000	0.000	42.184	41.840	6.194	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
12900.000	90.000	179.657	11889.997	21.050	0.000	42.228	-0.000	21.050	0.000	0.000	42.230	41.847	4.376	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22

13000.000	90.000	179.657	11889.997	21.177	0.000	42.286	-0.000	21.177	0.000	0.000	42.288	41.856	2.786	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13100.000	90.000	179.657	11889.997	21.312	0.000	42.353	-0.000	21.312	0.000	0.000	42.353	41.864	1.497	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13200.000	90.000	179.657	11889.997	21.456	0.000	42.427	-0.000	21.456	0.000	0.000	42.427	41.872	0.471	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13300.000	90.000	179.657	11889.997	21.609	0.000	42.509	-0.000	21.609	0.000	0.000	42.509	41.881	-0.336	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13400.000	90.000	179.657	11889.997	21.770	0.000	42.599	-0.000	21.770	0.000	0.000	42.599	41.891	-0.967	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13500.000	90.000	179.657	11889.997	21.939	0.000	42.697	-0.000	21.939	0.000	0.000	42.697	41.901	-1.457	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13600.000	90.000	179.657	11889.997	22.116	0.000	42.802	-0.000	22.116	0.000	0.000	42.803	41.911	-1.837	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13700.000	90.000	179.657	11889.997	22.301	0.000	42.915	-0.000	22.301	0.000	0.000	42.916	41.923	-2.130	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13800.000	90.000	179.657	11889.997	22.494	0.000	43.035	-0.000	22.494	0.000	0.000	43.037	41.935	-2.354	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
13900.000	90.000	179.657	11889.997	22.695	0.000	43.163	-0.000	22.695	0.000	0.000	43.165	41.947	-2.524	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14000.000	90.000	179.657	11889.997	22.902	0.000	43.299	-0.000	22.902	0.000	0.000	43.301	41.960	-2.652	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14100.000	90.000	179.657	11889.997	23.117	0.000	43.441	-0.000	23.117	0.000	0.000	43.444	41.974	-2.746	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14200.000	90.000	179.657	11889.997	23.338	0.000	43.591	-0.000	23.338	0.000	0.000	43.594	41.989	-2.814	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14300.000	90.000	179.657	11889.997	23.567	0.000	43.749	-0.000	23.567	0.000	0.000	43.752	42.004	-2.861	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14400.000	90.000	179.657	11889.997	23.801	0.000	43.913	-0.000	23.801	0.000	0.000	43.917	42.021	-2.890	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14500.000	90.000	179.657	11889.997	24.042	0.000	44.084	-0.000	24.042	0.000	0.000	44.088	42.037	-2.906	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14600.000	90.000	179.657	11889.997	24.289	0.000	44.263	-0.000	24.289	0.000	0.000	44.267	42.055	-2.912	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14700.000	90.000	179.657	11889.997	24.542	0.000	44.448	-0.000	24.542	0.000	0.000	44.452	42.073	-2.909	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14800.000	90.000	179.657	11889.997	24.801	0.000	44.640	-0.000	24.801	0.000	0.000	44.645	42.092	-2.900	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
14900.000	90.000	179.657	11889.997	25.065	0.000	44.839	-0.000	25.065	0.000	0.000	44.844	42.111	-2.885	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15000.000	90.000	179.657	11889.997	25.335	0.000	45.044	-0.000	25.335	0.000	0.000	45.049	42.132	-2.865	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15100.000	90.000	179.657	11889.997	25.610	0.000	45.256	-0.000	25.610	0.000	0.000	45.261	42.153	-2.843	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15200.000	90.000	179.657	11889.997	25.890	0.000	45.474	-0.000	25.890	0.000	0.000	45.480	42.174	-2.818	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15300.000	90.000	179.657	11889.997	26.175	0.000	45.699	-0.000	26.175	0.000	0.000	45.705	42.197	-2.791	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15400.000	90.000	179.657	11889.997	26.465	0.000	45.930	-0.000	26.465	0.000	0.000	45.936	42.220	-2.762	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15500.000	90.000	179.657	11889.997	26.759	0.000	46.167	-0.000	26.759	0.000	0.000	46.173	42.243	-2.733	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15600.000	90.000	179.657	11889.997	27.058	0.000	46.410	-0.000	27.058	0.000	0.000	46.416	42.268	-2.702	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15700.000	90.000	179.657	11889.997	27.361	0.000	46.659	-0.000	27.361	0.000	0.000	46.666	42.293	-2.671	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15800.000	90.000	179.657	11889.997	27.668	0.000	46.914	-0.000	27.668	0.000	0.000	46.921	42.319	-2.640	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
15900.000	90.000	179.657	11889.997	27.979	0.000	47.174	-0.000	27.979	0.000	0.000	47.182	42.345	-2.609	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16000.000	90.000	179.657	11889.997	28.294	0.000	47.441	-0.000	28.294	0.000	0.000	47.448	42.372	-2.578	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16100.000	90.000	179.657	11889.997	28.612	0.000	47.713	-0.000	28.612	0.000	0.000	47.720	42.400	-2.547	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16200.000	90.000	179.657	11889.997	28.935	0.000	47.990	-0.000	28.935	0.000	0.000	47.998	42.429	-2.516	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16300.000	90.000	179.657	11889.997	29.261	0.000	48.273	-0.000	29.261	0.000	0.000	48.281	42.458	-2.486	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22

16400.000	90.000	179.657	11889.997	29.590	0.000	48.562	-0.000	29.590	0.000	0.000	48.569	42.488	-2.455	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16500.000	90.000	179.657	11889.997	29.922	0.000	48.855	-0.000	29.922	0.000	0.000	48.863	42.518	-2.426	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16600.000	90.000	179.657	11889.997	30.258	0.000	49.153	-0.000	30.258	0.000	0.000	49.161	42.549	-2.397	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16700.000	90.000	179.657	11889.997	30.597	0.000	49.457	-0.000	30.597	0.000	0.000	49.465	42.581	-2.368	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16800.000	90.000	179.657	11889.997	30.939	0.000	49.766	-0.000	30.939	0.000	0.000	49.774	42.614	-2.340	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
16900.000	90.000	179.657	11889.997	31.283	0.000	50.079	-0.000	31.283	0.000	0.000	50.087	42.647	-2.312	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17000.000	90.000	179.657	11889.997	31.630	0.000	50.397	-0.000	31.630	0.000	0.000	50.405	42.681	-2.285	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17100.000	90.000	179.657	11889.997	31.981	0.000	50.720	-0.000	31.981	0.000	0.000	50.728	42.715	-2.258	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17200.000	90.000	179.657	11889.997	32.333	0.000	51.047	-0.000	32.333	0.000	0.000	51.055	42.750	-2.232	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17300.000	90.000	179.657	11889.997	32.688	0.000	51.379	-0.000	32.688	0.000	0.000	51.387	42.786	-2.206	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17400.000	90.000	179.657	11889.997	33.046	0.000	51.715	-0.000	33.046	0.000	0.000	51.723	42.822	-2.181	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17500.000	90.000	179.657	11889.997	33.406	0.000	52.056	-0.000	33.406	0.000	0.000	52.064	42.860	-2.157	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17600.000	90.000	179.657	11889.997	33.768	0.000	52.400	-0.000	33.768	0.000	0.000	52.409	42.897	-2.133	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17700.000	90.000	179.657	11889.997	34.132	0.000	52.749	-0.000	34.132	0.000	0.000	52.758	42.936	-2.109	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17800.000	90.000	179.657	11889.997	34.499	0.000	53.102	-0.000	34.499	0.000	0.000	53.111	42.975	-2.086	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
17900.000	90.000	179.657	11889.997	34.868	0.000	53.459	-0.000	34.868	0.000	0.000	53.468	43.015	-2.064	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18000.000	90.000	179.657	11889.997	35.238	0.000	53.820	-0.000	35.238	0.000	0.000	53.828	43.055	-2.042	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18100.000	90.000	179.657	11889.997	35.611	0.000	54.185	-0.000	35.611	0.000	0.000	54.193	43.096	-2.020	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18200.000	90.000	179.657	11889.997	35.985	0.000	54.553	-0.000	35.985	0.000	0.000	54.562	43.137	-1.999	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18300.000	90.000	179.657	11889.997	36.362	0.000	54.925	-0.000	36.362	0.000	0.000	54.934	43.180	-1.979	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18400.000	90.000	179.657	11889.997	36.740	0.000	55.301	-0.000	36.740	0.000	0.000	55.309	43.223	-1.959	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18500.000	90.000	179.657	11889.997	37.119	0.000	55.680	-0.000	37.119	0.000	0.000	55.689	43.266	-1.939	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18600.000	90.000	179.657	11889.997	37.501	0.000	56.063	-0.000	37.501	0.000	0.000	56.071	43.310	-1.920	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18700.000	90.000	179.657	11889.997	37.884	0.000	56.449	-0.000	37.884	0.000	0.000	56.457	43.355	-1.901	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18800.000	90.000	179.657	11889.997	38.268	0.000	56.838	-0.000	38.268	0.000	0.000	56.847	43.401	-1.882	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
18900.000	90.000	179.657	11889.997	38.655	0.000	57.231	-0.000	38.655	0.000	0.000	57.239	43.447	-1.864	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19000.000	90.000	179.657	11889.997	39.042	0.000	57.627	-0.000	39.042	0.000	0.000	57.635	43.493	-1.847	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19100.000	90.000	179.657	11889.997	39.431	0.000	58.026	-0.000	39.431	0.000	0.000	58.034	43.541	-1.829	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19200.000	90.000	179.657	11889.997	39.822	0.000	58.428	-0.000	39.822	0.000	0.000	58.436	43.588	-1.812	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19300.000	90.000	179.657	11889.997	40.213	0.000	58.833	-0.000	40.213	0.000	0.000	58.841	43.637	-1.796	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19400.000	90.000	179.657	11889.997	40.606	0.000	59.241	-0.000	40.606	0.000	0.000	59.249	43.686	-1.779	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19500.000	90.000	179.657	11889.997	41.001	0.000	59.651	-0.000	41.001	0.000	0.000	59.660	43.736	-1.764	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19600.000	90.000	179.657	11889.997	41.396	0.000	60.065	-0.000	41.396	0.000	0.000	60.073	43.786	-1.748	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19700.000	90.000	179.657	11889.997	41.793	0.000	60.481	-0.000	41.793	0.000	0.000	60.490	43.837	-1.733	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22

19800.000	90.000	179.657	11889.997	42.191	0.000	60.900	-0.000	42.191	0.000	0.000	60.909	43.889	-1.718	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
19900.000	90.000	179.657	11889.997	42.590	0.000	61.322	-0.000	42.590	0.000	0.000	61.330	43.941	-1.703	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20000.000	90.000	179.657	11889.997	42.990	0.000	61.746	-0.000	42.990	0.000	0.000	61.755	43.994	-1.689	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20100.000	90.000	179.657	11889.997	43.391	0.000	62.173	-0.000	43.391	0.000	0.000	62.182	44.047	-1.675	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20200.000	90.000	179.657	11889.997	43.793	0.000	62.602	-0.000	43.793	0.000	0.000	62.611	44.101	-1.661	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20300.000	90.000	179.657	11889.997	44.197	0.000	63.034	-0.000	44.197	0.000	0.000	63.043	44.156	-1.647	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20400.000	90.000	179.657	11889.997	44.601	0.000	63.468	-0.000	44.601	0.000	0.000	63.477	44.211	-1.634	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20500.000	90.000	179.657	11889.997	45.006	0.000	63.905	-0.000	45.006	0.000	0.000	63.913	44.267	-1.621	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20600.000	90.000	179.657	11889.997	45.412	0.000	64.344	-0.000	45.412	0.000	0.000	64.352	44.323	-1.608	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20700.000	90.000	179.657	11889.997	45.819	0.000	64.784	-0.000	45.819	0.000	0.000	64.793	44.380	-1.596	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20800.000	90.000	179.657	11889.997	46.227	0.000	65.228	-0.000	46.227	0.000	0.000	65.236	44.437	-1.583	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
20900.000	90.000	179.657	11889.997	46.636	0.000	65.673	-0.000	46.636	0.000	0.000	65.681	44.495	-1.571	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21000.000	90.000	179.657	11889.997	47.045	0.000	66.120	-0.000	47.045	0.000	0.000	66.129	44.554	-1.559	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21100.000	90.000	179.657	11889.997	47.456	0.000	66.570	-0.000	47.456	0.000	0.000	66.578	44.613	-1.548	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21200.000	90.000	179.657	11889.997	47.867	0.000	67.021	-0.000	47.867	0.000	0.000	67.030	44.673	-1.536	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21300.000	90.000	179.657	11889.997	48.279	0.000	67.475	-0.000	48.279	0.000	0.000	67.483	44.734	-1.525	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21400.000	90.000	179.657	11889.997	48.692	0.000	67.930	-0.000	48.692	0.000	0.000	67.938	44.795	-1.514	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21500.000	90.000	179.657	11889.997	49.105	0.000	68.388	-0.000	49.105	0.000	0.000	68.396	44.856	-1.503	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21600.000	90.000	179.657	11889.997	49.520	0.000	68.847	-0.000	49.520	0.000	0.000	68.855	44.918	-1.493	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21700.000	90.000	179.657	11889.997	49.934	0.000	69.308	-0.000	49.934	0.000	0.000	69.316	44.981	-1.482	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21800.000	90.000	179.657	11889.997	50.350	0.000	69.771	-0.000	50.350	0.000	0.000	69.779	45.044	-1.472	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
21900.000	90.000	179.657	11889.997	50.766	0.000	70.235	-0.000	50.766	0.000	0.000	70.243	45.108	-1.462	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22000.000	90.000	179.657	11889.997	51.183	0.000	70.702	-0.000	51.183	0.000	0.000	70.710	45.172	-1.452	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22100.000	90.000	179.657	11889.997	51.601	0.000	71.170	-0.000	51.601	0.000	0.000	71.177	45.237	-1.442	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22200.000	90.000	179.657	11889.997	52.019	0.000	71.639	-0.000	52.019	0.000	0.000	71.647	45.303	-1.433	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22300.000	90.000	179.657	11889.997	52.438	0.000	72.111	-0.000	52.438	0.000	0.000	72.118	45.369	-1.423	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22400.000	90.000	179.657	11889.997	52.857	0.000	72.583	-0.000	52.857	0.000	0.000	72.591	45.435	-1.414	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22500.000	90.000	179.657	11889.997	53.277	0.000	73.058	-0.000	53.277	0.000	0.000	73.066	45.502	-1.405	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22600.000	90.000	179.657	11889.997	53.697	0.000	73.534	-0.000	53.697	0.000	0.000	73.542	45.570	-1.396	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22700.000	90.000	179.657	11889.997	54.118	0.000	74.011	-0.000	54.118	0.000	0.000	74.019	45.638	-1.387	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22800.000	90.000	179.657	11889.997	54.540	0.000	74.490	-0.000	54.540	0.000	0.000	74.498	45.707	-1.378	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
22900.000	90.000	179.657	11889.997	54.962	0.000	74.971	-0.000	54.962	0.000	0.000	74.978	45.776	-1.370	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
23000.000	90.000	179.657	11889.997	55.385	0.000	75.452	-0.000	55.385	0.000	0.000	75.460	45.846	-1.361	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22
23100.000	90.000	179.657	11889.997	55.808	0.000	75.936	-0.000	55.808	0.000	0.000	75.943	45.916	-1.353	MWD+IFR1+SAG+MS+GS_XTO_PLU	TD_22

23200.000	90.000	179.657	11889.997	56.231	0.000	76.420	-0.000	56.231	0.000	0.000	76.428	45.987	-1.345	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23300.000	90.000	179.657	11889.997	56.655	0.000	76.906	-0.000	56.655	0.000	0.000	76.913	46.058	-1.337	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23400.000	90.000	179.657	11889.997	57.080	0.000	77.393	-0.000	57.080	0.000	0.000	77.401	46.130	-1.329	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23500.000	90.000	179.657	11889.997	57.505	0.000	77.882	-0.000	57.505	0.000	0.000	77.889	46.202	-1.321	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23600.000	90.000	179.657	11889.997	57.930	0.000	78.371	-0.000	57.930	0.000	0.000	78.379	46.275	-1.314	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23700.000	90.000	179.657	11889.997	58.356	0.000	78.862	-0.000	58.356	0.000	0.000	78.870	46.349	-1.306	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23800.000	90.000	179.657	11889.997	58.782	0.000	79.355	-0.000	58.782	0.000	0.000	79.362	46.423	-1.299	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
23900.000	90.000	179.657	11889.997	59.209	0.000	79.848	-0.000	59.209	0.000	0.000	79.855	46.497	-1.292	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24000.000	90.000	179.657	11889.997	59.636	0.000	80.343	-0.000	59.636	0.000	0.000	80.350	46.572	-1.284	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24100.000	90.000	179.657	11889.997	60.064	0.000	80.838	-0.000	60.064	0.000	0.000	80.845	46.647	-1.277	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24200.000	90.000	179.657	11889.997	60.492	0.000	81.335	-0.000	60.492	0.000	0.000	81.342	46.723	-1.270	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24300.000	90.000	179.657	11889.997	60.920	0.000	81.833	-0.000	60.920	0.000	0.000	81.840	46.800	-1.263	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24400.000	90.000	179.657	11889.997	61.349	0.000	82.332	-0.000	61.349	0.000	0.000	82.339	46.877	-1.257	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24500.000	90.000	179.657	11889.997	61.778	0.000	82.832	-0.000	61.778	0.000	0.000	82.839	46.954	-1.250	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24600.000	90.000	179.657	11889.997	62.207	0.000	83.333	-0.000	62.207	0.000	0.000	83.340	47.032	-1.243	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24700.000	90.000	179.657	11889.997	62.637	0.000	83.836	-0.000	62.637	0.000	0.000	83.843	47.111	-1.237	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22
24735.650	90.000	179.657	11889.997	62.790	0.000	84.014	-0.000	62.790	0.000	0.000	84.021	47.139	-1.235	MWD+IFR1+SAG+MS+GS_XTO_PLUDDTD_22

Poker Lake Unit 22 DTD South 145H

Plan Targets

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 5	12097.24	440459.30	641692.10	8452.00	RECTANGLE
SHL 16	13312.56	439638.38	641266.46	7763.17	RECTANGLE
LTP 5	24645.09	427476.30	641769.90	8452.00	RECTANGLE
BHL 5	24735.10	427386.30	641770.80	8452.00	RECTANGLE

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	NMNM02862
LOCATION:	Sec. 22, T.24 S, R 30 E
COUNTY:	Eddy County, New Mexico ▼
WELL NAME & NO.:	Poker Lake Unit 22 DTD 145H
SURFACE HOLE FOOTAGE:	916'/N & 173'/W
BOTTOM HOLE FOOTAGE:	2627'/N & 585'W

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-Q	<input type="checkbox"/> Open Annulus <input type="checkbox"/> WIPP
	Choose an option (including blank option.)			
Cave / Karst	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input 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 checked="" type="checkbox"/> Primary Squeeze	<input type="checkbox"/> Cont. Squeeze	<input checked="" type="checkbox"/> EchoMeter	<input type="checkbox"/> DV Tool
Special Req	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input checked="" type="checkbox"/> Unit
Waste Prev.	<input type="radio"/> Self-Certification	<input type="radio"/> Waste Min. Plan	<input checked="" type="radio"/> APD Submitted prior to 06/10/2024	
Additional Language	<input checked="" type="checkbox"/> Flex Hose	<input checked="" type="checkbox"/> Casing Clearance	<input type="checkbox"/> Pilot Hole	<input checked="" type="checkbox"/> Break Testing
	<input type="checkbox"/> Four-String	<input checked="" type="checkbox"/> Offline Cementing	<input type="checkbox"/> Fluid-Filled	

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 **800** 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.

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

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 6498'**.
 - 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.

Operator has proposed to pump down **Surface X Intermediate 1** 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 Surface casing to tieback requirements listed above 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. Operator must use a limited flush fluid volume of 1 bbl following backside cementing procedures.

If cement does not reach surface, the next casing string must come to surface.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is: Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

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. **(This is not necessary for secondary recovery unit wells)**

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 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 **(575-361-2822 Eddy County)** 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 **43 CFR 3172**.
- 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.

Engineer may elect to vary this language. Speak with Chris about implementing changes and whether that change seems reasonable.

Casing Clearance

String does not meet 0.422" clearance requirement per 43 CFR 3172. Cement tieback requirement increased 100' for Production casing tieback. Operator may contact approving engineer to discuss changing casing set depth or grade to meet clearance requirement.

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)

Contact Eddy County Petroleum Engineering Inspection Staff:

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

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
 - i. Notify the BLM when moving in and removing the Spudder Rig.
 - ii. 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.
 - iii. BOP/BOPE test to be conducted per **43 CFR 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. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

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 of both lead and tail cement, 2) until cement has been in place at least 8 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-Q 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 3172**.
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:
 - i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - ii. 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.
 - iii. Manufacturer representative shall install the test plug for the initial BOP test.
 - iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
 - v. 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.
 - i. 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).
 - ii. 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.)

- iii. 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 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 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. 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.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. 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.
- vii. 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.
- viii. 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 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.

Approved by Zota Stevens on 10/6/2024
575-234-5998 / zstevens@blm.gov



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:

Will Dacus, Drilling Manager	832-948-5021
Brian Dunn, Drilling Supervisor	832-653-0490
Robert Bartels, Construction Execution Planner	406-478-3617
Andy Owens, EH & S Manager	903-245-2602
Frank Fuentes, Production Foreman	575-689-3363

SHERIFF DEPARTMENTS:

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

NEW MEXICO STATE POLICE:

575-392-5588

FIRE DEPARTMENTS:

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

HOSPITALS:

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

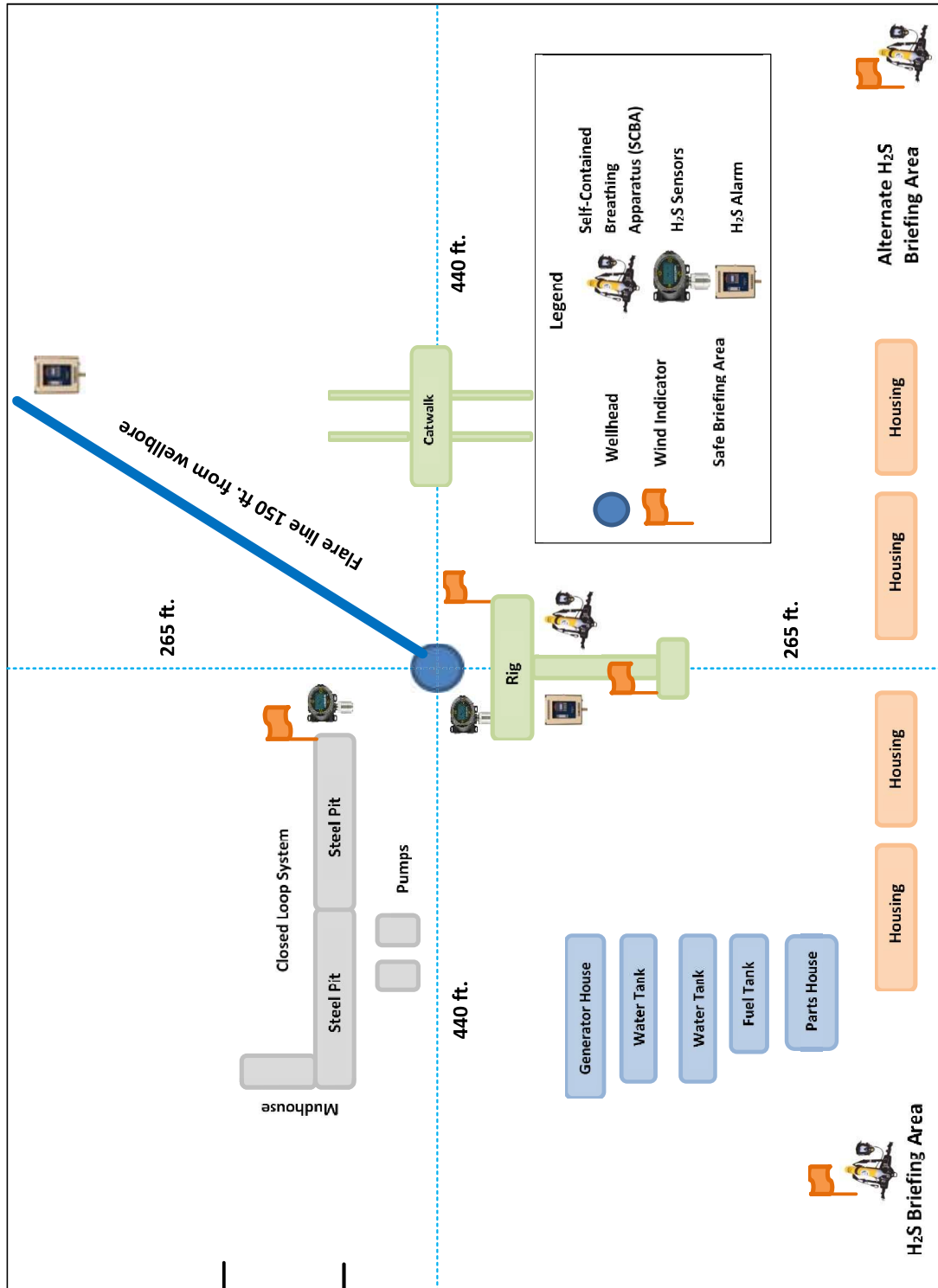
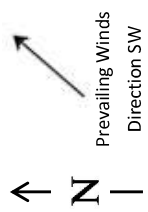
AGENT NOTIFICATIONS:**For Lea County:**

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

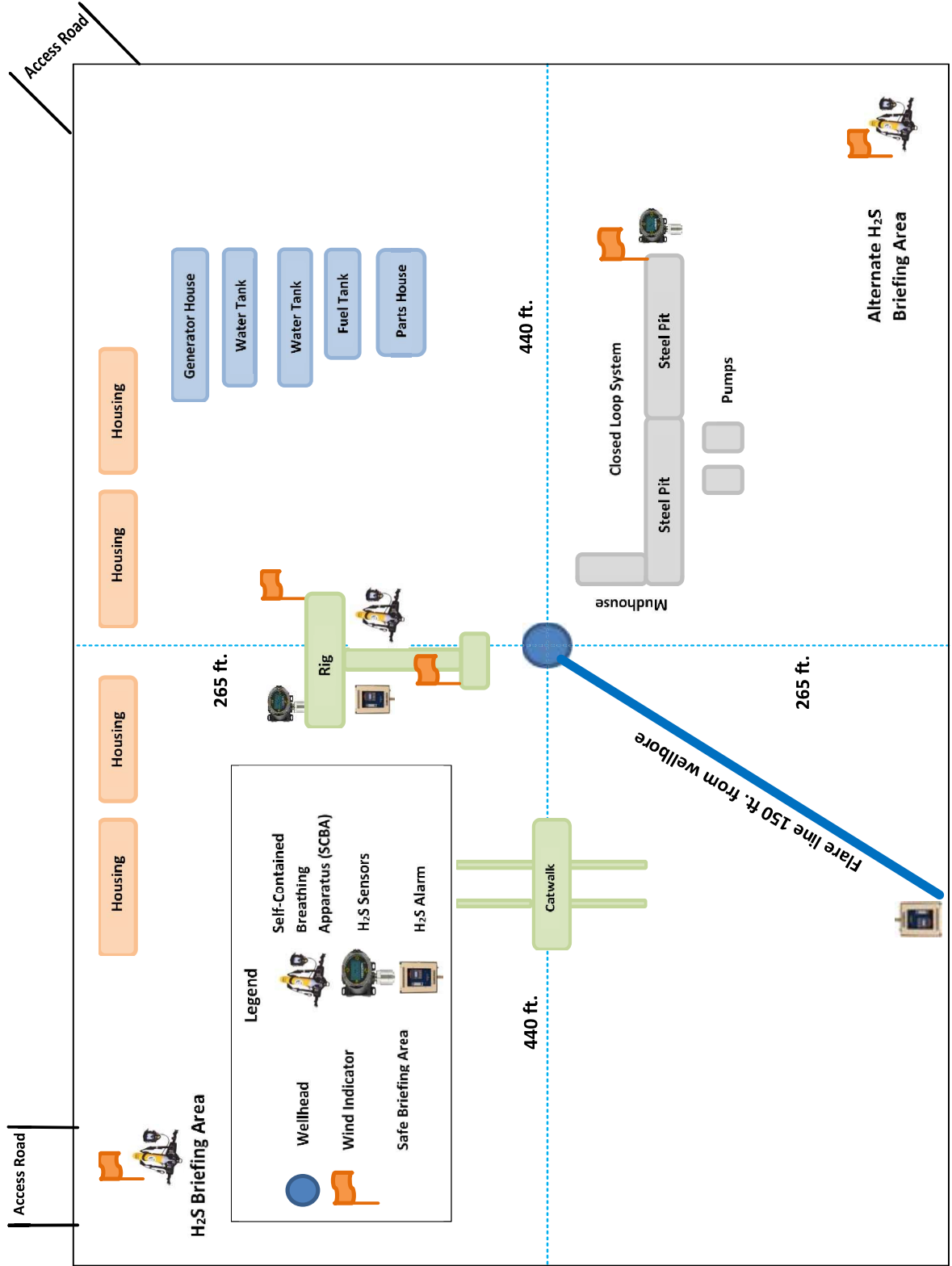
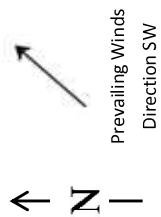
For Eddy County:

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

H2S Briefing Areas and Alarm Locations



H2S Briefing Areas and Alarm Locations



Operator Name: XTO PERMIAN OPERATING LLC**Well Name:** POKER LAKE UNIT 22 DTD**Well Number:** 145H**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:****Section 9 - Well Site****Well Site Layout Diagram:**

Poker_Lake_Unit_22_DTD_145H_Well_20240407152948.pdf

Comments: Multi-well pad.

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 22 DTD

Well Number: 145H

Section 10 - Plans for Surface Reclamation

Type of disturbance: No New Surface Disturbance Multiple Well Pad Name: POKER LAKE UNIT 22 DTD

Multiple Well Pad Number: A

Recontouring

PLU_22_DTD_IR1_20240330135315.pdf

PLU_22_DTD_IR2_20240330135315.pdf

PLU_22_DTD_IR3_20240330135315.pdf

PLU_22_DTD_IR4_20240330135315.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 gully, 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 species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation

Existing Vegetation at the well pad: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona~Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility

Existing Vegetation at the well pad

Operator Name: XTO PERMIAN OPERATING LLC**Well Name:** POKER LAKE UNIT 22 DTD**Well Number:** 145H

Existing Vegetation Community at the road: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona~Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona~Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: Soils are classified as Simona Gravelly Fine Sandy Loam and Simona-Bippus Complex. Simona soils are found on alluvial fans and plans and form in mixed alluvium and/or Aeolian sands. Bippus soils are found on alluvial fans and floodplains and form in mixed alluvium. The Simona~Bippus soils are dominant to the east and the Simona Gravelly Fine Sandy Loams are dominant to the West. Dominant vegetation species include: mesquite, sumac snakeweed, and various forbs and grasses. Ground cover is minimal, offering 90 percent visibility

Existing Vegetation Community at other disturbances**Non native seed used?** N**Non native seed description:****Seedling transplant description:****Will seedlings be transplanted for this project?** N**Seedling transplant description****Will seed be harvested for use in site reclamation?** N**Seed harvest description:****Seed harvest description attachment:****Seed****Seed Table****Seed Summary****Total pounds/Acre:****Seed Type****Pounds/Acre****Seed reclamation****Operator Contact/Responsible Official**

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 395271

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID:
	373075
	Action Number:
	395271
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	10/28/2024
ward.rikala	Will require a File As Drilled C-102 and a Directional Survey with the C-104	10/28/2024
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	10/28/2024
ward.rikala	Cement is required to circulate on both surface and intermediate1 strings of casing	10/28/2024
ward.rikala	If cement does not circulate on any string, a CBL is required for that string of casing	10/28/2024
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	10/28/2024