

Application for Permit to Drill

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

Date Printed: 10/18/2024 01:30 PM

APD Package Report

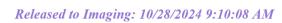
APD ID: 10400098108 Well Status: AAPD

APD Received Date: 04/17/2024 07:36 AM Well Name: POKER LAKE UNIT 22 DTD

Operator: XTO PERMIAN OPERATING LLC Well Number: 153H

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: 8 file(s)
 - -- Other Variances: 3 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 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM02862 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER 1a. Type of work: NMNM071016X/POKER LAKE UNIT 1b. Type of Well: Oil Well ✓ Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing ✓ Single Zone Multiple Zone POKER LAKE UNIT 22 DTD 153H 2. Name of Operator 9. API Well No. XTO PERMIAN OPERATING LLC 30-015-55584 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory PURPLE SAGE/WOLFCAMP (GAS) 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND, TX 7970 (432) 683-2277 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 22/T24S/R30E/NMP At surface NWNE / 414 FNL / 1946 FEL / LAT 32.20943 / LONG -103.866571 At proposed prod. zone SWNE / 2627 FNL / 2088 FEL / LAT 32.174365 / LONG -103.866961 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office* **EDDY** NM 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 414 feet location to nearest 1600.0 property or lease line, ft. (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 12090 feet / 24862 feet FED: COB000050 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3414 feet 03/16/2025 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 2. A Drilling Plan. Item 20 above). 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 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 25. Signature Name (Printed/Typed) Date (Electronic Submission) RICHARD REDUS / Ph: (432) 682-8873 04/17/2024 Title Permitting Manager Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) 10/18/2024 CODY LAYTON / Ph: (575) 234-5959 Title Office Assistant Field Manager Lands & Minerals 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

APPROVED WITH CONDITIONS Released to Imaging: 10/28/2024 9:10:08 AM Approval Date: 10/18/2024

(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 wen, 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 directionany 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 wen 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 win 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 conects this information to anow 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

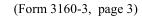
Additional Operator Remarks

Location of Well

0. SHL: NWNE / 414 FNL / 1946 FEL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.20943 / LONG: -103.866571 (TVD: 0 feet, MD: 0 feet)
PPP: NWNE / 100 FNL / 2089 FEL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.21029 / LONG: -103.867033 (TVD: 12090 feet, MD: 12600 feet)
PPP: NWSE / 2635 FSL / 2082 FEL / TWSP: 24S / RANGE: 30E / SECTION: 22 / LAT: 32.203318 / LONG: -103.867019 (TVD: 12090 feet, MD: 15300 feet)
BHL: SWNE / 2627 FNL / 2088 FEL / TWSP: 24S / RANGE: 30E / SECTION: 34 / LAT: 32.174365 / LONG: -103.866961 (TVD: 12090 feet, MD: 24862 feet)

BLM Point of Contact

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



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.



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

| Revised July 9, 2024 | | | | | | |
|-----------------------|--|--|--|--|--|--|
| Submit Electronically | | | | | | |
| via OCD Permitting | | | | | | |
| tial Submittal | | | | | | |
| 1 1D 4 | | | | | | |

⊠ Ini Submittal ☐ Amended Report Type: ☐ As Drilled

WELL LOCATION INFORMATION

| API Number 30-015-55584 | Pool Code 98220 | Pool Name PURPLE SAGE/WOLFCAMP (GAS) | |
|---|--|--|--------------------------------------|
| Property Code 333192 | Property Name POKER LAKE UNIT 22 DTD | | Well Number 153H |
| OGRID No. 373075 | Operator Name XTO PERMIAN OPERATING LLC | | Ground Level Elevation 3,414 feet |
| Surface Owner: □ State □ Fee □ Tribal 🗷 Federal | | Mineral Owner: ☐ State ☐ Fee ☐ Tribal 🗷 Fe | ederal |

Surface Location

| UL | Section | Township | Range | Lot | Ft. from N/S | Ft. from E/W | Latitude | Longitude | County |
|----|----------------------|----------|-------|-----|--------------|--------------|-----------|-------------|--------|
| В | 22 | 24S | 30E | | 414 FNL | 1946 FEL | 32.209430 | -103.866571 | EDDY |
| | Bottom Hole Location | | | | | | | | |
| UL | Section | Township | Range | Lot | Ft. from N/S | Ft. from E/W | Latitude | Longitude | County |
| G | 34 | 24S | 30E | | 2627 FNL | 2088 FEL | 32.174365 | -103.866961 | 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: Yes □No |

Kick Off Point (KOP)

| UL | Section | Township | Range | Lot | Ft. from N/S | Ft. from E/W | Latitude | Longitude | County |
|----|---------|----------|-------|-----|--------------|--------------|-----------|-------------|--------|
| В | 22 | 24S | 30E | | 414 FNL | 1946 FEL | 32.209430 | -103.866571 | EDDY |
| | | | | | First Take | Point (FTP) | | | |
| UL | Section | Township | Range | Lot | Ft. from N/S | Ft. from E/W | Latitude | Longitude | County |
| В | 22 | 24S | 30E | | 100 FNL | 2,089 FEL | 32.210290 | -103.867033 | EDDY |
| • | • | • | | | Last Take | Point (LTP) | • | | _ |
| UL | Section | Township | Range | Lot | Ft. from N/S | Ft. from E/W | Latitude | Longitude | County |
| Н | 34 | 24S | 30E | | 2,537 FNL | 2,088 FEL | 32.174612 | -103.866963 | EDDY |

| Unitized Area or Area of Uniform Interest NMNM105422429 | Spacing Unit Type 🗷 Horizontal 🗆 Vertical | Ground Floor Elevation 3,414 feet |
|--|---|-----------------------------------|

my belief.

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.

10/22/2024 Terra Debastian Signature Terra Sebastian

Please See Below

Signature and Seal of Professional Surveyor

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

Certificate Number Date of Survey

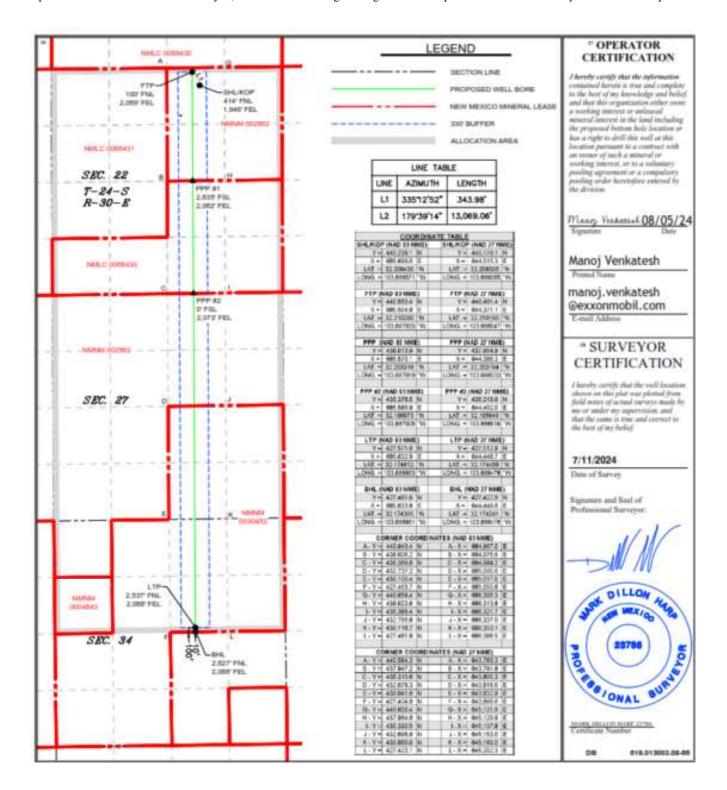
Printed Name

terra.b.sebastian@exxonmobil.com Email Address

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: | <u>373075</u> | Date: <u>09 / 16 / 2024</u> |
|--------------------------|--|---------------------|------------------|------------------------------------|
| II. Type: ⊠ Original | \square Amendment due to \square 19.15.27.9. | D(6)(a) NMAC □ 19.1 | 5.27.9.D(6)(b) N | NMAC □ Other. |
| If Other, please describ | be: | | | |

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 | 3 yr | Anticipated | 3 yr | Anticipated | 3 yr |
|-----------------------------------|-----|-----------------|------------------------|-------------|-------------------------------|--------------|-------------------------------------|----------------------------|---------------------------------|
| | | | | Oil BBL/D | Anticipated decline Oil BBL/D | Gas MCF/D | Anticipated decline Gas MCF/D | Produced Water BBL/D | 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.

| proposed to be recomple | | | | * 1 | | T |
|---|-------------|------------|------------|-------------------|--------------|------------------|
| Well Name | API | Spud Date | TD Reached | Completion | Initial Flow | First Production |
| | | | Date | Commencement Date | Back Date | Date |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | TBD | TBD | TBD | TBD | TBD |
| 103H | <u>I DD</u> | 100 | 100 | <u>100</u> | <u>100</u> | 100 |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | TBD | TBD | TBD | TBD | TBD |
| 106H | 100 | 100 | 100 | 100 | 100 | 100 |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | TBD | TBD | TBD | TBD | TBD |
| 907H | | | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | TBD | TBD | TBD | TBD | TBD |
| 145H | | | | | | |
| Poker Lake Unit 22 DTD | TBD | TBD | TBD | TBD | TBD | TBD |
| 153H | | | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | TBD | TBD | TBD | <u>TBD</u> |
| 194H | | | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | TBD | TBD | TBD | TBD | TBD |
| 197H | | | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | TBD | <u>TBD</u> | TBD | TBD |
| 201H | <u> </u> | <u></u> | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | TBD | <u>TBD</u> | TBD | TBD |
| 202H | | | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> |
| 203H | | | | | | |
| | | | | | | |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> |
| 204H | | | | | | |
| D. I. | | | | | | |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> |
| 205H | | | | | | |
| Dalam Lala Hair 22 DED | TEDD | TDD | TERR | TEN D | TDD | TDD |
| Poker Lake Unit 22 DTD | TBD | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> |
| 401H | | | | | | |
| Poker Lake Unit 22 DTD | TDD | TDD | TDD | TDD | TDD | TDD |
| 402H | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> |
| 40211 | | | | | | |
| Poker Lake Unit 22 DTD | TDD | TDD | TDD | TDD | TDD | TDD |
| 403H | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> | <u>TBD</u> |
| 70311 | | | | | | |
| | | l . | <u> </u> | | | 1 |

| 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> | TBD | <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 <u>EFFECTIVE APRIL 1, 2022</u>

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 | Available Maximum Daily Capacity |
|----------|--------|-----------------|-----------------------|----------------------------------|
| | | | Start Date | of System Segment Tie-in |
| | | | | |
| | | | | |

XI. Map. \square 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 \boxtimes will \square 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 \Box does \Box 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.

Page 3 of 6

XIV. Confidentiality: \square 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 <u>Effective May 25, 2021</u>

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. \square 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:

- power generation on lease; (a)
- **(b)** power generation for grid;
- compression on lease; (c)
- liquids removal on lease; (d)
- reinjection for underground storage; (e)
- reinjection for temporary storage; **(f)**
- reinjection for enhanced oil recovery; **(g)**
- fuel cell production; and (h)
- **(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:
- Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become (a) 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
- 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 infeasible, 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 LLCwill 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

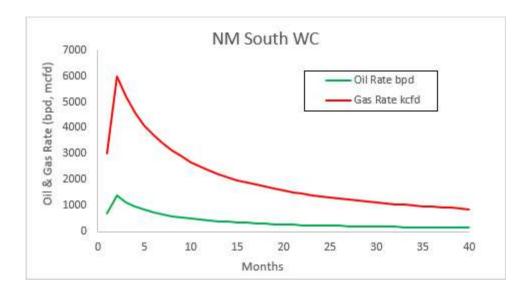
• Conduct and document AVO inspections on the frequency set forth in Part 27 to detect and repair any onsite leaks as quickly and efficiently as is feasible.

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: Samantha Weis |
|---|
| 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: |
| |
| |
| |
| |





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

Drilling Plan Data Report 10/18/2024

APD ID: 10400098108

Submission Date: 04/17/2024

Highlighted data reflects the most recent changes

Operator Name: XTO PERMIAN OPERATING LLC

Well Number: 153H

Well Type: CONVENTIONAL GAS WELL

Well Name: POKER LAKE UNIT 22 DTD

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 |
|--------------|-----------------|-----------|---------------|-------------------|-------------------------|--|-----------------------|
| 14339017 | QUATERNARY | 3414 | 0 | 0 | ALLUVIUM | USEABLE WATER | N |
| 14339018 | RUSTLER | 2283 | 1131 | 1131 | ANHYDRITE, SANDSTONE | USEABLE WATER | N |
| 14339019 | SALADO | 1880 | 1534 | 1534 | SALT | NONE | N |
| 14339020 | BASE OF SALT | -313 | 3727 | 3727 | SALT | NONE | N |
| 14339021 | DELAWARE | -507 | 3921 | 3921 | LIMESTONE, SANDSTONE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | N |
| 14339015 | BRUSHY CANYON | -3053 | 6467 | 6467 | SANDSTONE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | N |
| 14339022 | BONE SPRING | -4377 | 7791 | 7791 | LIMESTONE, SANDSTONE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | N |
| 14339023 | BONE SPRING 1ST | -5086 | 8500 | 8500 | LIMESTONE, SANDSTONE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | N |
| 14339024 | BONE SPRING 2ND | -5671 | 9085 | 9085 | LIMESTONE, SANDSTONE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | N |
| 14339014 | BONE SPRING 3RD | -6497 | 9911 | 9911 | LIMESTONE, SANDSTONE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | N |
| 14339016 | WOLFCAMP | -8646 | 12060 | 12060 | SANDSTONE, SHALE | NATURAL GAS, OIL, OTHER : PRODUCED WATER | Y |

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M Rating Depth: 12090

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

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

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 BLM 43 CFR 3172

Choke Diagram Attachment:

10MCM_20240806073407.pdf

BOP Diagram Attachment:

5M10M BOP 20240806073414.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 | 12.2 5 | 9.625 | NEW | API | N | 0 | 1231 | 0 | 1231 | 3414 | 2183 | 1231 | J-55 | 40 | BUTT | 5.11 | 1.49 | DRY | 12.7 9 | DRY | 12.7 9 |
| 2 | INTERMED IATE | 8.75 | 7.625 | NEW | API | Υ | 0 | 11185 | 0 | 11174 | 3411 | -7760 | 11185 | L-80 | 29.7 | FJ | 2.14 | 1.34 | DRY | 1.9 | DRY | 1.9 |
| 3 | PRODUCTI ON | 6.75 | 5.5 | NEW | NON API | Υ | 0 | 24862 | 0 | 12090 | 3411 | -8676 | 24862 | P- 110 | | OTHER - Freedom HTQ/Talon HTQ | 1.42 | 1.05 | DRY | 1.9 | DRY | 1.9 |

Casing Attachments

| Casing ID: 1 | String | SURFACE |
|--------------|--------|---------|
| Casilia ib. | Julia | OUN AUL |

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_22_DTD_153H_Csg_20240416125723.pdf

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

Casing Attachments

Casing ID: 2

String

INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

PLU_22_DTD_153H_Csg_20240416131047.pdf

Casing Design Assumptions and Worksheet(s):

PLU_22_DTD_153H_Csg_20240416131211.pdf

Casing ID: 3

String

PRODUCTION

Inspection Document:

Spec Document:

Freedom_semi_premium_5.5_production_casing_20240806074634.pdf Talon___semiflush_5.5_production_casing_20240806074634.pdf

Tapered String Spec:

PLU_22_DTD_153H_Csg_20240416125822.pdf

Casing Design Assumptions and Worksheet(s):

PLU_22_DTD_153H_Csg_20240416125859.pdf

Section 4 - Cement

| String Type | Lead/Tail | Stage Tool Depth | Top MD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|--------------|-----------|---------------------|--------|-----------|--------------|-------|---------|-------|---------|---------------------|-----------|
| SURFACE | Lead | | 0 | 1231 | 310 | 1.87 | 10.5 | 579.7 | 100 | EconoCem- HLTRRC | NA |
| SURFACE | Tail | | 0 | 1231 | 130 | 1.35 | 14.8 | 175.5 | 100 | Class C | 2% CaCl |
| INTERMEDIATE | Lead | | 0 | 6467 | 430 | 1.35 | 14.8 | 580.5 | 100 | Class C | NA |
| INTERMEDIATE | Tail | | 6467 | 1118 5 | 730 | 1.33 | 14.8 | 970.9 | 100 | Class C | NA |

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

| String Type | Lead/Tail | Stage Tool Depth | Тор МD | Bottom MD | Quantity(sx) | Yield | Density | Cu Ft | Excess% | Cement type | Additives |
|-------------|-----------|---------------------|-----------|-----------|--------------|-------|---------|------------|---------|-------------|-----------|
| PRODUCTION | Lead | | 1088 5 | 1138 5 | 20 | 2.69 | 13.2 | 53.8 | 30 | NeoCem | NA |
| PRODUCTION | Tail | | 1138 5 | 2486 2 | 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 (Ibs/gal) | Max Weight (lbs/gal) | Density (lbs/cu ft) | Gel Strength (lbs/100 sqft) | Hd | Viscosity (CP) | Salinity (ppm) | Filtration (cc) | Additional Characteristics |
|-----------|--------------|--------------------|----------------------|----------------------|---------------------|-----------------------------|----|----------------|----------------|-----------------|----------------------------|
| 1118 5 | 2486 2 | OIL-BASED MUD | 12.4 | 12.9 | | | | | | | |
| 3921 | 1118 5 | OTHER : BDE/OBM | 9 | 9.5 | | | | | | | |
| 0 | 1231 | WATER-BASED MUD | 8.4 | 8.9 | | | | | | | |
| 1231 | 3921 | SALT SATURATED | 10.5 | 11 | | | | | | | |

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

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: 7796 Anticipated Surface Pressure: 5136

Anticipated Bottom Hole Temperature(F): 205

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

XTO Energy H2S Plan Updated 20240806073133.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PLU 22 DTD 153H DD 20240416133648.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

PLU 22 DTD 153H Cmt 20240416134059.pdf

PLU_22_DTD_H2S_DiaA_20240806075715.pdf

PLU_22_DTD_H2S_DiaC_20240806075715.pdf

PLU_22_DTD_H2S_DiaB_20240806075716.pdf

PLU 22 DTD H2S DiaD 20240806075715.pdf

PLU 22 DTD MBS 20240806075716.pdf

PLU_22_DTD_153H_RL_20240806075734.pdf

Wild_Well_Control_Plan_10M_Annular_BOP_Variance_20240917090442.pdf

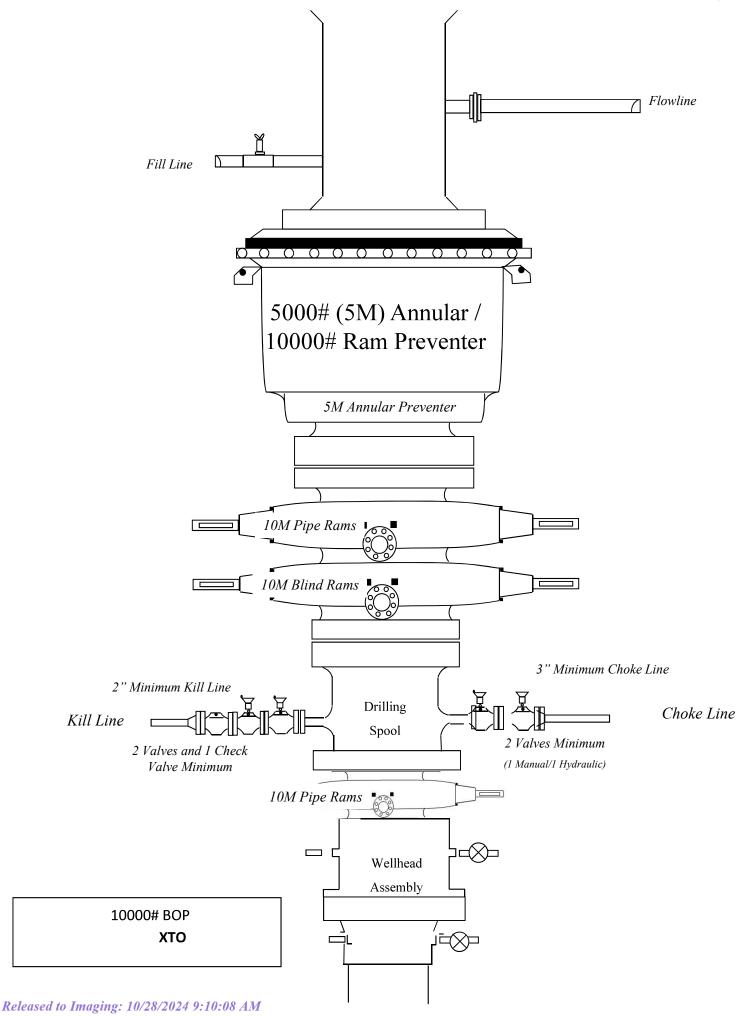
Other Variance attachment:

Spudder Rig Request 20240806075654.pdf

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

Offline_Cement_Variance_Surf___Interm_Csg_20240806075654.pdf

Updated_Flex_Hose_20240806075654.pdf



Casing Assumptions

| Casing Design | | | | | | | | | |
|---------------|-----------------|--------|--------|----------|--------------|----------|-------------|----------------|---------------|
| Hole Size | Depth | OD Csg | Weight | Grade | Collar | New/Used | SF Burst | SF Collapse | SF Tension |
| 12.25 | 0' – 1231' | 9.625 | 40 | J-55 | BTC | New | 1.49 | 5.11 | 12.79 |
| 8.75 | 0' - 4000' | 7.625 | 29.7 | RY P-110 | Flush Joint | New | 1.84 | 2.92 | 1.68 |
| 8.75 | 4000' – 11185' | 7.625 | 29.7 | HC L-80 | Flush Joint | New | 1.34 | 2.14 | 1.90 |
| 6.75 | 0' – 11085' | 5.5 | 20 | RY P-110 | Semi-Premium | New | 1.05 | 1.55 | 1.90 |
| 6.75 | 11085' - 24862' | 5.5 | 20 | RY P-110 | Semi-Flush | New | 1.05 | 1.42 | 1.90 |

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Cement Variance Request

Intermediate Casing:

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (6467') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

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

Production Casing:

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

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

Description of Operations:

- 1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
 - a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
 - 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 nippled 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.

10,000 PSI Annular BOP Variance Request

Mewbourne Oil Company 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.

| | 12-: | 1/4" Intermediate Hole 10M psi Requiremen | | | |
|---------------------|---------------|--|-----|------------------------|-----|
| Component | OD | Primary Preventer | RWP | Alternate Preventer(s) | RWP |
| Drillpipe | 5.000" or | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | 4.500" | | | Lower 3.5"-5.5" VBR | 10M |
| HWDP | 5.000" or | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | 4.500" | | | Lower 3.5"-5.5" VBR | 10M |
| Jars | 6.500" | Annular | 5M | - | - |
| DCs and MWD tools | 6.500"-8.000" | Annular | 5M | - | - |
| Mud Motor | 8.000"-9.625" | Annular | 5M | - | - |
| Intermediate Casing | 9.625" | Annular | 5M | - | - |
| Open-Hole | - | Blind Rams | 10M | - | - |

| | 8- | 3/4" Production Hole So | | | |
|-------------------|---------------|--------------------------------------|-----|------------------------|-----|
| Component | OD | 10M psi Requiremen Primary Preventer | RWP | Alternate Preventer(s) | RWP |
| Drillpipe | 5.000" or | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | 4.500" | | | Lower 3.5"-5.5" VBR | 10M |
| HWDP | 5.000" or | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | 4.500" | | | Lower 3.5"-5.5" VBR | 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 | 7" | Annular | 5M | - | - |
| Open-Hole | - | Blind Rams | 10M | - | - |

| | | 6-1/8" Lateral Hole Sect | | | |
|-------------------|---------------|--------------------------|-----|------------------------|-----|
| Component | OD | Primary Preventer | RWP | Alternate Preventer(s) | RWP |
| Drillpipe | 4.500" | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | | | | Lower 3.5"-5.5" VBR | 10M |
| HWDP | 4.500" | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | | | | Lower 3.5"-5.5" VBR | 10M |
| DCs and MWD tools | 4.750"-5.500" | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | | | | Lower 3.5"-5.5" VBR | 10M |
| Mud Motor | 4.750"-5.500" | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | | | | Lower 3.5"-5.5" VBR | 10M |
| Production Casing | 4.500" | Annular | 5M | Upper 3.5"-5.5" VBR | 10M |
| | | | | Upper 3.5"-5.5" VBR | 10M |
| Open-Hole | - | Blind Rams | 10M | - | - |

VBR = Variable Bore Ram

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 Mewbourne Oil Company 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
 - 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

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

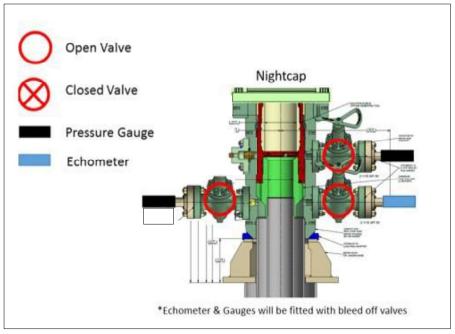
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

- 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 nippled 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

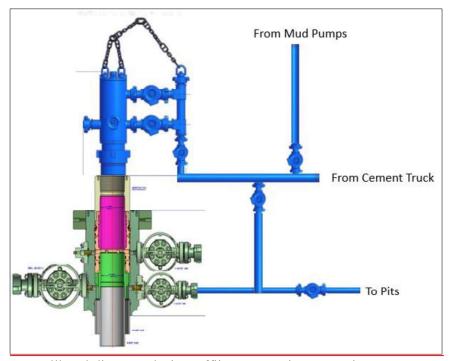
XTO Permian Operating, LLC Offline Cementing Variance Request



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 nippling 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.



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FAX: +1 (281) 602-4147

EMAIL: gesna.quality@gates.com

WEB: www.gates.com/oilandgas

NEW CHOKE HOSE

INSTRUED 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: 7. CUSTUS & QUALITY ASSURANCE

DATE: 1/25/2024

H3-15/16

1/25/2024 11:48:06 AM



TEST REPORT

CUSTOMER

Company:

Nabors Industries Inc.

TEST OBJECT

Serial number:

H3-012524-1

Production description:

Lot number: Description:

Part number:

74621/66-1531

Sales order #:

529480

74621/66-1531

74021/00-133

Customer reference:

FG1213

Hose ID:

3" 16C CK

TEST INFORMATION

Test procedure:

GTS-04-053

Fitting 1:

3.0 x 4-1/16 10K

Test pressure: Test pressure hold: 15000.00 psi 3600.00 sec Part number: Description:

erc)

Work pressure:

10000.00

Fitting 2:

3.0 x 4-1/16 10K

Work pressure hold:

900.00 sec 0.00 %

Part number:

3.0 X 4-1/16 10K

feet

D. ... 15

Length difference: Length difference:

0.00

inch

psi

Description:

Length:

45

Visual check:

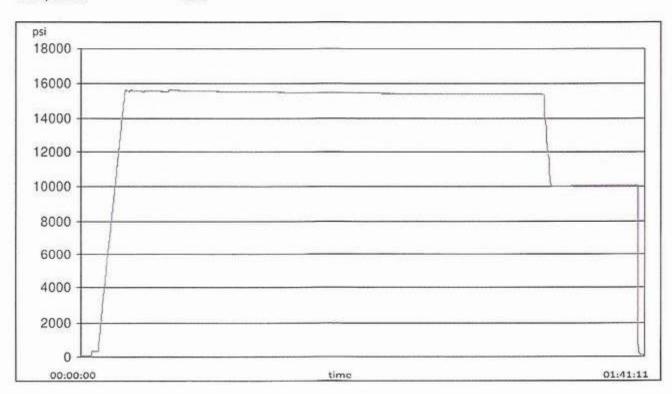
Pressure test result:

PASS

Length measurement result:

Test operator:

Travis





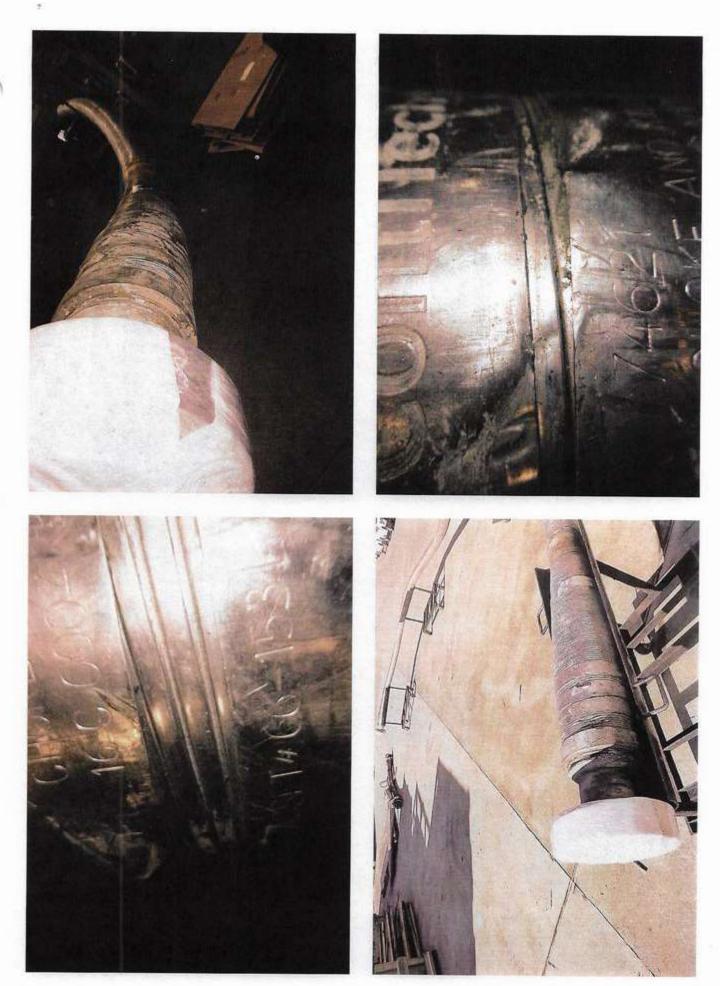
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TEST REPORT

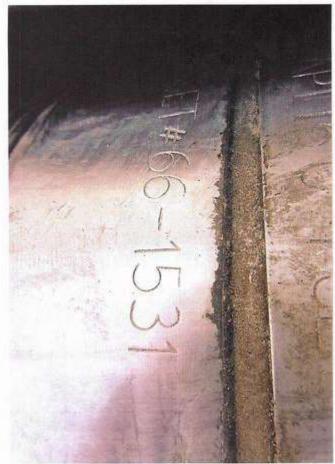
GAUGE TRACEABILITY

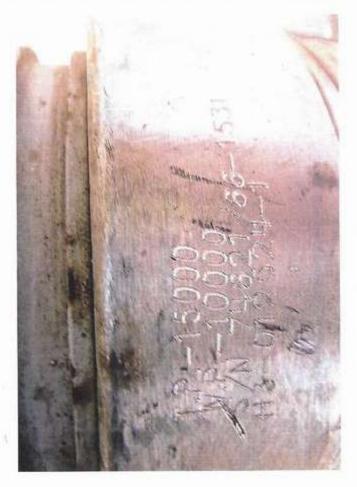
| Serial number | Calibration date | Calibration due date |
|---------------|------------------|----------------------|
| 110D3PHO | 2023-06-06 | 2024-06-06 |
| 110IQWDG | 2023-05-16 | 2024-05-16 |
| | | |
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| | | |
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| | 110D3PHO | 110D3PHO 2023-06-06 |



Released to Imaging: 10/28/2024 9:10:08 AM

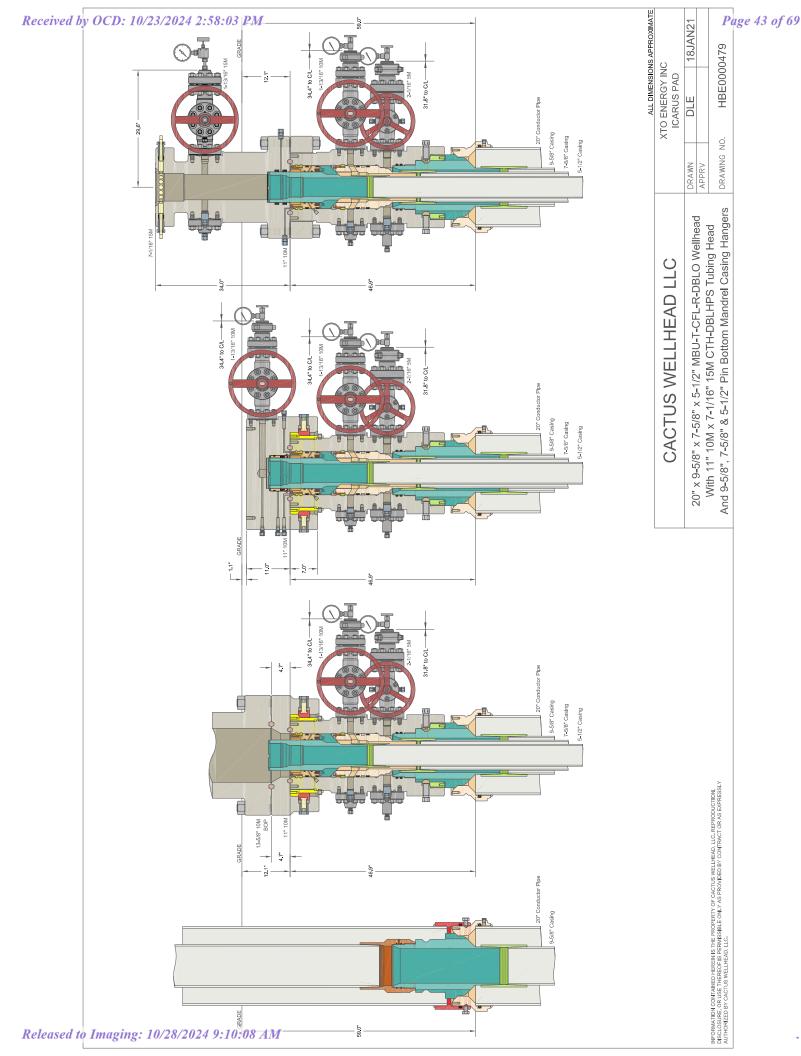








Released to Imaging: 10/28/2024 9:10:08 AM



Well Plan Report - Poker Lake Unit 22 DTD South 153H

| 3/4/24, 10:43 PM | | Well Plan Report |
|-----------------------------------|--|------------------|
| Well Plan Report | Well Plan Report - Poker Lake Unit 22 DTD South 153H | |
| Measured Depth: | 24862.12 ft | |
| TVD RKB: | 12090.00 ft | |
| Location | | |
| Cartographic Reference System: | New Mexico East - NAD 27 | |
| Northing: | 440179.10 ft | |
| Easting: | 644515.30 ft | |
| RKB: | 3446.00 ft | |
| Ground Level: | 3414.00 ft | |
| North Reference: | Grid | |
| Convergence Angle: | 0.25 Deg | |

| Plan Sections | Po | Poker Lake Unit 22 DTD South 153H | OTD South 153H | | | | | |
|---------------|-------------|-----------------------------------|----------------|-----------|--------------|-------------|-------------|--------------------|
| Measured | | | TVD | | | Build | Turn | Dogleg |
| Depth | Inclination | Azimuth | RKB | Y Offset | X Offset | Rate | Rate | Rate |
| (ft) | (Deg) | (Deg) | (#) | (H) | (#) | (Deg/100ft) | (Deg/100ft) | (Deg/100ft) Target |
| 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 00.00 | 0.00 | 0.00 | 0.00 |
| 1100.00 | 00.00 | 0.00 | 1100.00 | 00.00 | 00.00 | 0.00 | 0.00 | 0.00 |
| 1281.63 | 3.63 | 335.22 | 1281.51 | 5.23 | -2.41 | 2.00 | 0.00 | 2.00 |
| 6529.16 | 3.63 | 335.22 | 6518.49 | 307.07 | -141.79 | 0.00 | 0.00 | 0.00 |
| 6710.79 | 00.00 | 0.00 | 6700.00 | 312.30 | -144.20 | -2.00 | 0.00 | 2.00 |
| 11384.59 | 00.00 | 0.00 | 11373.80 | 312.30 | -144.20 | 0.00 | 0.00 | 0.00 |
| 12509.59 | 90.00 | 179.66 | 12090.00 | 403.88 | -139.91 | 8.00 | 0.00 | 8.00 |
| 24772.16 | 00.06 | 179.66 | 12090.00 | -12666.23 | -66.50 | 0.00 | 0.00 | 0.00 LTP 6 |
| 24862.12 | 00.06 | 179.66 | 12090.00 | -12756.20 | -65.96 | 00.0 | 0.00 | 0.00 BHL 6 |
| | | | | | | | | |

| Position Uncertainty | Poker La | Poker Lake Unit 22 DTD South 153H | 2 DTD § | South 153 | Į | | | | | | | |
|---|--------------|--------------------------------------|----------|-----------|---------|----------|------|-----------|----------------|----------------------------|----------------------------------|--------------|
| Measured | ΔVΤ | TVD Highside | | Latera | | Vertical | | Magnitude | Semi- major | Semi- Semi- major minor | Semi- minor | 100 <u>l</u> |
| Depth Inclination Azimuth | RKB | RKB Error Bias Error Bias Error Bias | Bias | Error | Bias | Error | Bias | of Bias | Error | Error | of Bias Error Error Azimuth Used | Nsed |
| file:///C:/Users/arsriva/Landmark/DecisionSpace/WellPlanning/Reports/PokerLakeUnit22DTDSouth153H.HTML | oace/WellPla | nning/Rep | orts/Pok | erLakeUni | t22DTDS | outh153F | HTML | | | | | |

| | MWD+IFR1+MS | MWD+IFR1+MS | MWD+IFR1+MS | MWD+IFR1+MS | MWD+IFR1+MS | |
|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|---|
| 0 | 0.000 | 112.264 | 122,711 | 125.469 | 126.713 | 127.419 | 127.873 | 128.190 | 128.423 | 128.602 | 128 744 | 128.859 | 121.534 | 111.726 | 111.553 | 111.252 | 110.936 | 110.659 | 110.414 | 110.195 | 109.997 | 109.817 | 109.652 | 109.501 | 109 360 | 109.229 | 109.107 | 108.992 | 108.883 | 108.780 | 108.683 | 108.589 | 108.501 | |
| Œ | 0.000 | 0.220 | 0.627 | 0.986 | 1.344 | 1.701 | 2.059 | 2.417 | 2.775 | 3,133 | 3.491 | 3.849 | 4.277 | 4.684 | 4.747 | 5.086 | 5.427 | 5.770 | 6.115 | 6.462 | 6.810 | 7.159 | 7.509 | 7.860 | 8.211 | 8.563 | 8.916 | 9.269 | 9.623 | 9.977 | 10.332 | 10.686 | 11.041 | |
| Œ | 0.000 | 0.751 | 1.259 | 1.698 | 2.108 | 2.503 | 2.888 | 3.267 | 3.642 | 4.014 | 4.384 | 4.752 | 5.204 | 5.630 | 5.686 | 6.002 | 6.359 | 6.717 | 7.075 | 7.433 | 7.792 | 8.150 | 8.509 | 8.868 | 9.227 | 9.586 | 9.946 | 10.305 | 10.665 | 11.024 | 11.384 | 11.744 | 12.103 | |
| Œ | 0.000 | 0.000 | 000'0 | 0.000 | 0.000 | 0.000 | 0.000 | 000.0 | 000.0 | 000.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 000'0 | |
| (ft) (ff) | 0.000 0.000 | 2.300 0.000 | 2.310 0.000 | 2.325 0.000 | 2.347 0.000 | 2.375 0.000 | 2.407 0.000 | 2.444 0.000 | 2.486 0.000 | 2.532 0.000 | 2.582 0.000 | 2.636 0.000 | 2.692 0.000 | 2.740 0.000 | 2.750 0.000 | 2.813 0.000 | 2.879 0.000 | 2.947 0.000 | 3.018 0.000 | 3.090 0.000 | 3.165 0.000 | 3.242 0.000 | 3.320 0.000 | 3.400 0.000 | 3.482 0.000 | 3.565 0.000 | 3.650 0.000 | 3.736 0.000 | 3.824 0.000 | 3.912 0.000 | 4.003 0.000 | 4.094 0.000 | 4.187 0.000 | outh153H.HTML |
| Œ | 0.000 | 0.000 | 000.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 00000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 000.0 | 000.0 | 0000 | 0.000 | 0.000 | it22DTDS |
| Œ | 0.000 | 0.350 | 0.861 | 1.271 | 1.658 | 2.034 | 2.405 | 2.773 | 3.138 | 3.502 | 3.865 | 4.228 | 4.938 | 5.203 | 5.260 | 5.579 | 5 923 | 6.269 | 6.616 | 6.964 | 7.313 | 7.664 | 8.015 | 8.367 | 8.719 | 9.072 | 9.425 | 9.779 | 10.133 | 10.488 | 10.842 | 11,197 | 11,553 | erLakeUn |
| (ft) | 0.000 0.000 | 0.700 0.000 | 1.112 0.000 | 1.497 0.000 | 1.871 0.000 | 2.240 0.000 | 2.607 0.000 | 2.971 0.000 | 3.334 0.000 | 3.696 0.000 | 4.058 0.000 | 4.419 0.000 | 4.580 0.000 | 5.147 0.000 | 5.208 0.000 | 5.539 0.000 | 5.893 0.000 | 6.248 0.000 | 6.604 0.000 | 000'0 096'9 | 7.317 0.000 | 7.675 0.000 | 8.032 0.000 | 8.390 0.000 | 8.748 0.000 | 9.107 0.000 | 9.466 0.000 | 9.824 0.000 | 10.184 0.000 | 10.543 0.000 | 10.902 0.000 | 11.262 0.000 | 11.621 0.000 | nning/Reports/Pok |
| (#) | 0.000 | 100.000 | 200.000 | 300.000 | 400.000 | 500.000 | 000'009 | 700.000 | 800.000 | 900.006 | 1000.000 | 1100.000 | 1199 980 | 1281.507 | 1299.841 | 1399.641 | 1499.440 | 1599.239 | 1699.038 | 1798.837 | 1898.636 | 1998.435 | 2098.234 | 2198.033 | 2297.832 | 2397.631 | 2497.430 | 2597.230 | 2697.029 | 2796.828 | 2896.627 | 2996.426 | 3096.225 | pace/WellPla |
| 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0.000 | 0.000 | 0.000 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | 335.216 | rk/DecisionS |
| 0 | 0.000 | 0.000 | 000.0 | 0.000 | 0.000 | 0.000 | 0000 | 0000 | 0000 | 0000 | 0000 | 0000 | 2.000 | 3 633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3 633 | 3 633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3.633 | 3,633 | iva/Landmaı |
| (£) | 0.000 | 100.000 | 200,000 | 300.000 | 400.000 | 500,000 | 000'009 | 700.000 | 800.000 | 000'006 | 1000.000 | 1100.000 | 1200.000 | 1281.629 | 1300.000 | 1400.000 | 1500.000 | 1600.000 | 1700.000 | 1800.000 | 1900,000 | 2000,000 | 2100.000 | 2200.000 | 2300.000 | 2400.000 | 2500.000 | 2600.000 | 2700.000 | 2800.000 | 2900.000 | 3000.000 | 3100,000 | file:///C:/Users/arsriva/Landmark/DecisionSpace/WellPlanning/Reports/PokerLakeUnit22DTDSouth153H.HTMI |

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| | 108,415 MWD+IFR1+MS | 108.334 MWD+IFR1+MS | 108.255 MWD+IFR1+MS | 108.179 MWD+IFR1+MS | 108.106 MWD+IFR1+MS | 108.035 MWD+IFR1+MS | 107.966 MWD+IFR1+MS | 107.899 MWD+IFR1+MS | 107.834 MWD+IFR1+MS | 107.770 MWD+IFR1+MS | 107.708 MWD+IFR1+MS | 107.648 MWD+IFR1+MS | 107.589 MWD+IFR1+MS | 107.531 MWD+IFR1+MS | 107.474 MWD+IFR1+MS | 107.419 MWD+IFR1+MS | 107.364 MWD+IFR1+MS | 107.311 MWD+IFR1+MS | 107.258 MWD+IFR1+MS | 107.206 MWD+IFR1+MS | 107.155 MWD+IFR1+MS | 107.104 MWD+IFR1+MS | 107.055 MWD+IFR1+MS | 107.006 MWD+IFR1+MS | 106.957 MWD+IFR1+MS | 106.910 MWD+IFR1+MS | 106.862 MWD+IFR1+MS | 106.816 MWD+IFR1+MS | 106.769 MWD+IFR1+MS | 106.724 MWD+IFR1+MS | 106.678 MWD+IFR1+MS | 106.633 MWD+IFR1+MS | 106,589 MWD+IFR1+MS | 106.545 MWD+IFR1+MS |
|------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Well Plan Report | 0.000 12.463 11.397 | 0.000 12.823 11.752 | 0.000 13.183 12.108 | 0.000 13.543 12.464 | 0.000 13.903 12.820 | 0.000 14.263 13.176 | 0.000 14.622 13.533 | 0.000 14.983 13.890 | 0.000 15.343 14.246 | 0.000 15.703 14.603 | 0.000 16.063 14.960 | 0.000 16.423 15.317 | 0.000 16.783 15.675 | 0.000 17.143 16.032 | 0.000 17.503 16.389 | 0.000 17.863 16.747 | 0.000 18.224 17.104 | 0.000 18.584 17.462 | 0.000 18.944 17.820 | 0.000 19.304 18.177 | 0.000 19.665 18.535 | 0.000 20.025 18.893 | 0.000 20.385 19.251 | 0.000 20.745 19.609 | 0.000 21.106 19.967 | 0.000 21.466 20.325 | 0.000 21.826 20.683 | 0.000 22.187 21.041 | 0.000 22.547 21.399 | 0.000 22.907 21.757 | 0.000 23.268 22.116 | 0.000 23.628 22.474 | 0.000 23.988 22.832 | 0.000 24.349 23.191 |
| Wel | 4.281 0.000 | 4.377 0.000 | 4.473 0.000 | 4.572 0.000 | 4.671 0.000 | 4.772 0.000 | 4.874 0.000 | 4.978 0.000 | 5.083 0.000 | 5.190 0.000 | 5.298 0.000 | 5.408 0.000 | 5.519 0.000 | 5.632 0.000 | 5.747 0.000 | 5.863 0.000 | 5.981 0.000 | 6.101 0.000 | 6.223 0.000 | 6.346 0.000 | 6.471 0.000 | 6.599 0.000 | 6.728 0.000 | 6.859 0.000 | 6.992 0.000 | 7.127 0.000 | 7.265 0.000 | 7.404 0.000 | 7.546 0.000 | 7.690 0.000 | 7.836 0.000 | 7.984 0.000 | 8.135 0.000 | 8.288 0.000 |
| | 3.633 335.216 3196.024 11.981 0.000 11.908 0.000 | 3.633 335.216 3295.823 12.341 0.000 12.264 0.000 | 3.633 335.216 3395.622 12.700 0.000 12.620 0.000 | 3.633 335.216 3495.421 13.060 0.000 12.976 0.000 | 3.633 335.216 3595.220 13.420 0.000 13.332 0.000 | 3.633 335.216 3695.020 13.780 0.000 13.689 0.000 | 3.633 335.216 3794.819 14.141 0.000 14.045 0.000 | 3.633 335.216 3894.618 14.501 0.000 14.402 0.000 | 3.633 335.216 3994.417 14.861 0.000 14.759 0.000 | 3.633 335.216 4094.216 15.221 0.000 15.116 0.000 | 3.633 335.216 4194.015 15.582 0.000 15.473 0.000 | 3.633 335.216 4293.814 15.942 0.000 15.830 0.000 | 3.633 335.216 4393.613 16.302 0.000 16.187 0.000 | 3.633 335.216 4493.412 16.663 0.000 16.545 0.000 | 3.633 335.216 4593.211 17.023 0.000 16.902 0.000 | 3.633 335.216 4693.010 17.384 0.000 17.260 0.000 | 3.633 335.216 4792.809 17.744 0.000 17.617 0.000 | 3.633 335.216 4892.609 18.105 0.000 17.975 0.000 | 3.633 335.216 4992.408 18.466 0.000 18.332 0.000 | 3.633 335.216 5092.207 18.826 0.000 18.690 0.000 | 3.633 335.216 5192.006 19.187 0.000 19.048 0.000 | 3.633 335.216 5291.805 19.548 0.000 19.406 0.000 | 3.633 335.216 5391.604 19.908 0.000 19.764 0.000 | 3.633 335.216 5491.403 20.269 0.000 20.121 0.000 | 3.633 335.216 5591.202 20.630 0.000 20.479 0.000 | 3.633 335.216 5691.001 20.991 0.000 20.837 0.000 | 3.633 335.216 5790.800 21.351 0.000 21.195 0.000 | 3.633 335.216 5890.599 21.712 0.000 21.554 0.000 | 3.633 335.216 5990.399 22.073 0.000 21.912 0.000 | 3.633 335.216 6090.198 22.434 0.000 22.270 0.000 | 3.633 335.216 6189.997 22.795 0.000 22.628 0.000 | 3.633 335.216 6289.796 23.156 0.000 22.986 0.000 | 3.633 335.216 6389.595 23.517 0.000 23.344 0.000 | 3.633 335.216 6489.394 23.877 0.000 23.703 0.000 |
| 3/4/24, 10:43 PM | 3500 000 | 3300.000 | 3400.000 | 3500,000 | 3600.000 | 3700.000 | 3800.000 | 3900.000 | 4000.000 | 4100.000 | 4200.000 | 4300.000 | 4400,000 | 4500.000 | 4600.000 | 4700.000 | 4800.000 | 4900.000 | 2000.000 | 5100.000 | 5200.000 | 2300.000 | 5400.000 | 2500.000 | 2600.000 | 2700.000 | 2800.000 | 2900.000 | 000'0009 | 6100.000 | 6200,000 | 000'0089 | 6400,000 | 000.0059 |

| | 106.519 MWD+IFR1+MS | 106.289 MWD+IFR1+MS | 104.564 MWD+IFR1+MS | 104,552 MWD+IFR1+MS | 104.592 MWD+IFR1+MS | 104.833 MWD+IFR1+MS | 105.101 MWD+IFR1+MS | 105.365 MWD+IFR1+MS | 105.624 MWD+IFR1+MS | 105.878 MWD+IFR1+MS | 106.127 MWD+IFR1+MS | 106.373 MWD+IFR1+MS | 106.613 MWD+IFR1+MS | 106.850 MWD+IFR1+MS | 107.082 MWD+IFR1+MS | 107.310 MWD+IFR1+MS | 107.535 MWD+IFR1+MS | 107.755 MWD+IFR1+MS | 107.971 MWD+IFR1+MS | 108.183 MWD+IFR1+MS | 108.392 MWD+IFR1+MS | 108,597 MWD+IFR1+MS | 108.798 MWD+IFR1+MS | 108.996 MWD+IFR1+MS | 109.191 MWD+IFR1+MS | 109.382 MWD+IFR1+MS | 109.570 MWD+IFR1+MS | 109.754 MWD+IFR1+MS | 109.935 MWD+IFR1+MS | 110.114 MWD+IFR1+MS | 110.289 MWD+IFR1+MS | 110,461 MWD+IFR1+MS | 110,631 MWD+IFR1+MS | 110,797 MWD+IFR1+MS |
|------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Well Plan Report | 0.000 24.450 23.295 | 0.000 24.702 23.550 | 0.000 25.114 23.923 | 0.000 25.152 23.961 | 0.000 25.459 24.278 | 0.000 25.810 24.635 | 0.000 26.162 24.993 | 0.000 26.514 25.351 | 0.000 26.866 25.709 | 0.000 27.219 26.066 | 0.000 27.572 26.424 | 0.000 27.925 26.782 | 0.000 28.278 27.139 | 0.000 28.632 27.497 | 0.000 28.985 27.855 | 0.000 29.339 28.212 | 0.000 29.693 28.570 | 0.000 30.047 28.928 | 0.000 30.401 29.285 | 0.000 30.755 29.643 | 0.000 31.110 30.000 | 0.000 31.464 30.358 | 0.000 31.819 30.715 | 0.000 32.174 31.073 | 0.000 32.528 31.430 | 0.000 32.883 31.788 | 0.000 33.238 32.145 | 0.000 33.594 32.503 | 0.000 33.949 32.860 | 0.000 34.304 33.218 | 0.000 34.660 33.576 | 0.000 35.015 33.933 | 0.000 35.371 34.291 | 0.000 35.726 34.648 |
| We | 8.333 0.000 | 8.443 0.000 | 8.599 0.000 | 8,616 0,000 | 8.757 0.000 | 8.916 0.000 | 9.078 0.000 | 9.243 0.000 | 9.410 0.000 | 9.580 0.000 | 9.752 0.000 | 9.927 0.000 | 10.105 0.000 | 10.285 0.000 | 10.469 0.000 | 10.654 0.000 | 10.843 0.000 | 11.034 0.000 | 11.228 0.000 | 11.425 0.000 | 11.625 0.000 | 11.827 0.000 | 12.033 0.000 | 12.241 0.000 | 12.452 0.000 | 12.666 0.000 | 12.883 0.000 | 13.102 0.000 | 13.325 0.000 | 13.550 0.000 | 13.779 0.000 | 14.010 0.000 | 14.244 0.000 | 14.481 0.000 |
| | 0000 | 0.000 | 0.000 | 0000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0000 | 0000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0000 | 0000 | 0000 |
| | 23.805 | 24.054 | 24.409 | 24.038 | 24.355 | 24.714 | 25.074 | 25.434 | 25.794 | 26.154 | 26.514 | 26.874 | 27.234 | 27.594 | 27.954 | 28.314 | 28.674 | 29.033 | 29.393 | 29.753 | 30.112 | 30.472 | 30.832 | 31.191 | 31.551 | 31.910 | 32.270 | 32.629 | 32.989 | 33.348 | 33.708 | 34.067 | 34.426 | 34.786 |
| | 000.0 | 0.000 | 0.000 | 000'0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 000.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 000.0 | 000.0 | 000.0 | 000.0 |
| | 23.981 | 24.239 | 24.646 | 25.078 | 25.386 | 25.734 | 26.084 | 26.434 | 26.784 | 27.135 | 27.485 | 27.836 | 28.187 | 28.538 | 28.889 | 29.241 | 29.593 | 29.945 | 30.297 | 30.649 | 31.001 | 31.353 | 31,706 | 32.059 | 32.412 | 32.765 | 33.118 | 33.471 | 33.824 | 34.177 | 34.531 | 34.885 | 35.238 | 35,592 |
| | 6518.493 | 6589.241 | 6689.214 | 6700,000 | 6789.214 | 6889.214 | 6989.214 | 7089.214 | 7189.214 | 7289.214 | 7389.214 | 7489.214 | 7589.214 | 7689.214 | 7789.214 | 7889.214 | 7989.214 | 8089.214 | 8189.214 | 8289.214 | 8389.214 | 8489.214 | 8589.214 | 8689.214 | 8789.214 | 8889.214 | 8989.214 | 9089.214 | 9189.214 | 9289.214 | 9389.214 | 9489.214 | 9589.214 | 9689.214 |
| | 335.216 | 335.216 | 335.216 | 0.000 | 0.000 | 0.000 | 00000 | 0.000 | 0.000 | 000.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0.000 | 0000 | 0.000 | 0.000 | 0.000 |
| | 3.633 | 2.216 | 0.216 | 000'0 | 0.000 | 0.000 | 0.000 | 0.000 | 000'0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 000.0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3/4/24, 10:43 PM | 6529.158 | 000'0099 | 6700.000 | 6710.786 | 000'0089 | 000'0069 | 7000.000 | 7100.000 | 7200.000 | 7300.000 | 7400.000 | 7500.000 | 7600.000 | 7700.000 | 7800.000 | 7900.000 | 8000.000 | 8100.000 | 8200.000 | 8300.000 | 8400.000 | 8500.000 | 8600,000 | 8700.000 | 8800.000 | 8900.000 | 9000.000 | 9100.000 | 9200.000 | 9300,000 | 9400.000 | 9500,000 | 000'0096 | 9700.000 |
| | leas | ed t | o In | nagi | ng: | 10/. | 28/2 | 2024 | 9:1 | 0:0 | 8 A1 | И | | | | | | | | | | | | | | | | | | | | | | |

| | 110.961 MWD+IFR1+MS | 111.122 MWD+IFR1+MS | 111.280 MWD+IFR1+MS | 111.436 MWD+IFR1+MS | 111.589 MWD+IFR1+MS | 111.740 MWD+IFR1+MS | 111.888 MWD+IFR1+MS | 112.034 MWD+IFR1+MS | 112.177 MWD+IFR1+MS | 112.318 MWD+IFR1+MS | 112.457 MWD+IFR1+MS | 112.594 MWD+IFR1+MS | 112.729 MWD+IFR1+MS | 112.861 MWD+IFR1+MS | 112.992 MWD+IFR1+MS | 113.120 MWD+IFR1+MS | 113.188 MWD+IFR1+MS | 113.183 MWD+IFR1+MS | 108.470 MWD+IFR1+MS | 102.109 MWD+IFR1+MS | 99.722 MWD+IFR1+MS | 98.601 MWD+IFR1+MS | 98.046 MWD+IFR1+MS | 97.799 MWD+IFR1+MS | 97.741 MWD+IFR1+MS | 97.800 MWD+IFR1+MS | 97.921 MWD+IFR1+MS | 98.046 MWD+IFR1+MS | 98.112 MWD+IFR1+MS | 98.104 MWD+IFR1+MS | 98.117 MWD+IFR1+MS | 98.152 MWD+IFR1+MS | 98.210 MWD+IFR1+MS | 98.293 MWD+IFR1+MS |
|------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Well Plan Report | 0.000 36.082 35.006 | 0.000 36.438 35.363 | 0.000 36.794 35.721 | 0.000 37.150 36.078 | 0.000 37.506 36.436 | 0.000 37.862 36.793 | 0.000 38.218 37.151 | 0.000 38.574 37.508 | 0.000 38.930 37.866 | 0.000 39.286 38.223 | 0.000 39.643 38.581 | 0.000 39.999 38.939 | 0.000 40.356 39.296 | 0.000 40.712 39.654 | 0.000 41.069 40.011 | 0.000 41.425 40.369 | 0.000 41.725 40.671 | 0.000 41.776 40.723 | 0.000 42.390 41.069 | 0.000 43.598 41.409 | 0.000 44.697 41.706 | 0.000 45.647 41.973 | 0.000 46.429 42.214 | 0.000 47.038 42.427 | 0.000 47.480 42.612 | 0.000 47.771 42.768 | 0.000 47.935 42.896 | 0.000 48.007 42.995 | 0.000 48.025 43.071 | 0.000 48.029 43.125 | 0.000 48.034 43.196 | 0.000 48.040 43.281 | 0.000 48.046 43.379 | 0.000 48.054 43.490 |
| Well | 14.722 0.000 | 14.965 0.000 | 15.211 0.000 | 15.460 0.000 | 15.712 0.000 | 15.967 0.000 | 16.225 0.000 | 16.486 0.000 | 16.750 0.000 | 17.017 0.000 | 17.287 0.000 | 17.560 0.000 | 17.836 0.000 | 18.115 0.000 | 18.397 0.000 | 18.682 0.000 | 18.925 0.000 | 18.970 0.000 | 19.270 0.000 | 19.659 0.000 | 20.195 0.000 | 20.921 0.000 | 21.858 0.000 | 23.000 0.000 | 24.320 0.000 | 25.779 0.000 | 27.325 0.000 | 28.907 0.000 | 30.930 0.000 | 31.422 0.000 | 31.569 0.000 | 31.735 0.000 | 31.920 0.000 | 32.122 0.000 |
| | 35.946 0.000 35.145 0.000 | 36.300 0.000 35.505 0.000 | 36.654 0.000 35.864 0.000 | 37.008 0.000 36.223 0.000 | 37.363 0.000 36.582 0.000 | 37.717 0.000 36.942 0.000 | 38.071 0.000 37.301 0.000 | 38.426 0.000 37.660 0.000 | 38.780 0.000 38.019 0.000 | 39.135 0.000 38.379 0.000 | 39.490 0.000 38.738 0.000 | 39.844 0.000 39.097 0.000 | 40.199 0.000 39.456 0.000 | 40.554 0.000 39.815 0.000 | 40.909 0.000 40.174 0.000 | 41.264 0.000 40.533 0.000 | 41.563 0.000 40.836 0.000 | 41.581 0.000 40.893 -0.000 | 41.682 0.000 41.208 -0.000 | 41.839 0.000 41.513 -0.000 | 41.390 0.000 41.800 -0.000 | 40.403 0.000 42.066 -0.000 | 38.970 0.000 42.308 -0.000 | 37.217 0.000 42.524 -0.000 | 35.308 0.000 42.713 -0.000 | 33.450 0.000 42.874 -0.000 | 31.883 0.000 43.006 -0.000 | 30.861 0.000 43.108 -0.000 | 30.930 0.000 43.185 -0.000 | 31.422 0.000 43.236 -0.000 | 31.569 0.000 43.307 -0.000 | 31.735 0.000 43.391 -0.000 | 31.920 0.000 43.488 -0.000 | 32.122 0.000 43.599 -0.000 |
| | 0.000 9789.214 | 0.000 9889.214 | 0.000 9989.214 | 0.000 10089.214 | 0.000 10189.214 | 0.000 10289.214 | 0.000 10389.214 | 0.000 10489.214 | 0.000 10589.214 | 0.000 10689.214 | 0.000 10789.214 | 0.000 10889.214 | 0.000 10989.214 | 0.000 11089.214 | 0.000 11189.214 | 0.000 11289.214 | 0.000 11373.800 | 179.657 11389.213 | 179.657 11488.715 | 179.657 11585.980 | 179.657 11679.116 | 179.657 11766.309 | 179.657 11845.863 | 179.657 11916.228 | 179.657 11976.035 | 179.657 12024.121 | 179.657 12059.549 | 179.657 12081.630 | 179.657 12089.997 | 179.657 12089.997 | 179.657 12089.997 | 179.657 12089.997 | 179.657 12089.997 | 179.657 12089.997 |
| | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.233 1 | 9.233 17 | 17.233 1 | 25.233 17 | 33,233 17 | 41.233 17 | 49.233 17 | 57.233 17 | 65.233 17 | 73.233 17 | 81.233 17 | 90.000 | 90.000 | 90 000 1 | 90.000 | 90.000 | 90.000 17 |
| 3/4/24, 10:43 PM | 9800,000 | 000'0066 | 10000.000 | 10100.000 | 10200.000 | 10300.000 | 10400.000 | 10500.000 | 10600.000 | 10700.000 | 10800.000 | 10900.000 | 11000.000 | 11100.000 | 11200.000 | 11300.000 | 11384.586 | 11400.000 | 11500.000 | 11600.000 | 11700.000 | 11800.000 | 11900.000 | 12000.000 | 12100.000 | 12200.000 | 12300.000 | 12400.000 | 12509.586 | 12600.000 | 12700.000 | 12800.000 | 12900,000 | 13000,000 |
| | eleas | ed t | o In | nagi | ng: | 10/ | 28/2 | 024 | 9:1 | 0:0 | 8 A1 | И | | | | | | | | | | | | | | | | | | | | | | |

file:///C:/Users/arsriva/Landmark/DecisionSpace/WellPlanning/Reports/PokerLakeUnit22DTDSouth153H.HTML

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| 71+MS 71+MS 71+MS | 71+MS | 71+MS | 31+MS |
|-------------------------------|----------------------------|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| MWD+IFR1+MS MWD+IFR1+MS | MWD+IFR1+MS MWD+IFR1+MS | MWD+IFR1+MS MWD+IFR1+MS | MWD+IFR1+MS |
| 98.543 | | 99.186 | | 100.315 | 100.857 | 101.519 | 102.333 | 103 349 | 104.638 | 106.305 | 108.511 | 111.507 | 115.665 | 121.472 | 129.271 | 41.456 | 32.391 | -25.025 | -19.613 | -15.737 | 12.926 | -10.836 | -9.241 | -7.992 | -6.995 | -6.182 | -5.510 | 4.946 | 4 468 | 4.058 |
| 43.614 43.751 | 43.900 | 44.236 | 44.619 | 44.828 | 45.048 | 45.279 | 45.520 | 45.770 | 46.030 | 46.296 | 46.568 | 46 843 | 47.115 | 47.376 | 47.612 | 47 807 | 47 955 | 48 060 | 48 137 | 48 196 | 48.245 | 48.287 | 48.325 | 48.361 | 48.394 | 48.427 | 48.459 | 48.491 | 48.523 | 48.555 |
| 48.062 4 | | 48.104 48.118 4 | | 48.148 | 48.165 | 48.184 | 48.205 4 | 48.229 | 48.256 | 48.287 | 48.324 | 48.369 | 48.429 | 48.510 | 48.627 | 48.795 | 49.021 | 49.299 | 49.615 | 49.959 | 50.323 | 50.702 | 51.094 | 51.498 | 51.912 | 52.336 | 52.768 | 53.209 | 53.657 | 54.113 |
| 0.000 | | 0.000 | | 0000 | 0000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0000 | 0.000 | 0.000 | 0000 | 0000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 00000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 32.343 (32.581 (32.581) | | 33.395 (33.698 (| | 34.351 (| 34.700 (| 35.063 | 35.439 (| 35.828 (| 36.231 | 36.646 (| 37.072 | 37.511 | 37.960 | 38.420 | 38.891 | 39.371 | 39 862 (| 40.361 | 40.870 | 41.387 (| 41.913 (| 42.446 (| 42.987 (| 43.536 (| 44.092 | 44.654 (| 45.224 (| 45.799 (| 46.381 | 46.969 (|
| 000.0- | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | 0000 | 0000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | 0000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 | -0.000 |
| 43.859 | 44.009 | 44.346 | 44.734 | 44.946 | 45.170 | 45.405 | 45.653 | 45.912 | 46.182 | 46.463 | 46.755 | 47.057 | 47.370 | 47.694 | 48.027 | 48.370 | 48.723 | 49.085 | 49,457 | 49.837 | 50.226 | 50.624 | 51.030 | 51.444 | 51.867 | 52.297 | 52.734 | 53.180 | 53.632 | 54.091 |
| 0.000 | | 0.000 | | 0.000 | 000'0 (| 3 0.000 | 0.000 | 3 0.000 | 000'0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 3 0.000 | 00000 | 0.000 | 000.0 | 0.000 | 0.000 | 000'0 1 | 000'0 | 000.0 | 00000 |
| 32.343 32.581 32.836 | 32.830 33.107 | 33.395 | 34.017 | 34.351 | 34.700 | 35.063 | 35,439 | 35.828 | 36.231 | 36.646 | 37.072 | 37.511 | 37.960 | 38.420 | 38.891 | 39 371 | 39.862 | 40.361 | 40.870 | 41.387 | 41.913 | 42.446 | 42.987 | 43.536 | 44.092 | 44.654 | 45.224 | 45.799 | 46.381 | 46.969 |
| 12089.997 12089.997 | 12089.997 | 12089.997 | 12089,997 | 12089.997 | 12089 997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089 997 | 12089.997 | 12089.997 | 12089.997 | 12089.997 | 12089 997 | 12089.997 | 12089.997 |
| 179.657 7 179.657 7 179.657 7 | | 759.657 | | 179.657 | 179,657 | 179.657 | 179.657 | 179.657 | 179,657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179 657 | 179.657 | 179.657 | 179 657 | 179.657 | 179.657 | 179.657 | 179.657 | 179.657 | 179 657 | 179.657 |
| 000.06 | | 000.06 | | . 000.06 | . 000 06 | . 000.06 | . 000'06 | . 000 06 | . 000 06 | . 000.06 | 000.06 | . 000.06 | . 000.06 | . 000.06 | . 000.06 | 000.06 | . 000 06 | . 000.06 | . 000.06 | . 000 06 | 000.06 | 000.06 | 000 06 | . 000.06 | . 000.06 | . 000.06 | . 000.06 | . 000 06 | . 000 06 | . 000'06 |
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| Well Plan Report | 0.000 54.577 48.586 | 0.000 55.048 48.618 | 0.000 55.525 48.651 | 0.000 56.009 48.683 | 0.000 56.500 48.716 | 0.000 56.997 48.750 | 0.000 57.500 48.784 | 0.000 58.008 48.818 | 0.000 58.523 48.853 | 0.000 59.043 48.888 | 0.000 59.568 48.924 | 0.000 60.099 48.960 | 0.000 60.634 48.997 | 0.000 61.175 49.034 | 0.000 61.720 49.072 | 0.000 62.270 49.110 | 0.000 62.825 49.149 | 0.000 63.384 49.188 | 0.000 63.947 49.228 | 0.000 64.515 49.269 | 0.000 65.086 49.310 | 0.000 65.662 49.351 | 0.000 66.241 49.393 | 0.000 66.824 49.436 | 0.000 67.411 49.479 | 0.000 68.002 49.523 | 0.000 68.596 49.567 | 0.000 69.193 49.612 | 0.000 69.793 49.657 | 0.000 70.397 49.703 | 0.000 71.004 49.750 | 0.000 71.614 49.797 | 0.000 72.227 49.844 | 0.000 72.843 49.892 |
| Well | 47.562 0.000 | 48.161 0.000 | 48.765 0.000 | 49.374 0.000 | 49.988 0.000 | 50.607 0.000 | 51.231 0.000 | 51.858 0.000 | 52.490 0.000 | 53.126 0.000 | 53.766 0.000 | 54.410 0.000 | 55.058 0.000 | 55.709 0.000 | 56.363 0.000 | 57.021 0.000 | 57.681 0.000 | 58.345 0.000 | 59.012 0.000 | 59.682 0.000 | 60.355 0.000 | 61.030 0.000 | 61.708 0.000 | 62.388 0.000 | 63.071 0.000 | 63.756 0.000 | 64.443 0.000 | 65.133 0.000 | 65.824 0.000 | 66.518 0.000 | 67.214 0.000 | 67.912 0.000 | 68.611 0.000 | 69.313 0.000 |
| | 47.562 0.000 54.558 -0.000 | 48.161 0.000 55.031 -0.000 | 48.765 0.000 55.510 -0.000 | 49.374 0.000 55.996 -0.000 | 49.988 0.000 56.488 -0.000 | 50.607 0.000 56.986 -0.000 | 51.231 0.000 57.490 -0.000 | 51.858 0.000 58.000 -0.000 | 52.490 0.000 58.515 -0.000 | 53.126 0.000 59.036 -0.000 | 53.766 0.000 59.562 -0.000 | 54.410 0.000 60.093 -0.000 | 55.058 0.000 60.629 -0.000 | 55.709 0.000 61.170 -0.000 | 56.363 0.000 61.716 -0.000 | 57.021 0.000 62.267 -0.000 | 57.681 0.000 62.822 -0.000 | 58.345 0.000 63.381 -0.000 | 59.012 0.000 63.945 -0.000 | 59.682 0.000 64.512 -0.000 | 60.355 0.000 65.084 -0.000 | 61.030 0.000 65.660 -0.000 | 61.708 0.000 66.240 -0.000 | 62.388 0.000 66.823 -0.000 | 63.071 0.000 67.410 -0.000 | 63.756 0.000 68.001 -0.000 | 64.443 0.000 68.595 -0.000 | 65.133 0.000 69.192 -0.000 | 65.824 0.000 69.793 -0.000 | 66.518 0.000 70.397 -0.000 | 67.214 0.000 71.004 -0.000 | 67.912 0.000 71.614 -0.000 | 68.611 0.000 72.227 -0.000 | 69.313 0.000 72.843 -0.000 |
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| 23400.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.100 0.000 90.785 | 785 -0.000 | 87.100 0.000 | 0.000 90.786 58.415 | -0.195 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 23500.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.128 0.000 90.991 | 991 -0.000 | 87.128 0.000 | 0.000 90.991 58.501 | -0.194 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 23600.000 | 90.000 | 179,657 | 90.000 179.657 12089.997 | 87.159 0.000 91.199 | 000.0- 661 | 87.159 0.000 | 0.000 91.200 58.588 | -0.192 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 23700.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.192 0.000 91.411 | 111 -0.000 | 87.192 0.000 | 0.000 91.411 58.674 | -0.191 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 23800.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.228 0.000 91.626 | 326 -0.000 | 87.228 0.000 | 0.000 91.626 58.761 | -0.190 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 23900.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.266 0.000 91.845 | 345 -0.000 | 87.266 0.000 | 0.000 91.845 58.849 | -0.188 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24000.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.306 0.000 92.066 | 000.0- 990 | 87.306 0.000 | 0.000 92.066 58.936 | -0.187 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24100.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.348 0.000 92.290 | 000 0- 067 | 87.348 0.000 | 0.000 92.291 59.025 | -0.186 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24200.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.393 0.000 92.518 | 518 -0.000 | 87.393 0.000 | 0.000 92.518 59.113 | -0.185 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24300.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.440 0.000 92.749 | 749 -0.000 | 87.440 0.000 | 0.000 92.749 59.202 | -0.184 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24400.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.490 0.000 92.982 | 982 -0.000 | 87.490 0.000 | 0.000 92.983 59.291 | -0.183 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24500.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.542 0.000 93.219 | _ | -0.000 87.542 0.000 | 0.000 93.219 59.381 | -0.181 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24600.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.596 0.000 93.459 | | -0.000 87.596 0.000 | 0.000 93.459 59.471 | -0.180 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24700.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.653 0.000 93.702 | - | -0.000 87.653 0.000 | 0.000 93.702 59.561 | -0.179 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24772.155 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.695 0.000 93.878 | 378 -0.000 | 87.695 0.000 | 0.000 93.879 59.627 | -0.179 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24800.000 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.712 0.000 93.947 | 947 -0.000 | 87.712 0.000 | 0.000 93.947 59.652 | -0.178 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| 24862.122 | 90.000 | 179.657 | 90.000 179.657 12089.997 | 87.749 0.000 94.101 | | -0.000 87.749 0.000 | 0.000 94.101 59.709 | -0.178 MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_22 |
| | | | | | | | | |

| Plan Targets | Poker Lake Unit 22 DTD South 153H | | | |
|--------------|-----------------------------------|----------------------|--------------|----------------------|
| | Measured Depth | Grid Northing | Grid Easting | TVD MSL Target Shape |
| Target Name | (ft) | (ft) | (t) | (ft) |
| FTP 6 | 12201.90 | 440491.40 | 644371.10 | 8644.00 RECTANGLE |
| SHL 17 | 12299.74 | 440176.60 | 644191.37 | 8611.85 RECTANGLE |
| LTP 6 | 24772.12 | 427512.90 | 644448.70 | 8644.00 RECTANGLE |
| BHL 6 | 24862.39 | 427422.90 | 644449.60 | 8644.00 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 153H

SURFACE HOLE FOOTAGE: 414'/N & 1946'/E

BOTTOM HOLE FOOTAGE: 2627'/N & 2088'/E

COA

| H_2S | • | No | © Yes | | |
|--------------|----------------------|--|--------------|----------------------------|--|
| Potash / | None | Secretary | © R-111-Q | Open Annulus | |
| WIPP | Choose | Choose an option (including blank option.) | | | |
| Cave / Karst | Low | Medium | 🖰 High | Critical | |
| Wellhead | Conventional | • Multibowl | O Both | Diverter | |
| Cementing | Primary Squeeze | Cont. Squeeze | EchoMeter | DV Tool | |
| Special Req | Capitan Reef | Water Disposal | COM | Unit | |
| Waste Prev. | C Self-Certification | C Waste Min. Plan | | | |
| Additional | Flex Hose | Casing Clearance | Pilot Hole | Break Testing | |
| Language | Four-String | Offline Cementing | 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 <u>8 hours</u> or <u>500 pounds compressive strength</u>, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The minimum required fill of cement behind the **7-5/8** inch intermediate casing is: Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.
 - a. First stage: Operator will cement with intent to reach the top of the Brushy Canyon at 6467'.
 - 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 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 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
- 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.

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.

<u>Ignition of Gas source</u>

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

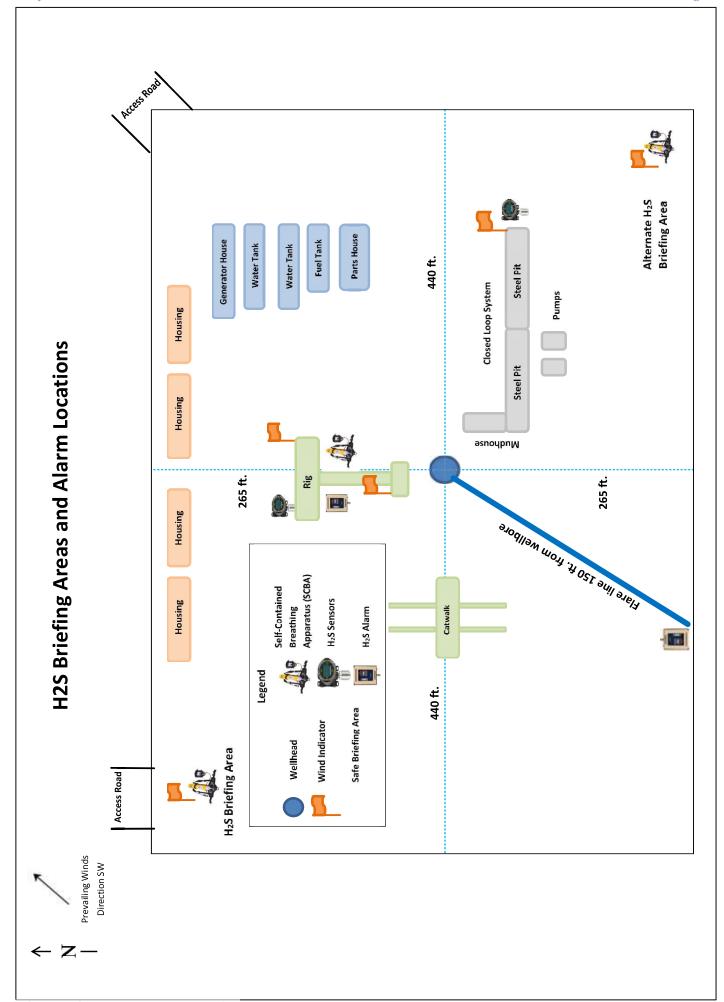
| Common Name | Chemical Formula | Specific Gravity | Threshold Limit | Hazardous Limit | Lethal Concentration |
|------------------|---------------------|------------------|-----------------|-----------------|----------------------|
| Hydrogen Sulfide | H ₂ S | 1.189 Air = I | 10 ppm | 100 ppm/hr |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

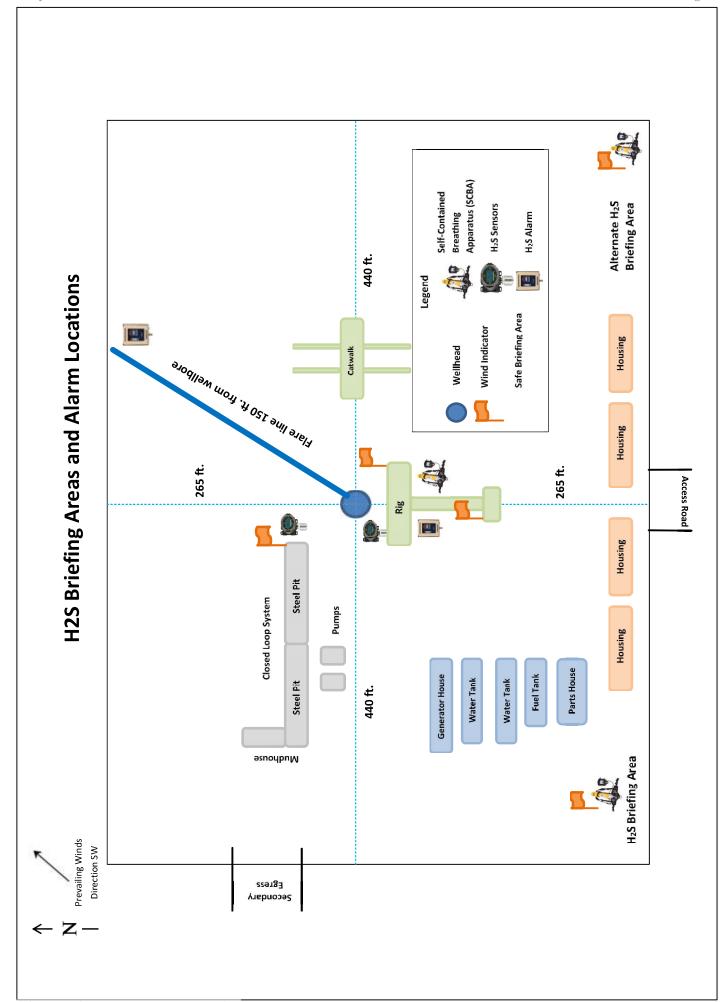
Contacting Authorities

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 Brian Dunn, Drilling Supervisor Robert Bartels, Construction Execution Planner Andy Owens, EH & S Manager Frank Fuentes, Production Foreman | 832-948-5021 832-653-0490 406-478-3617 903-245-2602 575-689-3363 |
| SHERIFF DEPARTMENTS: | |
| Eddy County Lea County | 575-887-7551 575-396-3611 |
| NEW MEXICO STATE POLICE: | 575-392-5588 |
| FIRE DEPARTMENTS: Carlsbad Eunice Hobbs Jal Lovington | 911 575-885-2111 575-394-2111 575-397-9308 575-395-2221 575-396-2359 |
| HOSPITALS: Carlsbad Medical Emergency Eunice Medical Emergency Hobbs Medical Emergency Jal Medical Emergency Lovington Medical Emergency | 911 575-885-2111 575-394-2112 575-397-9308 575-395-2221 575-396-2359 |
| AGENT NOTIFICATIONS: For Lea County: Bureau of Land Management – Hobbs New Mexico Oil Conservation Division – Hobbs | 575-393-3612 575-393-6161 |
| For Eddy County: Bureau of Land Management - Carlsbad New Mexico Oil Conservation Division - Artesia | 575-234-5972 575-748-1283 |





Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

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:

PLU 22 DTD 153H Well 20240416140431.pdf

Comments: Multi-well pad.

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 22 DTD Well Number: 153H

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: C

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 gullying, headcutting, slumping, and deep or excessive rills (greater than 3 inches) are not observed.

Well pad proposed disturbance 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 Powerline interim reclamation (acres): Powerline long term disturbance

0 (acres): 0

Pipeline proposed disturbance 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:

(acres):

(acres):

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) plan 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

&It;style isBold="true">Existing Vegetation at the well pad:&It;/style> 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: 153H

<style isBold="true">Existing Vegetation Community at the road:</style> 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

<style isBold="true">Existing Vegetation Community at the pipeline:</style> 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

<style isBold="true">Existing Vegetation Community at other disturbances:</style> 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
Seed Type Pounds/Acre

Total 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

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 395278

CONDITIONS

| Operator: | OGRID: |
|----------------------------|---|
| XTO PERMIAN OPERATING LLC. | 373075 |
| 6401 HOLIDAY HILL ROAD | Action Number: |
| MIDLAND, TX 79707 | 395278 |
| | 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 |