AFMSS

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

Application for Permit to Drill

APD Package Report

Date Printed: 11/25/2024 03:45 PM

APD ID:	10400098065	Well Status:	AAPD
APD Received Date:	04/18/2024 06:52 AM	Well Name:	POKER LAKE UNIT 23 DTD
Operator:	XTO PERMIAN OPERATING LLC	Well Number:	445H

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: 6 file(s)
  -- Other Variances: 4 file(s)

- SUPO Report
- SUPO Attachments
  -- Existing Road Map: 1 file(s)
  -- Attach Well map: 1 file(s)
  -- Water source and transportation map: 1 file(s)
  -- Well Site Layout Diagram: 2 file(s)
  -- Recontouring attachment: 4 file(s)
  -- Other SUPO Attachment: 1 file(s)

- PWD Report
- PWD Attachments
  -- None

- Bond Report
- Bond Attachments
  -- None

Form 3160-3
(June 2015)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM030452

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Other

1c. Type of Completion: ☐ Hydraulic Fracturing ☑ Single Zone ☐ Multiple Zone

7. If Unit or CA Agreement, Name and No.: NMNM071016X/POKER LAKE UNIT

8. Lease Name and Well No.: POKER LAKE UNIT 23 DTD 445H

2. Name of Operator: XTO PERMIAN OPERATING LLC

9. API Well No.: 30-015-55909

3a. Address: 6401 HOLIDAY HILL ROAD BLDG 5, MIDLAND, TX 7970

3b. Phone No. *(include area code)*: (432) 683-2277

10. Field and Pool, or Exploratory: PURPLE SAGE/WOLFCAMP (GAS)

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: NWNE / 1152 FNL / 1651 FEL / LAT 32.207469 / LONG -103.848317

At proposed prod. zone: SWNE / 2627 FNL / 2277 FEL / LAT 32.174406 / LONG -103.850311

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 23/T24S/R30E/NMP

14. Distance in miles and direction from nearest town or post office*: 9.3 miles

12. County or Parish: EDDY

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 1152 feet

16. No of acres in lease:

17. Spacing Unit dedicated to this well: 1600.0

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 30 feet

19. Proposed Depth: 11493 feet / 24409 feet

20. BLM/BIA Bond No. in file: FED: COB000050

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3429 feet

22. Approximate date work will start*: 04/26/2025

23. Estimated duration: 45 days

24. Attachments

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

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

25. Signature: (Electronic Submission)

Name *(Printed/Typed)*: RICHARD REDUS / Ph: (432) 682-8873

Date: 04/18/2024

Title: Permitting Manager

Approved by *(Signature)*: (Electronic Submission)

Name *(Printed/Typed)*: CODY LAYTON / Ph: (575) 234-5959

Date: 11/22/2024

Title: Assistant Field Manager Lands & Minerals

Office: Carlsbad Field Office

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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

APPROVED WITH CONDITIONS

(Continued on page 2)

*(Instructions on page 2)

Approval Date: 11/22/2024

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.

Approval Date: 11/22/2024

Additional Operator Remarks

Location of Well

0. SHL: NWNE / 1152 FNL / 1651 FEL / TWSP: 24S / RANGE: 30E / SECTION: 23 / LAT: 32.207469 / LONG: -103.848317 (TVD: 0 feet, MD: 0 feet)

PPP: NWNE / 100 FNL / 2290 FEL / TWSP: 24S / RANGE: 30E / SECTION: 23 / LAT: 32.210358 / LONG: -103.850375 (TVD: 11493 feet, MD: 12100 feet)

PPP: NWNE / 0 FSL / 2265 FEL / TWSP: 24S / RANGE: 30E / SECTION: 26 / LAT: 32.196136 / LONG: -103.85035 (TVD: 11493 feet, MD: 17400 feet)

BHL: SWNE / 2627 FNL / 2277 FEL / TWSP: 24S / RANGE: 30E / SECTION: 35 / LAT: 32.174406 / LONG: -103.850311 (TVD: 11493 feet, MD: 24409 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.

C-102 Sumbit electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONVERSION DIVISION	Revised July, 09 2024
		Submittal Type: ☒ Initial Submittal / ☐ Amended Report / ☐ As Drilled

WELL LOCATION INFORMATION

API Number	Pool Code	Pool Name
30-015-55909	98220	PURPLE SAGE; WOLFCAMP (GAS)

Property Code	Property Name	Well Number
325598	POKER LAKE UNIT 23 DTD	445H

OGRID No.	Operator Name	Ground Level Elevation
373075	XTO PERMIAN OPERATING, LLC.	3,429'

Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	23	24S	30E		1,152' FNL	1,651' FEL	32.207469	-103.848317	EDDY

Bottom Hole Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	35	24S	30E		2,627' FNL	2,277' FEL	32.174406	-103.850311	EDDY

Dedicated Acres	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
1,600.00	INFILL		Y	U

Order Numbers.

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
B	23	24S	30E		1,152' FNL	1,651' FEL	32.207469	-103.848317	EDDY

First Take Point (FTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
B	23	24S	30E		100' FNL	2,290' FEL	32.210358	-103.850375	EDDY

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
G	35	24S	30E		2,537' FNL	2,277' FEL	32.174654	-103.850314	EDDY

Unitized Area or Area of Interest	Spacing Unit Type : ☒ Horizontal ☐ Vertical	Ground Elevation
NMNM105422429		3,429'

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 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 at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or a voluntary pooling agreement or a compulsory pooling order of 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 information) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.

Terra Sebastian — Signature

10/29/2024 — Date

Terra Sebastian — Printed Name

terra.b.sebastian@exxonmobil.com — Email Address

SURVEYOR CERTIFICATIONS

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

Signature and Seal of Professional Surveyor

MARK DILLON HARP 23786 — Certificate Number

10/28/2024 — Date of Survey

KT

618.013003.09-60

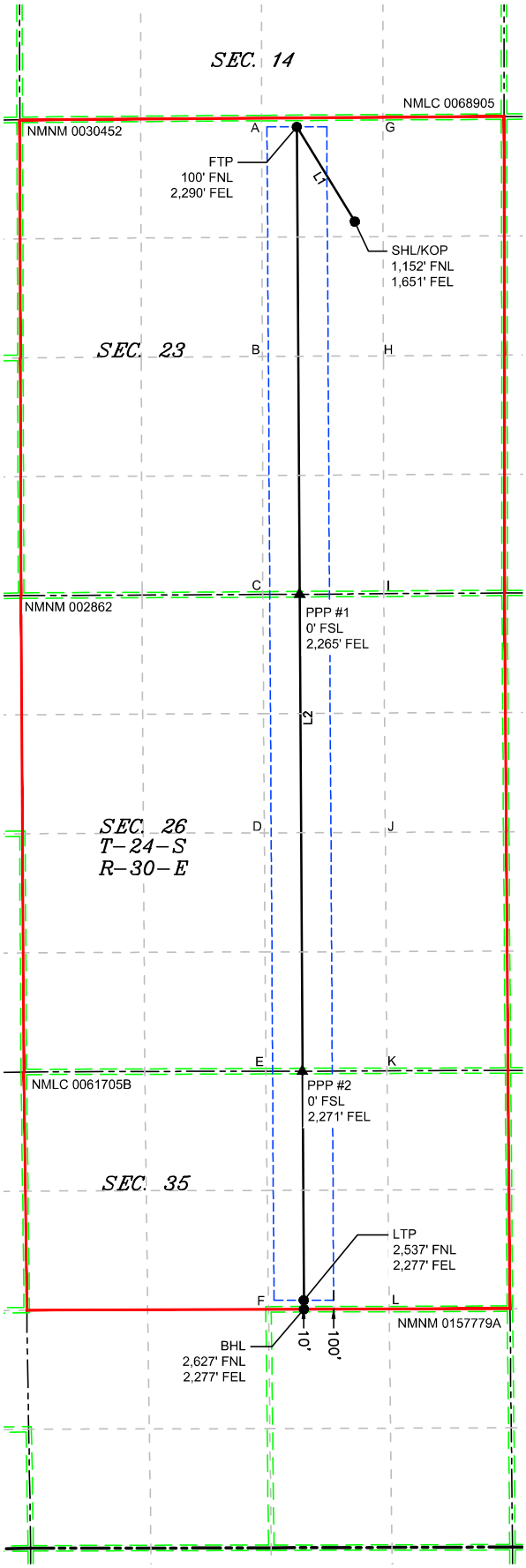
Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

\618.013 XTO Energy - NM\003 Poker Lake Unit\09 - PLU 23 DTD - EDDY\Wells\-60 - PLU 23 DTD - 445H\DWG\445H C-102.dwg

ACREAGE DEDICATION PLATS

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 a 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 then the First Take Point and Last Take Point) that is closest to any outer boundary of the tract.

Surveyor 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 in not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



LEGEND

- SECTION LINE
- PROPOSED WELL BORE
- NEW MEXICO MINERAL LEASE
- 330' BUFFER
- ALLOCATION AREA

LINE TABLE		
LINE	AZIMUTH	LENGTH
L1	328°33'17"	1,228.74'
L2	179°39'25"	13,078.92'

COORDINATE TABLE

SHL/KOP (NAD 83 NME)			SHL/KOP (NAD 27 NME)		
Y =	439,549.8	N	Y =	439,490.8	N
X =	691,347.9	E	X =	650,164.1	E
LAT. =	32.207469	°N	LAT. =	32.207345	°N
LONG. =	103.848317	°W	LONG. =	103.847831	°W
FTP (NAD 83 NME)			**FTP (NAD 27 NME)**		
Y =	440,598.1	N	Y =	440,539.0	N
X =	690,706.9	E	X =	649,523.2	E
LAT. =	32.210358	°N	LAT. =	32.210235	°N
LONG. =	103.850375	°W	LONG. =	103.849888	°W
PPP #1 (NAD 83 NME)			**PPP #1 (NAD 27 NME)**		
Y =	435,424.0	N	Y =	435,365.2	N
X =	690,737.6	E	X =	649,553.7	E
LAT. =	32.196136	°N	LAT. =	32.196012	°N
LONG. =	103.850350	°W	LONG. =	103.849865	°W
PPP #2 (NAD 83 NME)			**PPP #2 (NAD 27 NME)**		
Y =	430,146.7	N	Y =	430,088.0	N
X =	690,769.0	E	X =	649,584.8	E
LAT. =	32.181629	°N	LAT. =	32.181505	°N
LONG. =	103.850326	°W	LONG. =	103.849841	°W
LTP (NAD 83 NME)			**LTP (NAD 27 NME)**		
Y =	427,609.4	N	Y =	427,550.7	N
X =	690,784.0	E	X =	649,599.8	E
LAT. =	32.174654	°N	LAT. =	32.174530	°N
LONG. =	103.850314	°W	LONG. =	103.849830	°W
BHL (NAD 83 NME)			**BHL (NAD 27 NME)**		
Y =	427,519.4	N	Y =	427,460.7	N
X =	690,785.2	E	X =	649,601.0	E
LAT. =	32.174406	°N	LAT. =	32.174282	°N
LONG. =	103.850311	°W	LONG. =	103.849827	°W
CORNER COORDINATES (NAD 83 NME)					
A - Y =	440,695.8	N	A - X =	690,318.7	E
B - Y =	438,055.8	N	B - X =	690,325.0	E
C - Y =	435,421.3	N	C - X =	690,331.2	E
D - Y =	432,784.0	N	D - X =	690,347.4	E
E - Y =	430,145.2	N	E - X =	690,363.6	E
F - Y =	427,508.2	N	F - X =	690,393.8	E
G - Y =	440,703.6	N	G - X =	691,657.9	E
H - Y =	438,063.2	N	H - X =	691,663.1	E
I - Y =	435,430.3	N	I - X =	691,666.7	E
J - Y =	432,788.9	N	J - X =	691,684.1	E
K - Y =	430,149.6	N	K - X =	691,701.7	E
L - Y =	427,512.3	N	L - X =	691,727.9	E
CORNER COORDINATES (NAD 27 NME)					
A - Y =	440,636.8	N	A - X =	649,135.0	E
B - Y =	437,996.8	N	B - X =	649,141.1	E
C - Y =	435,362.4	N	C - X =	649,147.3	E
D - Y =	432,725.2	N	D - X =	649,163.4	E
E - Y =	430,086.5	N	E - X =	649,179.4	E
F - Y =	427,449.5	N	F - X =	649,209.6	E
G - Y =	440,644.6	N	G - X =	650,474.1	E
H - Y =	438,004.2	N	H - X =	650,479.3	E
I - Y =	435,371.5	N	I - X =	650,482.8	E
J - Y =	432,730.1	N	J - X =	650,500.1	E
K - Y =	430,090.8	N	K - X =	650,517.5	E
L - Y =	427,453.6	N	L - X =	650,543.6	E

KT 618.013003.09-60

618.013 XTO Energy - NM\003 Poker Lake Unit\09 - PLU 23 DTD - EDDY\Wells\-60 - PLU 23 DTD - 445H\DWG\445H C-102.dwg

State of New Mexico
Energy, Minerals and Natural Resources Department

Submit Electronically
Via E-permitting

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

NATURAL GAS MANAGEMENT PLAN

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

Section 1 – Plan Description

Effective May 25, 2021

I. Operator: ____XTO Permian Operating, LLC____ **OGRID:** _____373075_____ **Date:** __11__/_4___/__2024___

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

If Other, please describe: _____

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

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	3 yr Anticipated Decline oil BBL/D	Anticipated Gas MCF/D	3 yr anticipated decline Gas MCF/D	Anticipated Produced Water BBL/D	3 yr anticipated decline Water BBL/D
Poker Lake Unit 23 DTD 104H		14 T24S R30E	556 FSL 310 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 193H		14 T24S R30E	556 FSL 280 FWL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 441H		23 T24S R30E	1152 FNL 1771 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 442H		23 T24S R30E	1152 FNL 1741 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 443H		23 T24S R30E	1152 FNL 1711 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 444H		23 T24S R30E	1152 FNL 1681 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 445H		23 T24S R30E	1152 FNL 1651 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 451H		23 T24S R30E	1247 FNL 1771 FEL	1,900	200	3,250	900	3,750	400

Poker Lake Unit 23 DTD 452H		23 T24S R30E	1247 FNL 1741 FEL	1,900	200	3,250	900	3,750	400
Poker Lake Unit 23 DTD 453H		23 T24S R30E	1247 FNL 1711 FEL	1,900	200	3,250	900	3,750	400
Poker Lake Unit 23 DTD 454H		23 T24S R30E	1247 FNL 1681 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 455H		23 T24S R30E	1247 FNL 1651 FEL	1,900	200	3,250	900	3,750	400
Poker Lake Unit 23 DTD 456H		23 T24S R30E	1247 FNL 1621 FEL	1,900	200	3,250	900	3,750	400
Poker Lake Unit 23 DTD 541H		14 T24S R30E	645 FSL 637 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 542H		14 T24S R30E	645 FSL 607 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 543H		14 T24S R30E	645 FSL 577 FEL	1,900	200	3,250	900	3,750	400
Poker Lake Unit 23 DTD 544H		14 T24S R30E	645 FSL 547 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 545H		14 T24S R30E	645 FSL 517 FEL	1,900	200	3,250	900	3,750	400
Poker Lake Unit 23 DTD 546H		14 T24S R30E	645 FSL 487 FEL	1,800	200	7,500	1,200	7,000	800
Poker Lake Unit 23 DTD 705H		14 T24S R30E	556 FSL 340 FWL	1,800	200	7,500	1,200	7,000	800

IV. Central Delivery Point Name: PLU 23 DTD CVB [See 19.15.27.9(D)(1) NMAC]

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

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Poker Lake Unit 23 DTD 104H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 193H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 441H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 442H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 443H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**

Poker Lake Unit 23 DTD 444H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 445H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 451H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 452H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 453H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 454H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 455H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 456H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 541H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 542H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 543H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 544H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 545H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 546H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**
Poker Lake Unit 23 DTD 705H	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**	**TBD**

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

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

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

Section 2 – Enhanced Plan

EFFECTIVE APRIL 1, 2022

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

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

IX. Anticipated Natural Gas Production:

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

X. Natural Gas Gathering System (NGGS):

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

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

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

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

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

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

Section 3 - Certifications

Effective May 25, 2021

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

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

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

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

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

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

Section 4 - Notices

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

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

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

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

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

Signature: *Samantha Weis*
Printed Name: Samantha Weis
Title: Permitting Advisor
E-mail Address: samantha.r.bartnik@exxonmobil.com
Date: 11/4/2024
Phone: +1-832-625-7361

OIL CONSERVATION DIVISION **(Only applicable when submitted as a standalone form)**
Approved By:
Title:
Approval Date:
Conditions of Approval:

VI. Separation Equipment:

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

VII. Operational Practices

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

- During drilling operations, XTO will utilize flares to capture and control natural gas, where technically feasible. If flaring is deemed technically in-feasible, XTO will employ best management practices to minimize or reduce venting to the extent possible.

- During completions operations, XTO will utilize Green Completion methods to capture gas produced during well completions that is otherwise vented or flared. If capture is technically in-feasible, flares will be used to control flow back fluids entering into frac tanks during initial flowback. Upon indication of first measurable hydrocarbon volumes, XTO Permian Operating LLCwill turn operations to onsite separation vessels and flow to the gathering pipeline.

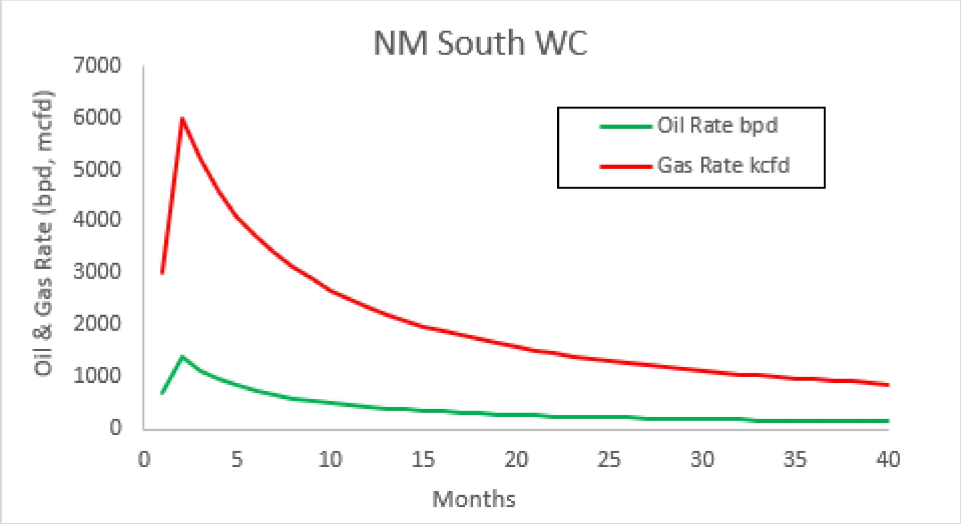
- During production operations, XTO Permian Operating LLC will take every practical effort to minimize waste of natural gas through venting and flaring by:

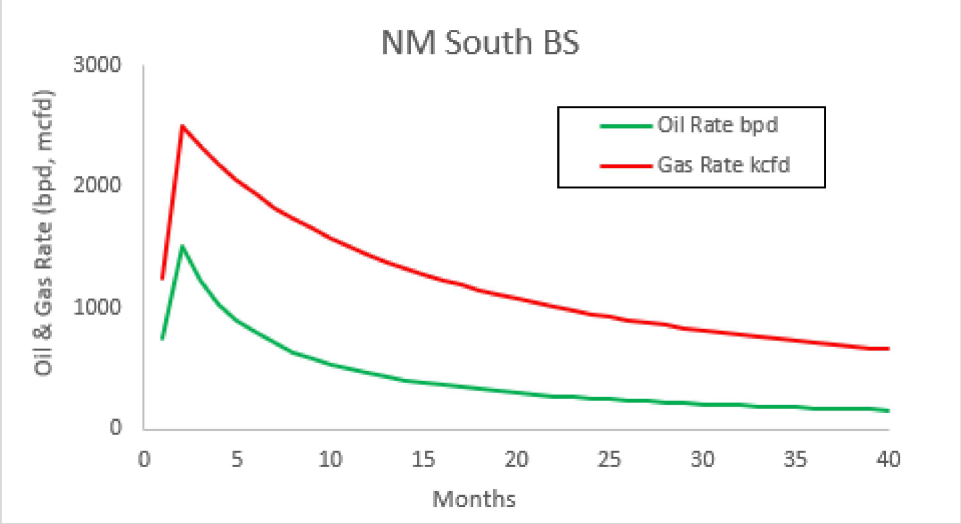
    - Designing and constructing facilities in a manner consistent to achieve maximum capture and control of hydrocarbon liquids & produced gas
    - Utilizing a closed-loop capture system to collect, and route produced gas to sales line via low pressure compression, or to a flare/combustor
    - Flaring 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.


NM South WC
Oil & Gas Rate (bpd, mcfd)
7000
6000
5000
4000
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
Months
Oil Rate bpd
Gas Rate kcfd


NM South BS
Oil & Gas Rate (bpd, mcfd)
3000
2000
1000
0
0
5
10
15
20
25
30
35
40
Months
Oil Rate bpd
Gas Rate kcfd

AFMSS

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

Drilling Plan Data Report
11/25/2024

APD ID: 10400098065 **Submission Date:** 04/18/2024

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

Well Type: CONVENTIONAL GAS WELL **Well Work Type:** Drill

Highlighted data reflects the most recent changes

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
14549492	QUATERNARY	3429	0	0	ALLUVIUM	USEABLE WATER	N
14549493	RUSTLER	2115	1314	1314	ANHYDRITE	USEABLE WATER	N
14549494	SALADO	1712	1717	1717	POTASH, SALT	NONE	N
14549495	BASE OF SALT	-481	3910	3910	ANHYDRITE, DOLOMITE, POTASH	NONE	N
14549496	DELAWARE	-675	4104	4104	LIMESTONE, SANDSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14549497	BRUSHY CANYON	-3181	6610	6610	SANDSTONE, SHALE, SILTSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14549498	BONE SPRING	-4470	7899	7899	LIMESTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14549499	BONE SPRING 1ST	-5241	8670	8670	SANDSTONE, SHALE, SILTSTONE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14549500	BONE SPRING 2ND	-5843	9272	9272	LIMESTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14549501	BONE SPRING 3RD	-6610	10039	10039	LIMESTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	N
14549502	WOLFCAMP	-7944	11373	11373	SANDSTONE, SHALE	NATURAL GAS, OIL, OTHER : PRODUCED WATER	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 5M **Rating Depth:** 11493

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

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells. A variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. We will request permission to ONLY retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

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

Choke Diagram Attachment:

PLU_23_DTD_5MCM_20240410151726.pdf

BOP Diagram Attachment:

5M10M_BOP_20240917090707.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	12.25	9.625	NEW	API	N	0	1414	0	1414	3429	2015	1414	J-55	40	BUTT	4.45	1.55	DRY	11.14	DRY	11.14
2	INTERMEDIATE	8.75	7.625	NEW	API	Y	0	10722	0	10577	3446	-7148	10722	L-80	29.7	FJ	2.23	1.58	DRY	2.03	DRY	2.03
3	PRODUCTION	6.75	5.5	NEW	NON API	Y	0	24409	0	11493	3446	-8064	24409	P-110	20	OTHER - Freedom HTQ/Talon HTQ	1.62	1.05	DRY	1.96	DRY	1.96

Casing Attachments

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

Casing Attachments

Casing ID: 1 **String** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

PLU_23_DTD_445H_Csg_20240414162206.pdf

Casing ID: 2 **String** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

PLU_23_DTD_445H_Csg_20240414161935.pdf

Casing Design Assumptions and Worksheet(s):

PLU_23_DTD_445H_Csg_20240414162045.pdf

Casing ID: 3 **String** PRODUCTION

Inspection Document:

Spec Document:

Freedom_semi_premium_5.5_production_casing_20240809154025.pdf
Talon___semiflush_5.5_production_casing_20240809154025.pdf

Tapered String Spec:

PLU_23_DTD_445H_Csg_20240414161747.pdf

Casing Design Assumptions and Worksheet(s):

PLU_23_DTD_445H_Csg_20240414161813.pdf

Section 4 - Cement

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1414	370	1.87	10.5	691.9	100	EconoCem-HLTRRC	NA
SURFACE	Tail		0	1414	130	1.35	14.8	175.5	100	Class C	2% CaCl
INTERMEDIATE	Lead		0	6610	380	1.35	14.8	513	100	Class C	NA
INTERMEDIATE	Tail		6610	10722	740	1.33	14.8	984.2	100	Class C	NA
PRODUCTION	Lead		10422	10922	20	2.69	11.5	53.8	30	NeoCem	NA
PRODUCTION	Tail		10922	24409	960	1.51	13.2	1449.6	30	VersaCem	NA

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

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

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

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

Describe the mud monitoring system utilized: Spud with fresh water/native mud. Drill out from under surface casing with Saturated Salt solution. Saturated Salt mud will be used while drilling through the salt formation. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
4104	10722	OTHER : BDE/ODM	9	9.5							

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1414	WATER-BASED MUD	8.4	8.9							
1414	4104	SALT SATURATED	10.5	11							
10722	24409	OIL-BASED MUD	11.5	12							

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: 6873 **Anticipated Surface Pressure:** 4344

Anticipated Bottom Hole Temperature(F): 200

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_20240809153902.pdf

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

PLU_23_DTD_445H_DD_20240414163435.pdf

Other proposed operations facets description:

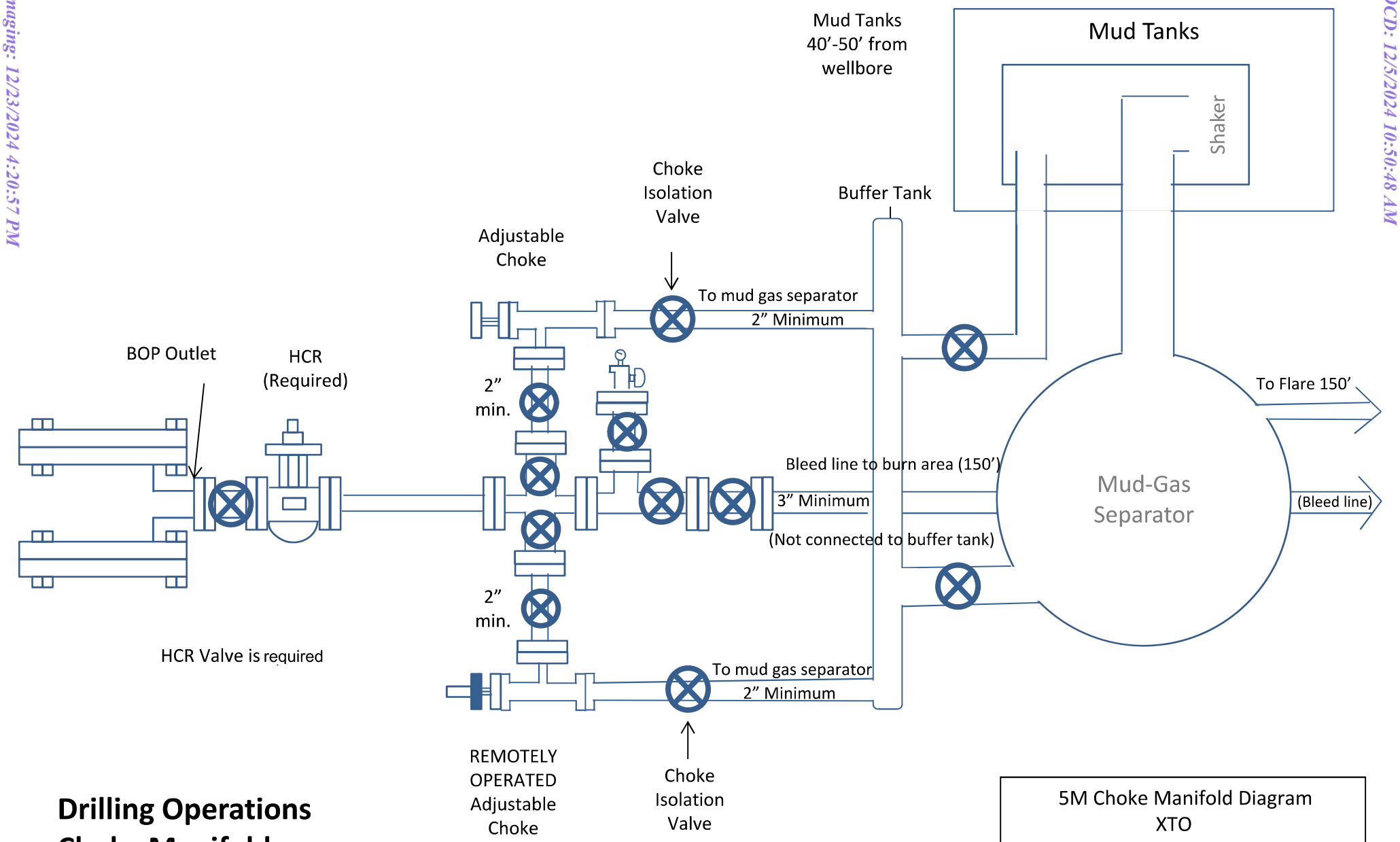
Other proposed operations facets attachment:

PLU_23_DTD_445H_Cmt_20240414163635.pdf
PLU_23_DTD_445H_RL_20240809154425.pdf
PLU_23_DTD_H2S_DiaA_20240809154515.pdf
PLU_23_DTD_H2S_DiaD_20240809154515.pdf
PLU_23_DTD_H2S_DiaC_20240809154517.pdf
9.625_7.625_5.5_3_String_Slimhole_HBE0000479_4_20240809160558.pdf

Other Variance attachment:

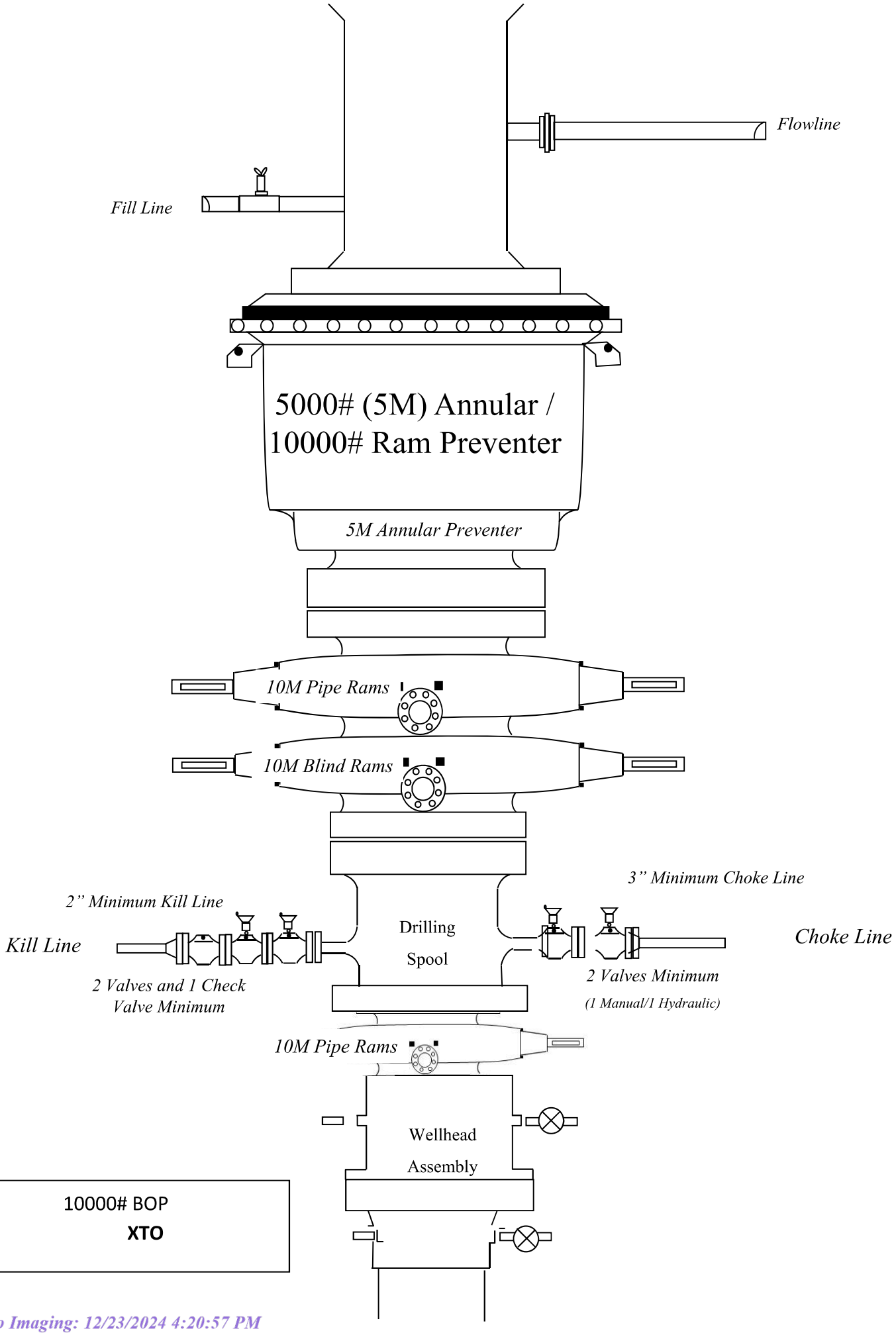
Spudder_Rig_Request_20240809154613.pdf
Offline_Cement_Variance_Surf___Interm_Csg_20240809154613.pdf
Updated_Flex_Hose_20240809154614.pdf
BOP_Break_Test_Variance_20240809154614.pdf

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



Drilling Operations
Choke Manifold
5M Service

5M Choke Manifold Diagram
XTO



10000# BOP

XTO

Casing Assumptions

Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 1414'	9.625	40	J-55	BTC	New	1.55	4.45	11.14
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	2.18	2.92	1.75
8.75	4000' – 10722'	7.625	29.7	HC L-80	Flush Joint	New	1.58	2.23	2.03
6.75	0' – 10622'	5.5	20	RY P-110	Semi-Premium	New	1.05	1.75	1.96
6.75	10622' - 24409'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.62	1.96

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 (6610') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

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

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

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

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

Production Casing:

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

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

Description of Operations:

1. Spudder rig will move in to drill the surface hole and pre-set surface casing on the well.
    a. After drilling the surface hole section, the spudder rig will run casing and cement following all of the applicable rules and regulations (OnShore Order 2, all COAs and NMOCD regulations).
    b. The spudder rig will utilize fresh water-based mud to drill the surface hole to TD. Solids control will be handled entirely on a closed loop basis. No earth pits will be used.
2. The wellhead will be installed and tested as soon as the surface casing is cut off and WOC time has been reached.
3. A blind flange at the same pressure rating as the wellhead will be installed to seal the wellbore. Pressure will be monitored with needle valves installed on two wing valves.
    a. A means for intervention will be maintained while the drilling rig is not over the well.
4. Spudder rig operations are expected to take 2-3 days per well on the pad.
5. The BLM will be contacted and notified 24 hours prior to commencing spudder rig operations.
6. Drilling Operations will begin with a larger rig and a BOP stack equal to or greater than the pressure rating that was permitted will be 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.

Subject: Request for a Variance Allowing break Testing of the Blowout Preventer Equipment (BOPE)

XTO Energy requests a variance to ONLY test broken pressure seals on the BOPE and function test BOP when skidding a drilling rig between multiple wells on a pad.

Background

Onshore Oil and Gas Order CFR Title 43 Part 3170, Drilling Operations, Sections III.A.2.i.iv.B states that the BOP test must be performed whenever any seal subject to test pressure is broken. The current interpretation of the Bureau of Land Management (BLM) requires a complete BOP test and not just a test of the affected component. CFR Title 43 Part 3170 states, "Some situation may exist either on a well-by- well basis or field-wide basis whereby it is commonly accepted practice to vary a particular minimum standard(s) established in this order. This situation can be resolved by requesting a variance…". XTO Energy feels the break testing the BOPE is such a situation. Therefore, as per CFR Title 43 Part 3170, XTO Energy submits this request for the variance.

Supporting Documentation

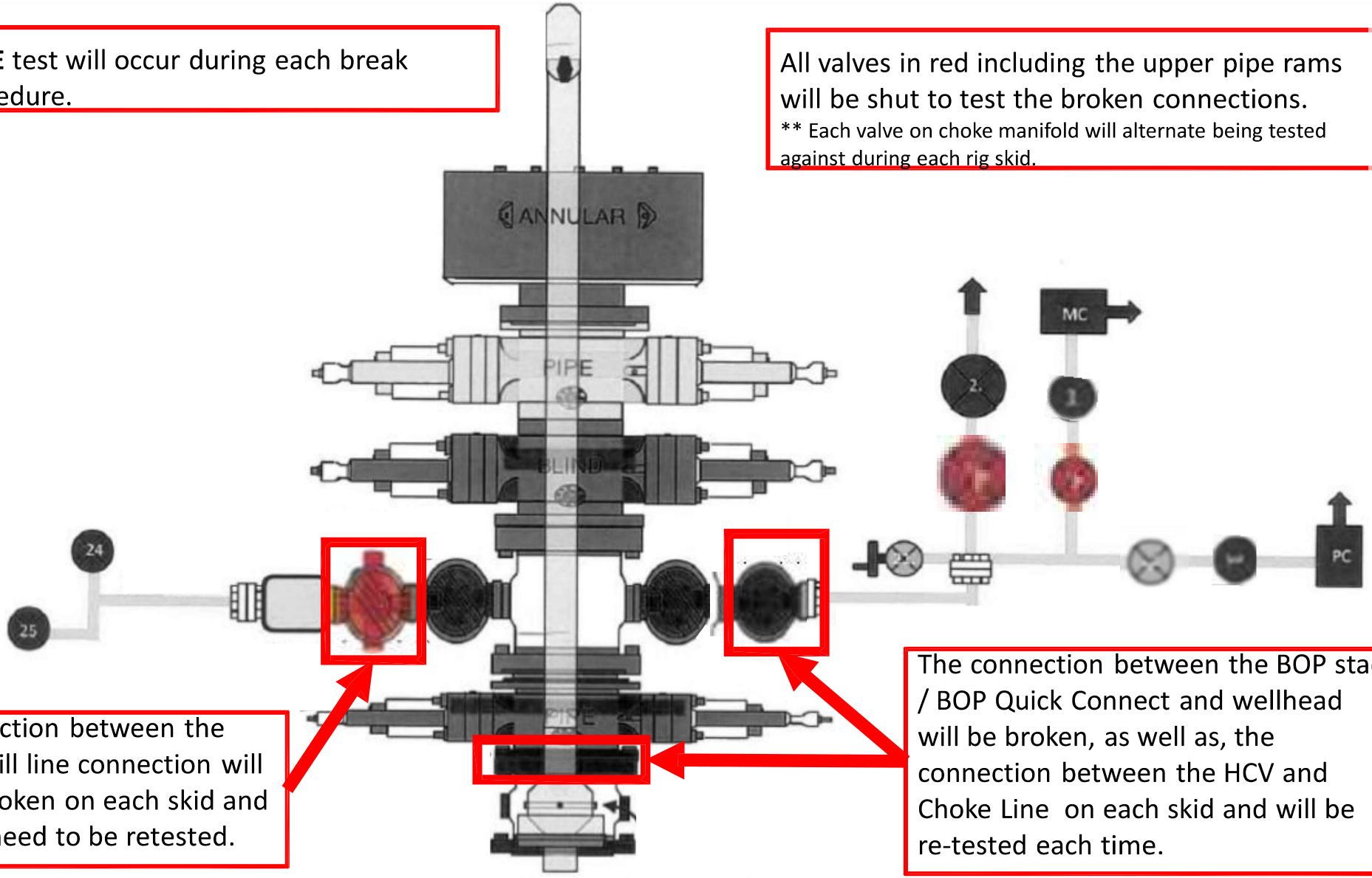
CFR Title 43 Part 3170 became effective on December 19, 1988 and has remained the standard for regulating BLM onshore drilling operations for over 30 years. During this time there have been significant changes in drilling technology. BLM continues to use the variance request process to allow for the use of modern technology and acceptable engineering practices that have arisen since CFR Title 43 Part 3170 was originally released. The XTO Energy drilling rig fleet has many modern upgrades that allow the intact BOP stack to be moved between well slots on a multi-well pad, as well as, wellhead designs that incorporate quick connects facilitating release of the BOP from the wellhead without breaking any BOP stack components apart. These technologies have been used extensively offshore, and other regulators, API, and many operators around the world have endorsed break testing as safe and reliable.

Figure 1: Winch System attached to BOP Stack

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

All valves in red including the upper pipe rams will be shut to test the broken connections.

** Each valve on choke manifold will alternate being tested against during each rig skid.



The connection between the HCV and kill line connection will **NOT** be broken on each skid and does not need to be retested.

The connection between the BOP stack / BOP Quick Connect and wellhead will be broken, as well as, the connection between the HCV and Choke Line on each skid and will be re-tested each time.

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.

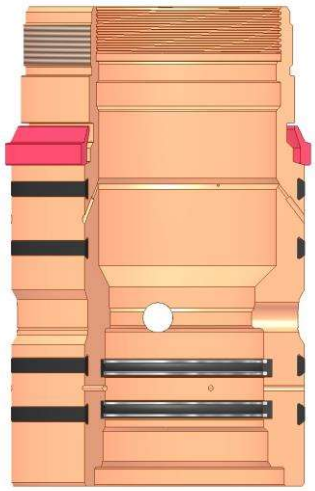
1. Cement Program

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

2. Offline Cementing Procedure

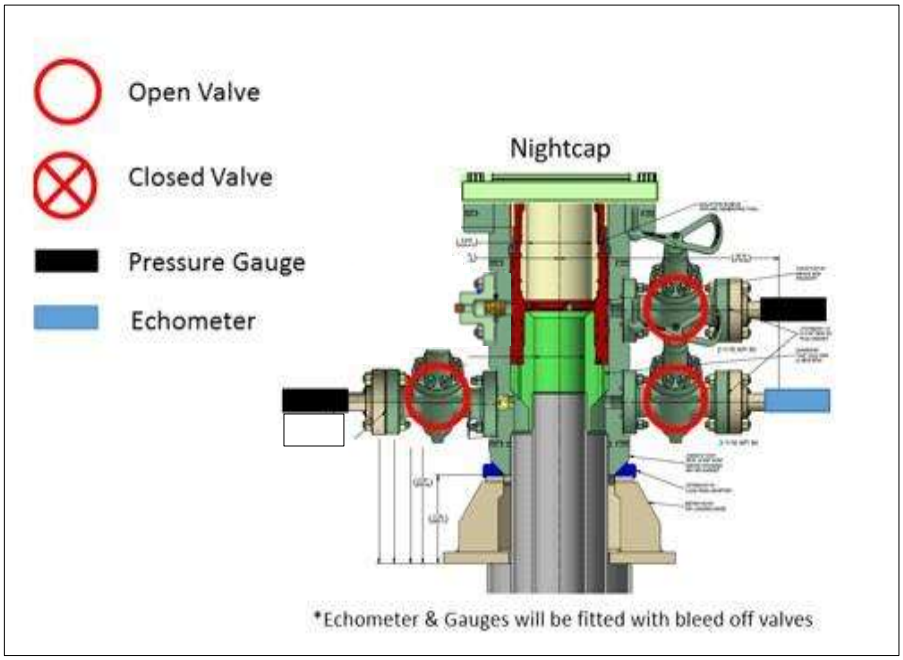
The operational sequence will be as follows. If a well control event occurs, the BLM will be contacted for approval prior to conducting offline cementing operations.

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

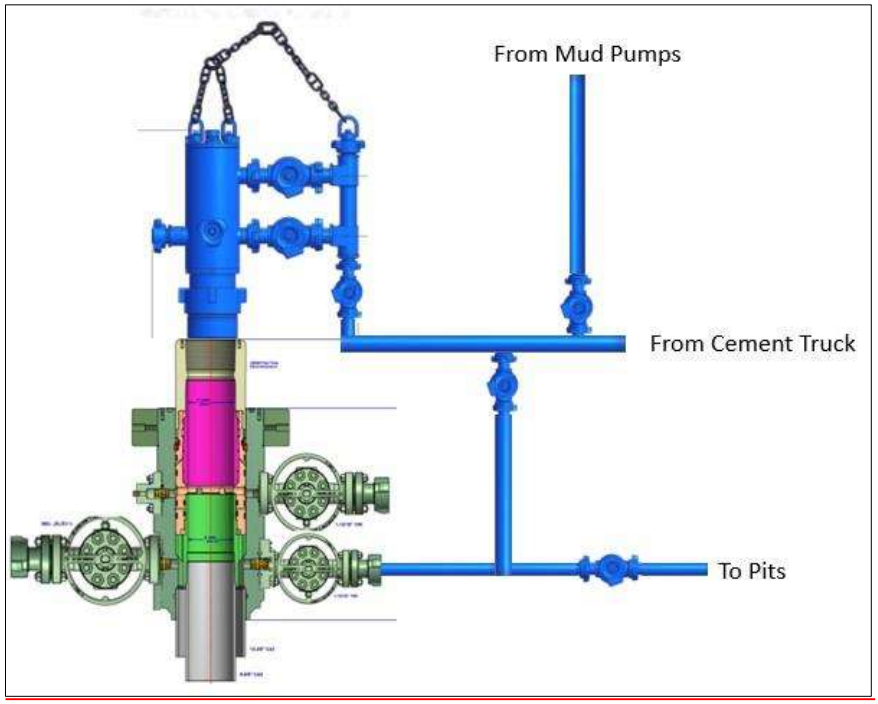
XTO Permian Operating, LLC Offline Cementing Variance Request



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.

BLACK GOLD®

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

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

NEW CHOKE HOSE INSTALLED 02-10-2024

CERTIFICATE OF CONFORMANCE

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

CUSTOMER:	NABORS DRILLING TECHNOLOGIES USA DBA NABORS DRILLING USA
CUSTOMER P.O.#:	15582803 (TAG NABORS PO #15582803 SN 74621 ASSET 66-1531)
CUSTOMER P/N:	IMR RETEST SN 74621 ASSET #66-1531
PART DESCRIPTION:	RETEST OF CUSTOMER 3" X 45 FT 16C CHOKE & KILL HOSE ASSEMBLY C/W 4 1/16" 10K FLANGES
SALES ORDER #:	529480
QUANTITY:	1
SERIAL #:	74621 H3-012524-1

SIGNATURE: F. OSPINOS

TITLE: QUALITY ASSURANCE

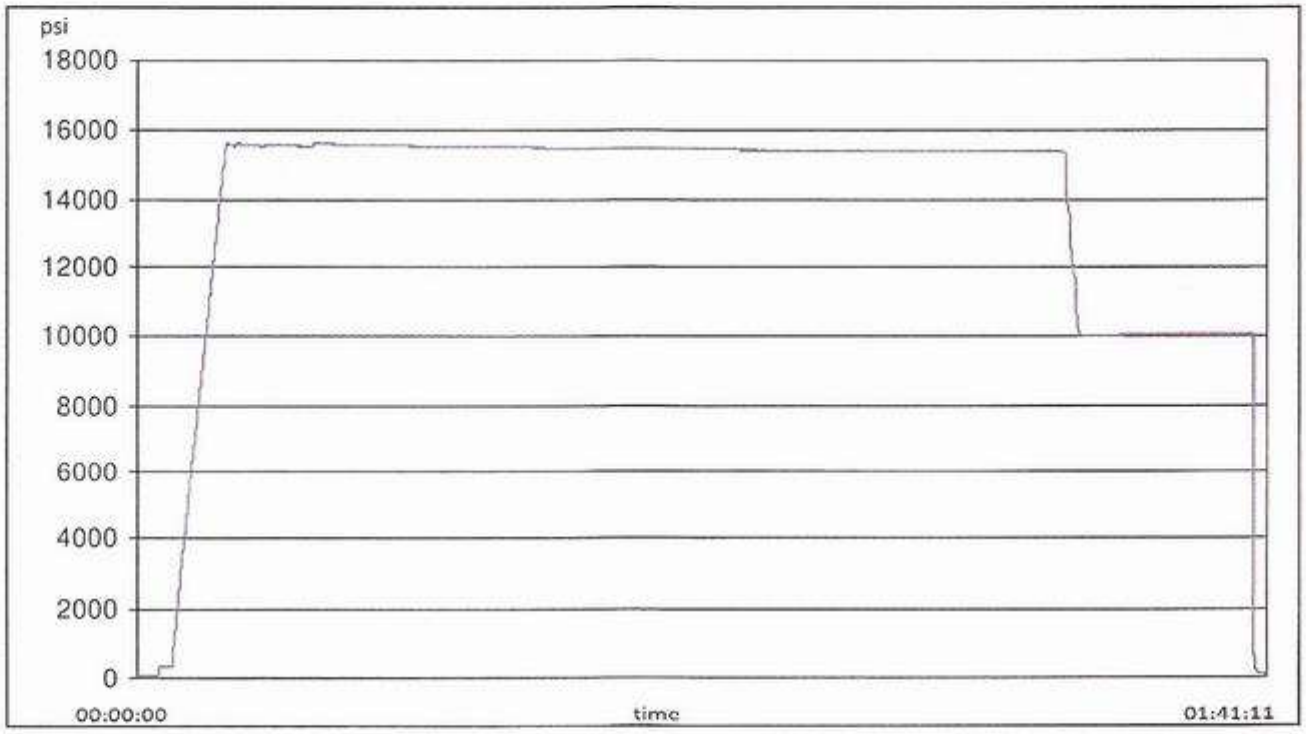
DATE: 1/25/2024

H3-15716

1/25/2024 11:48:06 AM

TEST REPORT

CUSTOMER			TEST OBJECT		
Company:	Nabors Industries Inc.		Serial number:	H3-012524-1	
			Lot number:		
Production description:	74621/66-1531		Description:	74621/66-1531	
Sales order #:	529480				
Customer reference:	FG1213		Hose ID:	3" 16C CK	
			Part number:		
TEST INFORMATION					
Test procedure:	GTS-04-053		Fitting 1:	3.0 x 4-1/16 10K	
Test pressure:	15000.00	psi	Part number:		
Test pressure hold:	3600.00	sec	Description:		
Work pressure:	10000.00	psi			
Work pressure hold:	900.00	sec	Fitting 2:	3.0 x 4-1/16 10K	
Length difference:	0.00	%	Part number:		
Length difference:	0.00	inch	Description:		
Visual check:			Length:	45	feet
Pressure test result:	PASS				
Length measurement result:					
Test operator:	Travis				



H3-15/16

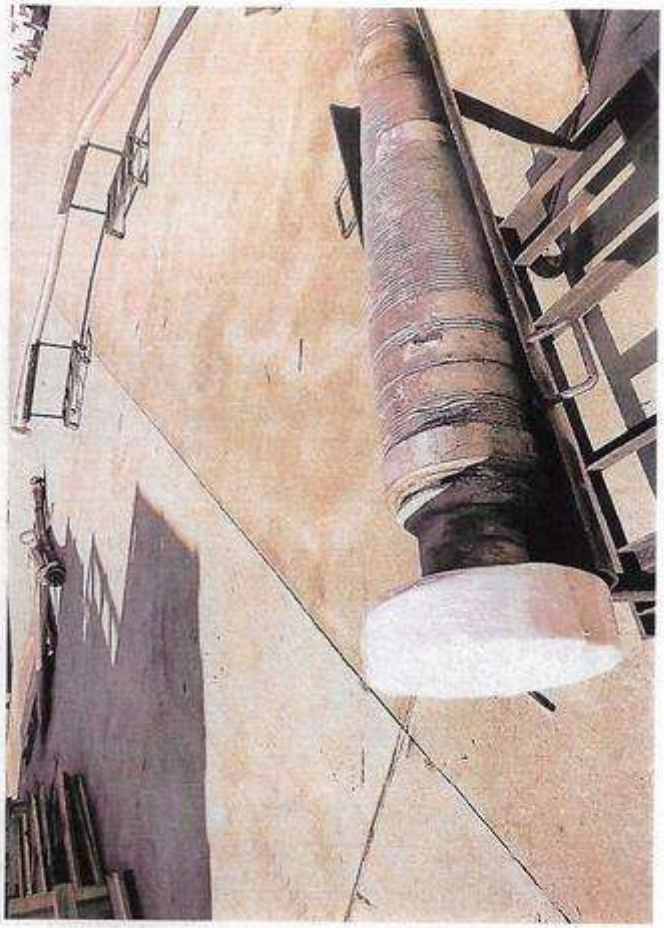
1/25/2024 11:48:06 AM

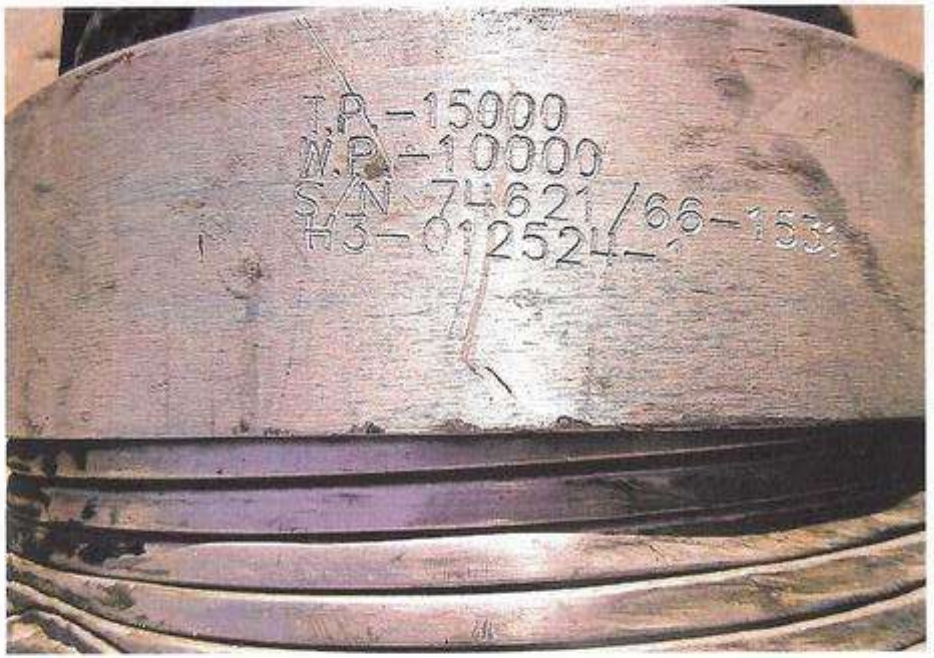
TEST REPORT

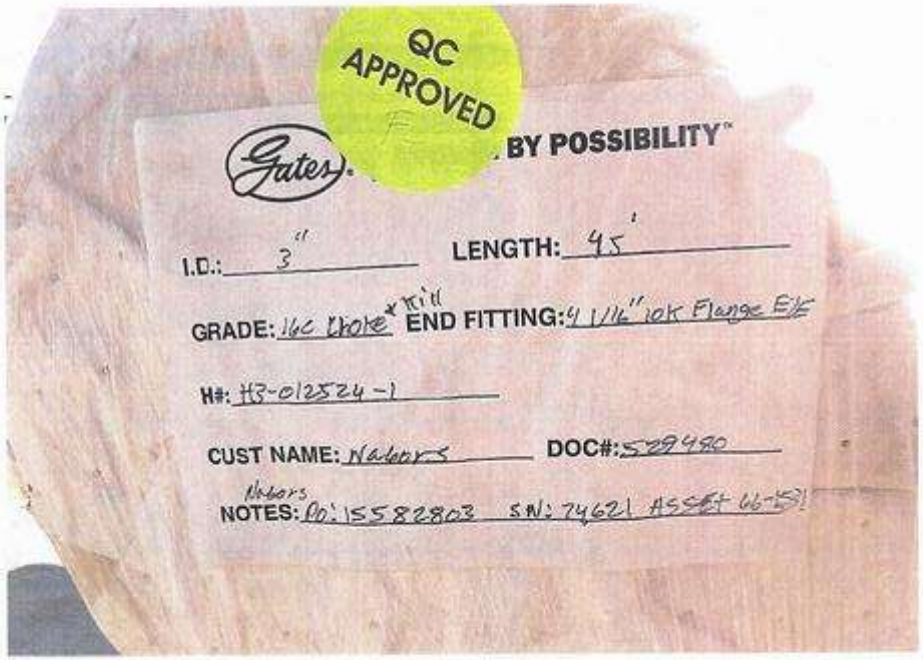
GAUGE TRACEABILITY

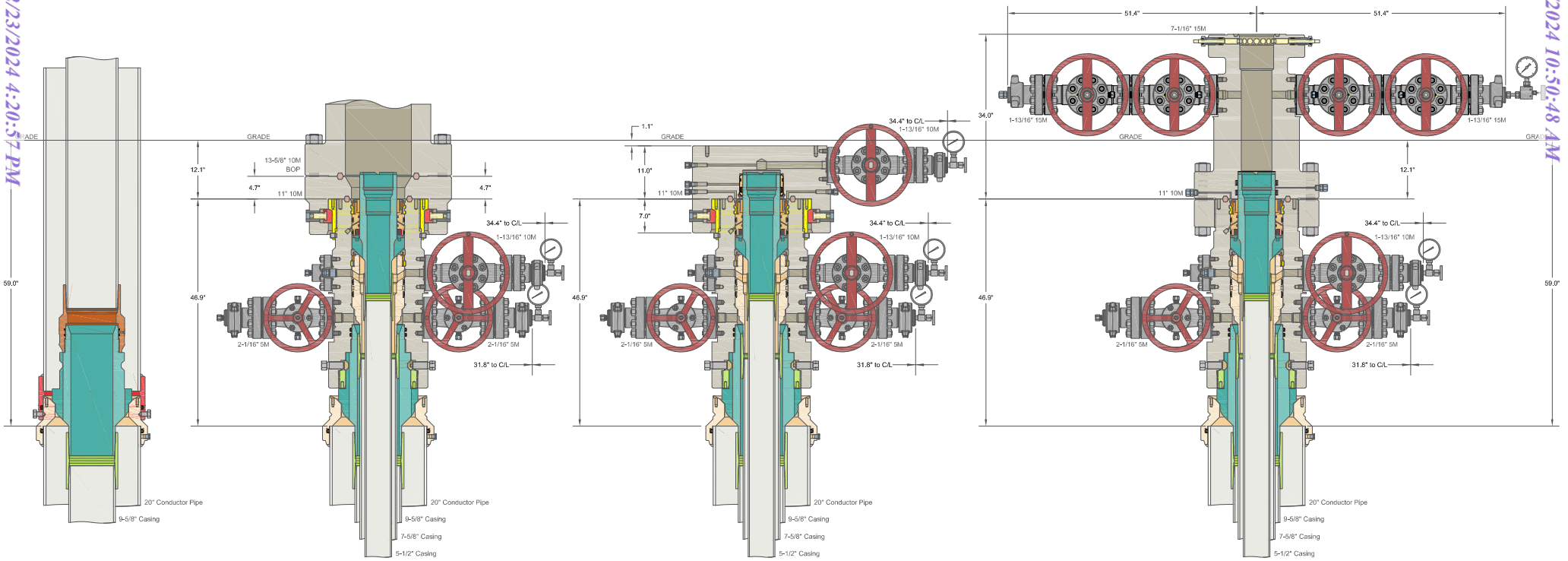
Description	Serial number	Calibration date	Calibration due date
S-25-A-W	110D3PHO	2023-06-06	2024-06-06
S-25-A-W	110IQWDG	2023-05-16	2024-05-16

Comment









ALL DIMENSIONS APPROXIMATE

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

Well Plan Report - Poker Lake Unit 23 DTD South 445H

Measured Depth:	24408.88 ft
TVD RKB:	11493.00 ft
Location	
Cartographic Reference System:	New Mexico East - NAD 27
Northing:	439490.80 ft
Easting:	650164.10 ft
RKB:	3461.00 ft
Ground Level:	3429.00 ft
North Reference:	Grid
Convergence Angle:	0.26 Deg

Plan Sections Poker Lake Unit 23 DTD South 445H

Measured Depth (ft)	Inclination (Deg)	Azimuth (Deg)	TVD RKB (ft)	Y Offset (ft)	X Offset (ft)	Build Rate (Deg/100ft)	Turn Rate (Deg/100ft)	Dogleg Rate (Deg/100ft)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
1100.00	0.00	0.00	1100.00	0.00	0.00	0.00	0.00	0.00	
1804.98	14.10	328.56	1797.89	73.63	-45.02	2.00	0.00	2.00	
6139.80	14.10	328.56	6002.11	974.57	-595.88	0.00	0.00	0.00	
6844.78	0.00	0.00	6700.00	1048.20	-640.90	-2.00	0.00	2.00	
10921.58	0.00	0.00	10776.80	1048.20	-640.90	0.00	0.00	0.00	
12046.58	90.00	179.66	11493.00	332.02	-636.68	8.00	0.00	8.00	
24318.87	90.00	179.66	11493.00	-11940.06	-564.28	0.00	0.00	0.00	LTP 11
24408.88	90.00	179.66	11493.00	-12030.07	-563.75	0.00	0.00	0.00	BHL 11

Position Uncertainty Poker Lake Unit 23 DTD South 445H

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

(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
100.000	0.000	0.000	100.000	0.358	0.000	0.179	0.000	2.300	0.000	0.000	0.358	0.179	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
200.000	0.000	0.000	200.000	0.717	0.000	0.538	0.000	2.310	0.000	0.000	0.717	0.538	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
300.000	0.000	0.000	300.000	1.075	0.000	0.896	0.000	2.326	0.000	0.000	1.075	0.896	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
400.000	0.000	0.000	400.000	1.434	0.000	1.255	0.000	2.347	0.000	0.000	1.434	1.255	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
500.000	0.000	0.000	500.000	1.792	0.000	1.613	0.000	2.375	0.000	0.000	1.792	1.613	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
600.000	0.000	0.000	600.000	2.151	0.000	1.972	0.000	2.407	0.000	0.000	2.151	1.972	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
700.000	0.000	0.000	700.000	2.509	0.000	2.330	0.000	2.445	0.000	0.000	2.509	2.330	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
800.000	0.000	0.000	800.000	2.868	0.000	2.689	0.000	2.486	0.000	0.000	2.868	2.689	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
900.000	0.000	0.000	900.000	3.226	0.000	3.047	0.000	2.533	0.000	0.000	3.226	3.047	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1000.000	0.000	0.000	1000.000	3.585	0.000	3.405	0.000	2.583	0.000	0.000	3.585	3.405	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1100.000	0.000	0.000	1100.000	3.943	0.000	3.764	0.000	2.636	0.000	0.000	3.943	3.764	90.000	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1200.000	2.000	328.557	1199.980	4.250	0.000	4.170	0.000	2.692	0.000	0.000	4.301	4.120	89.927	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1300.000	4.000	328.557	1299.838	4.600	0.000	4.524	0.000	2.750	0.000	0.000	4.658	4.475	89.654	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1400.000	6.000	328.557	1399.452	4.944	0.000	4.878	0.000	2.808	0.000	0.000	5.016	4.828	89.394	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1500.000	8.000	328.557	1498.702	5.283	0.000	5.231	0.000	2.868	0.000	0.000	5.373	5.180	89.261	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1600.000	10.000	328.557	1597.465	5.615	0.000	5.584	0.000	2.928	0.000	0.000	5.730	5.531	89.355	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1700.000	12.000	328.557	1695.623	5.940	0.000	5.936	0.000	2.991	0.000	0.000	6.086	5.880	89.769	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1804.979	14.100	328.557	1797.885	6.273	0.000	6.307	0.000	3.060	0.000	0.000	6.457	6.246	90.676	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
1900.000	14.100	328.557	1890.044	6.609	0.000	6.643	0.000	3.132	0.000	0.000	6.792	6.577	92.074	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2000.000	14.100	328.557	1987.031	6.963	0.000	6.999	0.000	3.217	0.000	0.000	7.143	6.925	94.038	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2100.000	14.100	328.557	2084.018	7.319	0.000	7.357	0.000	3.307	0.000	0.000	7.497	7.275	96.001	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2200.000	14.100	328.557	2181.006	7.675	0.000	7.717	0.000	3.399	0.000	0.000	7.851	7.625	97.942	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2300.000	14.100	328.557	2277.993	8.033	0.000	8.078	0.000	3.494	0.000	0.000	8.208	7.976	99.844	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2400.000	14.100	328.557	2374.981	8.391	0.000	8.440	0.000	3.592	0.000	0.000	8.566	8.328	101.691	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2500.000	14.100	328.557	2471.968	8.750	0.000	8.803	0.000	3.693	0.000	0.000	8.925	8.680	103.470	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2600.000	14.100	328.557	2568.955	9.109	0.000	9.166	0.000	3.796	0.000	0.000	9.285	9.032	105.171	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2700.000	14.100	328.557	2665.943	9.469	0.000	9.531	0.000	3.901	0.000	0.000	9.646	9.385	106.787	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2800.000	14.100	328.557	2762.930	9.830	0.000	9.896	0.000	4.008	0.000	0.000	10.008	9.737	108.315	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
2900.000	14.100	328.557	2859.917	10.191	0.000	10.262	0.000	4.117	0.000	0.000	10.371	10.090	109.753	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3000.000	14.100	328.557	2956.905	10.552	0.000	10.628	0.000	4.229	0.000	0.000	10.735	10.444	111.103	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3100.000	14.100	328.557	3053.892	10.914	0.000	10.995	0.000	4.342	0.000	0.000	11.100	10.797	112.366	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3200.000	14.100	328.557	3150.880	11.275	0.000	11.362	0.000	4.456	0.000	0.000	11.465	11.150	113.545	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

3300.000	14.100	328.557	3247.867	11.638	0.000	11.730	0.000	4.573	0.000	0.000	11.831	11.504	114.646	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3400.000	14.100	328.557	3344.854	12.000	0.000	12.098	0.000	4.691	0.000	0.000	12.198	11.857	115.672	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3500.000	14.100	328.557	3441.842	12.363	0.000	12.467	0.000	4.811	0.000	0.000	12.565	12.211	116.628	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3600.000	14.100	328.557	3538.829	12.725	0.000	12.835	0.000	4.932	0.000	0.000	12.932	12.565	117.519	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3700.000	14.100	328.557	3635.816	13.088	0.000	13.204	0.000	5.055	0.000	0.000	13.300	12.918	118.350	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3800.000	14.100	328.557	3732.804	13.452	0.000	13.574	0.000	5.180	0.000	0.000	13.668	13.272	119.125	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
3900.000	14.100	328.557	3829.791	13.815	0.000	13.943	0.000	5.306	0.000	0.000	14.037	13.626	119.849	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4000.000	14.100	328.557	3926.779	14.178	0.000	14.313	0.000	5.433	0.000	0.000	14.405	13.980	120.525	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4100.000	14.100	328.557	4023.766	14.542	0.000	14.683	0.000	5.562	0.000	0.000	14.775	14.334	121.158	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4200.000	14.100	328.557	4120.753	14.906	0.000	15.053	0.000	5.693	0.000	0.000	15.144	14.689	121.750	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4300.000	14.100	328.557	4217.741	15.270	0.000	15.423	0.000	5.825	0.000	0.000	15.514	15.043	122.305	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4400.000	14.100	328.557	4314.728	15.634	0.000	15.793	0.000	5.958	0.000	0.000	15.884	15.397	122.826	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4500.000	14.100	328.557	4411.715	15.998	0.000	16.164	0.000	6.093	0.000	0.000	16.254	15.752	123.315	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4600.000	14.100	328.557	4508.703	16.362	0.000	16.535	0.000	6.230	0.000	0.000	16.624	16.106	123.775	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4700.000	14.100	328.557	4605.690	16.726	0.000	16.905	0.000	6.368	0.000	0.000	16.995	16.461	124.208	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4800.000	14.100	328.557	4702.678	17.090	0.000	17.276	0.000	6.508	0.000	0.000	17.366	16.815	124.616	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
4900.000	14.100	328.557	4799.665	17.455	0.000	17.647	0.000	6.649	0.000	0.000	17.737	17.170	125.001	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5000.000	14.100	328.557	4896.652	17.819	0.000	18.019	0.000	6.792	0.000	0.000	18.108	17.525	125.365	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5100.000	14.100	328.557	4993.640	18.184	0.000	18.390	0.000	6.936	0.000	0.000	18.479	17.880	125.709	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5200.000	14.100	328.557	5090.627	18.549	0.000	18.761	0.000	7.082	0.000	0.000	18.850	18.234	126.034	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5300.000	14.100	328.557	5187.614	18.913	0.000	19.133	0.000	7.229	0.000	0.000	19.222	18.589	126.343	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5400.000	14.100	328.557	5284.602	19.278	0.000	19.504	0.000	7.379	0.000	0.000	19.593	18.944	126.635	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5500.000	14.100	328.557	5381.589	19.643	0.000	19.876	0.000	7.530	0.000	0.000	19.965	19.299	126.912	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5600.000	14.100	328.557	5478.577	20.008	0.000	20.247	0.000	7.682	0.000	0.000	20.337	19.654	127.176	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5700.000	14.100	328.557	5575.564	20.373	0.000	20.619	0.000	7.836	0.000	0.000	20.709	20.010	127.427	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5800.000	14.100	328.557	5672.551	20.737	0.000	20.991	0.000	7.992	0.000	0.000	21.081	20.365	127.665	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
5900.000	14.100	328.557	5769.539	21.102	0.000	21.363	0.000	8.150	0.000	0.000	21.453	20.720	127.892	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6000.000	14.100	328.557	5866.526	21.468	0.000	21.735	0.000	8.310	0.000	0.000	21.825	21.076	128.108	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6100.000	14.100	328.557	5963.514	21.833	0.000	22.107	0.000	8.471	0.000	0.000	22.197	21.431	128.315	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6139.800	14.100	328.557	6002.115	21.978	0.000	22.255	0.000	8.536	0.000	0.000	22.345	21.572	128.390	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6200.000	12.896	328.557	6060.651	22.217	0.000	22.478	0.000	8.635	0.000	0.000	22.569	21.786	128.499	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6300.000	10.896	328.557	6158.498	22.593	0.000	22.845	0.000	8.797	0.000	0.000	22.936	22.142	128.608	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6400.000	8.896	328.557	6257.005	22.942	0.000	23.208	0.000	8.957	0.000	0.000	23.300	22.497	128.630	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6500.000	6.896	328.557	6356.052	23.265	0.000	23.566	0.000	9.113	0.000	0.000	23.658	22.852	128.573	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

6600.000	4.896	328.557	6455.518	23.561	0.000	23.919	0.000	9.264	0.000	0.000	24.012	23.207	128.453	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6700.000	2.896	328.557	6555.282	23.828	0.000	24.266	0.000	9.411	0.000	0.000	24.361	23.559	128.285	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6800.000	0.896	328.557	6655.222	24.066	0.000	24.609	0.000	9.555	0.000	0.000	24.705	23.908	128.081	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6844.779	0.000	0.000	6700.000	24.560	0.000	24.367	0.000	9.618	0.000	0.000	24.857	24.063	127.980	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
6900.000	0.000	0.000	6755.221	24.750	0.000	24.555	0.000	9.696	0.000	0.000	25.046	24.254	127.851	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7000.000	0.000	0.000	6855.221	25.096	0.000	24.895	0.000	9.839	0.000	0.000	25.387	24.598	127.621	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7100.000	0.000	0.000	6955.221	25.442	0.000	25.236	0.000	9.984	0.000	0.000	25.729	24.943	127.395	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7200.000	0.000	0.000	7055.221	25.788	0.000	25.577	0.000	10.133	0.000	0.000	26.072	25.288	127.174	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7300.000	0.000	0.000	7155.221	26.135	0.000	25.919	0.000	10.284	0.000	0.000	26.414	25.634	126.958	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7400.000	0.000	0.000	7255.221	26.482	0.000	26.261	0.000	10.438	0.000	0.000	26.758	25.980	126.745	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7500.000	0.000	0.000	7355.221	26.829	0.000	26.604	0.000	10.595	0.000	0.000	27.101	26.326	126.537	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7600.000	0.000	0.000	7455.221	27.177	0.000	26.947	0.000	10.755	0.000	0.000	27.446	26.673	126.332	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7700.000	0.000	0.000	7555.221	27.525	0.000	27.290	0.000	10.918	0.000	0.000	27.790	27.020	126.131	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7800.000	0.000	0.000	7655.221	27.873	0.000	27.634	0.000	11.084	0.000	0.000	28.135	27.367	125.935	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
7900.000	0.000	0.000	7755.221	28.221	0.000	27.978	0.000	11.252	0.000	0.000	28.480	27.714	125.742	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8000.000	0.000	0.000	7855.221	28.570	0.000	28.323	0.000	11.424	0.000	0.000	28.826	28.062	125.552	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8100.000	0.000	0.000	7955.221	28.919	0.000	28.667	0.000	11.599	0.000	0.000	29.172	28.410	125.366	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8200.000	0.000	0.000	8055.221	29.268	0.000	29.013	0.000	11.777	0.000	0.000	29.518	28.758	125.184	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8300.000	0.000	0.000	8155.221	29.617	0.000	29.358	0.000	11.958	0.000	0.000	29.864	29.107	125.005	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8400.000	0.000	0.000	8255.221	29.967	0.000	29.704	0.000	12.141	0.000	0.000	30.211	29.455	124.829	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8500.000	0.000	0.000	8355.221	30.316	0.000	30.050	0.000	12.328	0.000	0.000	30.558	29.804	124.656	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8600.000	0.000	0.000	8455.221	30.666	0.000	30.396	0.000	12.518	0.000	0.000	30.905	30.153	124.487	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8700.000	0.000	0.000	8555.221	31.016	0.000	30.743	0.000	12.711	0.000	0.000	31.253	30.503	124.321	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8800.000	0.000	0.000	8655.221	31.367	0.000	31.090	0.000	12.907	0.000	0.000	31.601	30.852	124.157	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
8900.000	0.000	0.000	8755.221	31.717	0.000	31.437	0.000	13.107	0.000	0.000	31.949	31.202	123.997	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9000.000	0.000	0.000	8855.221	32.068	0.000	31.785	0.000	13.309	0.000	0.000	32.297	31.552	123.839	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9100.000	0.000	0.000	8955.221	32.419	0.000	32.132	0.000	13.514	0.000	0.000	32.646	31.902	123.685	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9200.000	0.000	0.000	9055.221	32.770	0.000	32.480	0.000	13.723	0.000	0.000	32.995	32.252	123.533	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9300.000	0.000	0.000	9155.221	33.121	0.000	32.828	0.000	13.934	0.000	0.000	33.344	32.602	123.383	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9400.000	0.000	0.000	9255.221	33.472	0.000	33.177	0.000	14.149	0.000	0.000	33.693	32.953	123.237	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9500.000	0.000	0.000	9355.221	33.824	0.000	33.525	0.000	14.367	0.000	0.000	34.042	33.303	123.092	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9600.000	0.000	0.000	9455.221	34.175	0.000	33.874	0.000	14.588	0.000	0.000	34.392	33.654	122.951	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9700.000	0.000	0.000	9555.221	34.527	0.000	34.223	0.000	14.812	0.000	0.000	34.742	34.005	122.812	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
9800.000	0.000	0.000	9655.221	34.879	0.000	34.572	0.000	15.040	0.000	0.000	35.092	34.356	122.675	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

9900.000	0.000	0.000	9755.221	35.231	0.000	34.922	0.000	15.270	0.000	0.000	35.442	34.708	122.540	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10000.000	0.000	0.000	9855.221	35.583	0.000	35.271	0.000	15.504	0.000	0.000	35.792	35.059	122.408	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10100.000	0.000	0.000	9955.221	35.936	0.000	35.621	0.000	15.741	0.000	0.000	36.143	35.411	122.278	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10200.000	0.000	0.000	10055.221	36.288	0.000	35.971	0.000	15.981	0.000	0.000	36.494	35.762	122.150	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10300.000	0.000	0.000	10155.221	36.641	0.000	36.321	0.000	16.224	0.000	0.000	36.844	36.114	122.024	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10400.000	0.000	0.000	10255.221	36.993	0.000	36.671	0.000	16.470	0.000	0.000	37.195	36.466	121.900	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10500.000	0.000	0.000	10355.221	37.346	0.000	37.022	0.000	16.720	0.000	0.000	37.547	36.818	121.779	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10600.000	0.000	0.000	10455.221	37.699	0.000	37.372	0.000	16.972	0.000	0.000	37.898	37.170	121.659	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10700.000	0.000	0.000	10555.221	38.052	0.000	37.723	0.000	17.228	0.000	0.000	38.249	37.523	121.541	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10800.000	0.000	0.000	10655.221	38.405	0.000	38.074	0.000	17.487	0.000	0.000	38.601	37.875	121.425	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10900.000	0.000	0.000	10755.221	38.758	0.000	38.425	0.000	17.750	0.000	0.000	38.952	38.228	121.311	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
10921.579	0.000	0.000	10776.800	38.834	0.000	38.501	0.000	17.807	0.000	0.000	39.028	38.304	121.287	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11000.000	6.274	179.662	10855.064	38.552	0.000	38.767	-0.000	18.011	0.000	0.000	39.288	38.565	121.412	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11100.000	14.274	179.662	10953.381	37.644	0.000	39.079	-0.000	18.258	0.000	0.000	39.590	38.872	121.981	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11200.000	22.274	179.662	11048.261	36.169	0.000	39.375	-0.000	18.487	0.000	0.000	39.872	39.159	122.947	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11300.000	30.274	179.662	11137.857	34.183	0.000	39.652	-0.000	18.693	0.000	0.000	40.126	39.421	124.476	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11400.000	38.274	179.662	11220.426	31.772	0.000	39.906	-0.000	18.877	0.000	0.000	40.348	39.653	126.680	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11500.000	46.274	179.662	11294.359	29.057	0.000	40.135	-0.000	19.038	0.000	0.000	40.537	39.851	129.596	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11600.000	54.274	179.662	11358.220	26.208	0.000	40.336	-0.000	19.178	0.000	0.000	40.694	40.012	133.140	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11700.000	62.274	179.662	11410.763	23.463	0.000	40.509	-0.000	19.301	0.000	0.000	40.822	40.135	-42.934	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11800.000	70.274	179.662	11450.968	21.148	0.000	40.651	-0.000	19.410	0.000	0.000	40.923	40.222	-39.016	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
11900.000	78.274	179.662	11478.050	19.656	0.000	40.761	-0.000	19.509	0.000	0.000	41.000	40.278	-35.542	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12000.000	86.274	179.662	11491.483	19.342	0.000	40.839	-0.000	19.601	0.000	0.000	41.052	40.311	-32.880	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12046.579	90.000	179.662	11492.997	19.642	0.000	40.862	-0.000	19.642	0.000	0.000	41.067	40.321	-32.055	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12100.000	90.000	179.662	11492.997	19.691	0.000	40.886	-0.000	19.691	0.000	0.000	41.082	40.331	-31.159	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12200.000	90.000	179.662	11492.997	19.791	0.000	40.943	-0.000	19.791	0.000	0.000	41.120	40.352	-29.147	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12300.000	90.000	179.662	11492.997	19.900	0.000	41.011	-0.000	19.900	0.000	0.000	41.169	40.374	-26.913	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12400.000	90.000	179.662	11492.997	20.020	0.000	41.092	-0.000	20.020	0.000	0.000	41.231	40.396	-24.555	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12500.000	90.000	179.662	11492.997	20.148	0.000	41.183	-0.000	20.148	0.000	0.000	41.305	40.418	-22.174	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12600.000	90.000	179.662	11492.997	20.286	0.000	41.286	-0.000	20.286	0.000	0.000	41.392	40.439	-19.863	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12700.000	90.000	179.662	11492.997	20.433	0.000	41.401	-0.000	20.433	0.000	0.000	41.492	40.459	-17.690	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12800.000	90.000	179.662	11492.997	20.590	0.000	41.527	-0.000	20.590	0.000	0.000	41.605	40.478	-15.697	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
12900.000	90.000	179.662	11492.997	20.755	0.000	41.664	-0.000	20.755	0.000	0.000	41.731	40.496	-13.906	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13000.000	90.000	179.662	11492.997	20.928	0.000	41.812	-0.000	20.928	0.000	0.000	41.869	40.513	-12.317	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

13100.000	90.000	179.662	11492.997	21.110	0.000	41.971	-0.000	21.110	0.000	0.000	42.020	40.529	-10.921	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13200.000	90.000	179.662	11492.997	21.300	0.000	42.141	-0.000	21.300	0.000	0.000	42.183	40.545	-9.700	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13300.000	90.000	179.662	11492.997	21.498	0.000	42.321	-0.000	21.498	0.000	0.000	42.358	40.561	-8.636	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13400.000	90.000	179.662	11492.997	21.704	0.000	42.512	-0.000	21.704	0.000	0.000	42.544	40.576	-7.709	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13500.000	90.000	179.662	11492.997	21.917	0.000	42.714	-0.000	21.917	0.000	0.000	42.741	40.591	-6.901	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13600.000	90.000	179.662	11492.997	22.137	0.000	42.926	-0.000	22.137	0.000	0.000	42.949	40.606	-6.196	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13700.000	90.000	179.662	11492.997	22.365	0.000	43.148	-0.000	22.365	0.000	0.000	43.168	40.622	-5.579	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13800.000	90.000	179.662	11492.997	22.599	0.000	43.380	-0.000	22.599	0.000	0.000	43.398	40.637	-5.038	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
13900.000	90.000	179.662	11492.997	22.840	0.000	43.621	-0.000	22.840	0.000	0.000	43.637	40.653	-4.562	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14000.000	90.000	179.662	11492.997	23.088	0.000	43.873	-0.000	23.088	0.000	0.000	43.886	40.670	-4.142	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14100.000	90.000	179.662	11492.997	23.341	0.000	44.134	-0.000	23.341	0.000	0.000	44.146	40.686	-3.770	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14200.000	90.000	179.662	11492.997	23.601	0.000	44.404	-0.000	23.601	0.000	0.000	44.414	40.704	-3.440	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14300.000	90.000	179.662	11492.997	23.866	0.000	44.683	-0.000	23.866	0.000	0.000	44.692	40.721	-3.146	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14400.000	90.000	179.662	11492.997	24.137	0.000	44.971	-0.000	24.137	0.000	0.000	44.979	40.739	-2.884	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14500.000	90.000	179.662	11492.997	24.414	0.000	45.269	-0.000	24.414	0.000	0.000	45.276	40.758	-2.649	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14600.000	90.000	179.662	11492.997	24.696	0.000	45.574	-0.000	24.696	0.000	0.000	45.581	40.777	-2.439	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14700.000	90.000	179.662	11492.997	24.983	0.000	45.889	-0.000	24.983	0.000	0.000	45.894	40.797	-2.249	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14800.000	90.000	179.662	11492.997	25.275	0.000	46.211	-0.000	25.275	0.000	0.000	46.216	40.817	-2.078	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
14900.000	90.000	179.662	11492.997	25.571	0.000	46.542	-0.000	25.571	0.000	0.000	46.546	40.838	-1.923	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15000.000	90.000	179.662	11492.997	25.872	0.000	46.880	-0.000	25.872	0.000	0.000	46.884	40.859	-1.782	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15100.000	90.000	179.662	11492.997	26.178	0.000	47.227	-0.000	26.178	0.000	0.000	47.230	40.882	-1.655	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15200.000	90.000	179.662	11492.997	26.488	0.000	47.581	-0.000	26.488	0.000	0.000	47.583	40.904	-1.539	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15300.000	90.000	179.662	11492.997	26.802	0.000	47.942	-0.000	26.802	0.000	0.000	47.944	40.928	-1.433	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15400.000	90.000	179.662	11492.997	27.120	0.000	48.311	-0.000	27.120	0.000	0.000	48.313	40.951	-1.336	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15500.000	90.000	179.662	11492.997	27.442	0.000	48.686	-0.000	27.442	0.000	0.000	48.688	40.976	-1.248	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15600.000	90.000	179.662	11492.997	27.767	0.000	49.069	-0.000	27.767	0.000	0.000	49.071	41.001	-1.167	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15700.000	90.000	179.662	11492.997	28.096	0.000	49.459	-0.000	28.096	0.000	0.000	49.460	41.027	-1.092	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15800.000	90.000	179.662	11492.997	28.429	0.000	49.855	-0.000	28.429	0.000	0.000	49.856	41.053	-1.024	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
15900.000	90.000	179.662	11492.997	28.765	0.000	50.257	-0.000	28.765	0.000	0.000	50.258	41.080	-0.960	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16000.000	90.000	179.662	11492.997	29.104	0.000	50.666	-0.000	29.104	0.000	0.000	50.667	41.108	-0.902	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16100.000	90.000	179.662	11492.997	29.446	0.000	51.081	-0.000	29.446	0.000	0.000	51.082	41.136	-0.848	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16200.000	90.000	179.662	11492.997	29.791	0.000	51.502	-0.000	29.791	0.000	0.000	51.503	41.165	-0.799	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16300.000	90.000	179.662	11492.997	30.139	0.000	51.929	-0.000	30.139	0.000	0.000	51.930	41.195	-0.753	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16400.000	90.000	179.662	11492.997	30.490	0.000	52.362	-0.000	30.490	0.000	0.000	52.362	41.225	-0.710	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

16500.000	90.000	179.662	11492.997	30.844	0.000	52.800	-0.000	30.844	0.000	0.000	52.800	41.256	-0.670	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16600.000	90.000	179.662	11492.997	31.200	0.000	53.244	-0.000	31.200	0.000	0.000	53.244	41.287	-0.633	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16700.000	90.000	179.662	11492.997	31.559	0.000	53.693	-0.000	31.559	0.000	0.000	53.693	41.319	-0.599	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16800.000	90.000	179.662	11492.997	31.920	0.000	54.147	-0.000	31.920	0.000	0.000	54.147	41.352	-0.567	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
16900.000	90.000	179.662	11492.997	32.283	0.000	54.606	-0.000	32.283	0.000	0.000	54.606	41.385	-0.538	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17000.000	90.000	179.662	11492.997	32.649	0.000	55.070	-0.000	32.649	0.000	0.000	55.070	41.419	-0.510	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17100.000	90.000	179.662	11492.997	33.017	0.000	55.539	-0.000	33.017	0.000	0.000	55.539	41.454	-0.484	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17200.000	90.000	179.662	11492.997	33.387	0.000	56.013	-0.000	33.387	0.000	0.000	56.013	41.489	-0.460	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17300.000	90.000	179.662	11492.997	33.759	0.000	56.491	-0.000	33.759	0.000	0.000	56.491	41.525	-0.438	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17400.000	90.000	179.662	11492.997	34.134	0.000	56.973	-0.000	34.134	0.000	0.000	56.973	41.561	-0.417	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17500.000	90.000	179.662	11492.997	34.510	0.000	57.460	-0.000	34.510	0.000	0.000	57.460	41.599	-0.397	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17600.000	90.000	179.662	11492.997	34.888	0.000	57.951	-0.000	34.888	0.000	0.000	57.951	41.636	-0.378	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17700.000	90.000	179.662	11492.997	35.267	0.000	58.447	-0.000	35.267	0.000	0.000	58.447	41.675	-0.361	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17800.000	90.000	179.662	11492.997	35.649	0.000	58.946	-0.000	35.649	0.000	0.000	58.946	41.714	-0.345	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
17900.000	90.000	179.662	11492.997	36.032	0.000	59.449	-0.000	36.032	0.000	0.000	59.449	41.753	-0.330	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18000.000	90.000	179.662	11492.997	36.417	0.000	59.956	-0.000	36.417	0.000	0.000	59.956	41.793	-0.315	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18100.000	90.000	179.662	11492.997	36.803	0.000	60.467	-0.000	36.803	0.000	0.000	60.467	41.834	-0.302	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18200.000	90.000	179.662	11492.997	37.191	0.000	60.981	-0.000	37.191	0.000	0.000	60.981	41.876	-0.290	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18300.000	90.000	179.662	11492.997	37.581	0.000	61.499	-0.000	37.581	0.000	0.000	61.499	41.918	-0.278	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18400.000	90.000	179.662	11492.997	37.972	0.000	62.020	-0.000	37.972	0.000	0.000	62.020	41.961	-0.267	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18500.000	90.000	179.662	11492.997	38.364	0.000	62.545	-0.000	38.364	0.000	0.000	62.545	42.004	-0.256	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18600.000	90.000	179.662	11492.997	38.758	0.000	63.073	-0.000	38.758	0.000	0.000	63.073	42.048	-0.246	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18700.000	90.000	179.662	11492.997	39.153	0.000	63.604	-0.000	39.153	0.000	0.000	63.604	42.092	-0.237	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18800.000	90.000	179.662	11492.997	39.549	0.000	64.138	-0.000	39.549	0.000	0.000	64.138	42.137	-0.228	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
18900.000	90.000	179.662	11492.997	39.946	0.000	64.676	-0.000	39.946	0.000	0.000	64.676	42.183	-0.220	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19000.000	90.000	179.662	11492.997	40.345	0.000	65.216	-0.000	40.345	0.000	0.000	65.216	42.229	-0.213	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19100.000	90.000	179.662	11492.997	40.745	0.000	65.759	-0.000	40.745	0.000	0.000	65.759	42.276	-0.205	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19200.000	90.000	179.662	11492.997	41.146	0.000	66.305	-0.000	41.146	0.000	0.000	66.305	42.324	-0.198	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19300.000	90.000	179.662	11492.997	41.548	0.000	66.854	-0.000	41.548	0.000	0.000	66.854	42.372	-0.192	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19400.000	90.000	179.662	11492.997	41.951	0.000	67.405	-0.000	41.951	0.000	0.000	67.405	42.421	-0.186	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19500.000	90.000	179.662	11492.997	42.355	0.000	67.959	-0.000	42.355	0.000	0.000	67.959	42.470	-0.180	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19600.000	90.000	179.662	11492.997	42.761	0.000	68.516	-0.000	42.761	0.000	0.000	68.516	42.520	-0.175	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19700.000	90.000	179.662	11492.997	43.167	0.000	69.075	-0.000	43.167	0.000	0.000	69.075	42.570	-0.170	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
19800.000	90.000	179.662	11492.997	43.574	0.000	69.636	-0.000	43.574	0.000	0.000	69.636	42.621	-0.165	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

19900.000	90.000	179.662	11492.997	43.982	0.000	70.200	-0.000	43.982	0.000	0.000	70.200	42.673	-0.161	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20000.000	90.000	179.662	11492.997	44.391	0.000	70.766	-0.000	44.391	0.000	0.000	70.766	42.725	-0.156	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20100.000	90.000	179.662	11492.997	44.801	0.000	71.334	-0.000	44.801	0.000	0.000	71.335	42.778	-0.152	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20200.000	90.000	179.662	11492.997	45.211	0.000	71.905	-0.000	45.211	0.000	0.000	71.905	42.831	-0.149	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20300.000	90.000	179.662	11492.997	45.623	0.000	72.478	-0.000	45.623	0.000	0.000	72.478	42.885	-0.145	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20400.000	90.000	179.662	11492.997	46.035	0.000	73.053	-0.000	46.035	0.000	0.000	73.053	42.940	-0.142	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20500.000	90.000	179.662	11492.997	46.448	0.000	73.630	-0.000	46.448	0.000	0.000	73.630	42.995	-0.139	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20600.000	90.000	179.662	11492.997	46.862	0.000	74.209	-0.000	46.862	0.000	0.000	74.209	43.051	-0.136	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20700.000	90.000	179.662	11492.997	47.277	0.000	74.789	-0.000	47.277	0.000	0.000	74.790	43.107	-0.133	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20800.000	90.000	179.662	11492.997	47.692	0.000	75.372	-0.000	47.692	0.000	0.000	75.373	43.164	-0.130	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
20900.000	90.000	179.662	11492.997	48.108	0.000	75.957	-0.000	48.108	0.000	0.000	75.957	43.221	-0.128	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21000.000	90.000	179.662	11492.997	48.525	0.000	76.543	-0.000	48.525	0.000	0.000	76.544	43.279	-0.126	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21100.000	90.000	179.662	11492.997	48.942	0.000	77.132	-0.000	48.942	0.000	0.000	77.132	43.337	-0.124	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21200.000	90.000	179.662	11492.997	49.360	0.000	77.722	-0.000	49.360	0.000	0.000	77.722	43.396	-0.121	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21300.000	90.000	179.662	11492.997	49.779	0.000	78.314	-0.000	49.779	0.000	0.000	78.314	43.456	-0.120	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21400.000	90.000	179.662	11492.997	50.199	0.000	78.907	-0.000	50.199	0.000	0.000	78.907	43.516	-0.118	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21500.000	90.000	179.662	11492.997	50.618	0.000	79.502	-0.000	50.618	0.000	0.000	79.502	43.577	-0.116	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21600.000	90.000	179.662	11492.997	51.039	0.000	80.099	-0.000	51.039	0.000	0.000	80.099	43.638	-0.115	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21700.000	90.000	179.662	11492.997	51.460	0.000	80.697	-0.000	51.460	0.000	0.000	80.697	43.700	-0.113	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21800.000	90.000	179.662	11492.997	51.882	0.000	81.297	-0.000	51.882	0.000	0.000	81.297	43.762	-0.112	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
21900.000	90.000	179.662	11492.997	52.304	0.000	81.898	-0.000	52.304	0.000	0.000	81.898	43.825	-0.111	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22000.000	90.000	179.662	11492.997	52.727	0.000	82.500	-0.000	52.727	0.000	0.000	82.501	43.888	-0.110	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22100.000	90.000	179.662	11492.997	53.150	0.000	83.105	-0.000	53.150	0.000	0.000	83.105	43.952	-0.109	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22200.000	90.000	179.662	11492.997	53.574	0.000	83.710	-0.000	53.574	0.000	0.000	83.711	44.017	-0.108	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22300.000	90.000	179.662	11492.997	53.998	0.000	84.317	-0.000	53.998	0.000	0.000	84.317	44.082	-0.107	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22400.000	90.000	179.662	11492.997	54.423	0.000	84.925	-0.000	54.423	0.000	0.000	84.926	44.147	-0.106	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22500.000	90.000	179.662	11492.997	54.848	0.000	85.535	-0.000	54.848	0.000	0.000	85.535	44.213	-0.105	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22600.000	90.000	179.662	11492.997	55.274	0.000	86.145	-0.000	55.274	0.000	0.000	86.146	44.280	-0.104	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22700.000	90.000	179.662	11492.997	55.700	0.000	86.757	-0.000	55.700	0.000	0.000	86.758	44.347	-0.104	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22800.000	90.000	179.662	11492.997	56.126	0.000	87.371	-0.000	56.126	0.000	0.000	87.371	44.414	-0.103	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
22900.000	90.000	179.662	11492.997	56.553	0.000	87.985	-0.000	56.553	0.000	0.000	87.986	44.483	-0.103	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23000.000	90.000	179.662	11492.997	56.981	0.000	88.601	-0.000	56.981	0.000	0.000	88.601	44.551	-0.102	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23100.000	90.000	179.662	11492.997	57.409	0.000	89.218	-0.000	57.409	0.000	0.000	89.218	44.620	-0.102	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23200.000	90.000	179.662	11492.997	57.837	0.000	89.836	-0.000	57.837	0.000	0.000	89.836	44.690	-0.101	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

23300.000	90.000	179.662	11492.997	58.266	0.000	90.455	-0.000	58.266	0.000	0.000	90.455	44.760	-0.101	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23400.000	90.000	179.662	11492.997	58.695	0.000	91.075	-0.000	58.695	0.000	0.000	91.075	44.831	-0.101	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23500.000	90.000	179.662	11492.997	59.124	0.000	91.696	-0.000	59.124	0.000	0.000	91.696	44.902	-0.101	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23600.000	90.000	179.662	11492.997	59.554	0.000	92.318	-0.000	59.554	0.000	0.000	92.319	44.974	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23700.000	90.000	179.662	11492.997	59.984	0.000	92.941	-0.000	59.984	0.000	0.000	92.942	45.046	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23800.000	90.000	179.662	11492.997	60.415	0.000	93.566	-0.000	60.415	0.000	0.000	93.566	45.119	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
23900.000	90.000	179.662	11492.997	60.845	0.000	94.191	-0.000	60.845	0.000	0.000	94.191	45.192	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
24000.000	90.000	179.662	11492.997	61.277	0.000	94.817	-0.000	61.277	0.000	0.000	94.818	45.265	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
24100.000	90.000	179.662	11492.997	61.708	0.000	95.444	-0.000	61.708	0.000	0.000	95.445	45.340	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
24200.000	90.000	179.662	11492.997	62.140	0.000	96.072	-0.000	62.140	0.000	0.000	96.073	45.414	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
24300.000	90.000	179.662	11492.997	62.572	0.000	96.701	-0.000	62.572	0.000	0.000	96.702	45.489	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
24318.867	90.000	179.662	11492.997	62.654	0.000	96.819	-0.000	62.654	0.000	0.000	96.820	45.503	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23
24408.879	90.000	179.662	11492.997	63.043	0.000	97.386	-0.000	63.043	0.000	0.000	97.387	45.572	-0.100	MWD+IFR1+SAG+MS+GS_XTO_PLUDTD_23

Plan Targets Poker Lake Unit 23 DTD South 445H

Target Name	Measured Depth (ft)	Grid Northing (ft)	Grid Easting (ft)	TVD MSL (ft)	Target Shape
FTP 11	11797.26	440539.00	649523.20	8032.00	RECTANGLE
SHL 11	13063.11	439489.39	650182.20	7916.65	RECTANGLE
LTP 11	24318.91	427550.70	649599.80	8032.00	RECTANGLE
BHL 11	24409.53	427460.70	649601.00	8032.00	RECTANGLE

PECOS DISTRICT
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	XTO
LEASE NO.:	**NMNM030452**
LOCATION:	Sec. 23, T.24 S, R 30 E
COUNTY:	Eddy County, New Mexico
WELL NAME & NO.:	Poker Lake Unit 23 DTD 445H
SURFACE HOLE FOOTAGE:	1152'/N & 1651'/E
BOTTOM HOLE FOOTAGE:	2627'/N & 2277'/E

COA

H_2S	○ No		○ Yes	
Potash / WIPP	◉ None	○ Secretary	○ R-111-Q	☐ Open Annulus ☐ WIPP
	Choose an option (including blank option.)			
Cave / Karst	○ Low	◉ Medium	○ High	○ Critical
Wellhead	○ Conventional	◉ Multibowl	○ Both	○ Diverter
Cementing	☑ Primary Squeeze	☐ Cont. Squeeze	☑ EchoMeter	☐ DV Tool
Special Req	☐ Capitan Reef	☐ Water Disposal	☐ COM	☑ Unit
Waste Prev.	○ Self-Certification	○ Waste Min. Plan	◉ APD Submitted prior to 06/10/2024	
Additional Language	☑ Flex Hose	☑ Casing Clearance	☐ Pilot Hole	☑ Break Testing
	☐ 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 **780** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.

    a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
    b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours**

or **500 pounds compressive strength**, whichever is greater. (This is to include the lead cement)

c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
d. If cement falls back, remedial cementing will be done prior to drilling out that string.

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

2. The minimum required fill of cement behind the **7-5/8** inch Intermediate casing is:
Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

a. **First stage:** Operator will cement with intent to reach the top of the **Brushy Canyon at 6610'.**

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.**

❖ In Medium Cave/Karst Areas if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 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 **200 feet** into the previous casing. Operator shall provide method of verification.

C. PRESSURE CONTROL

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

2. Operator has proposed a multi-bowl wellhead assembly. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.

Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.

a. 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.
b. Manufacturer representative shall install the test plug for the initial BOP test.
c. 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.
d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172 must be followed.

D. SPECIAL REQUIREMENT (S)

Unit Wells

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

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months. **(This is not necessary for secondary recovery unit wells)**

BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for intervals utilizing a 5M BOPE or less. **(Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP.)**
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer **(575-706-2779)** prior to the commencement of any BOPE Break Testing operations.

- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per **43 CFR 3172**.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

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

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

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

GENERAL REQUIREMENTS

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

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

Contact Eddy County Petroleum Engineering Inspection Staff:
Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220;
BLM_NM_CFO_DrillingNotifications@BLM.GOV; (575) 361-2822

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
    a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
    b. When the operator proposes to set surface casing with Spudder Rig
        i. Notify the BLM when moving in and removing the Spudder Rig.
        ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
        iii. BOP/BOPE test to be conducted per **43 CFR 3172** as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.

2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in **43 CFR 3172**.
2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's

requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.

3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
    i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
    ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
    iii. Manufacturer representative shall install the test plug for the initial BOP test.
    iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
    v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
    i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
    ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve

open. (only applies to single stage cement jobs, prior to the cement setting up.)

iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.

v. The results of the test shall be reported to the appropriate BLM office.

vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per **43 CFR 3172**.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be

disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

Approved by Zota Stevens on 10/15/2024
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 H_2S, 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 H_2S 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
  - Detection of H_2S, and
  - Measures for protection against the gas,
  - Equipment used for protection and emergency response.

Ignition of Gas source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO_2). 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 H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	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	832-948-5021
Brian Dunn, Drilling Supervisor	832-653-0490
Robert Bartels, Construction Execution Planner	406-478-3617
Andy Owens, EH & S Manager	903-245-2602
Frank Fuentes, Production Foreman	575-689-3363

SHERIFF DEPARTMENTS:

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

NEW MEXICO STATE POLICE: 575-392-5588

FIRE DEPARTMENTS: 911

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

HOSPITALS: 911

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

AGENT NOTIFICATIONS:

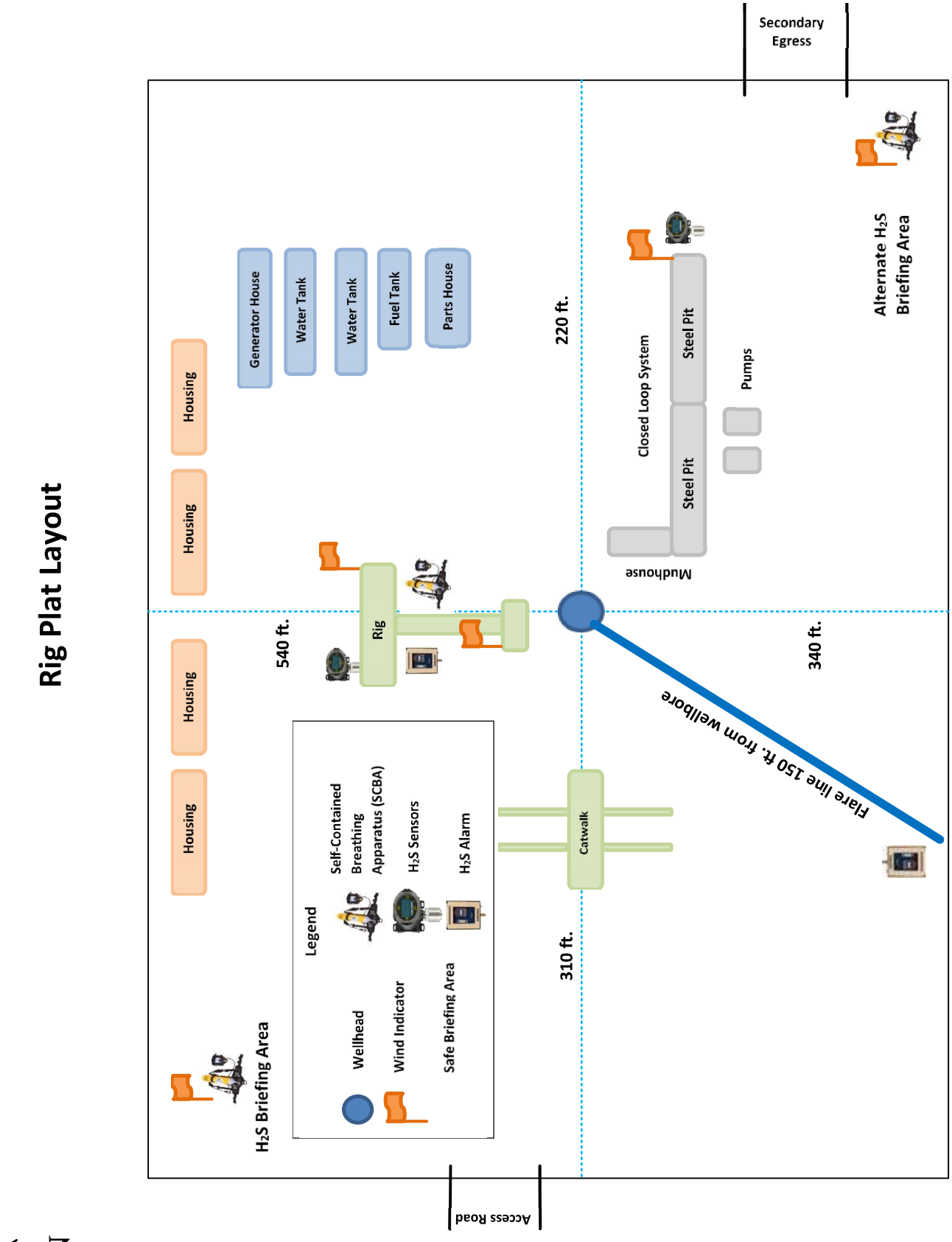
For Lea County:

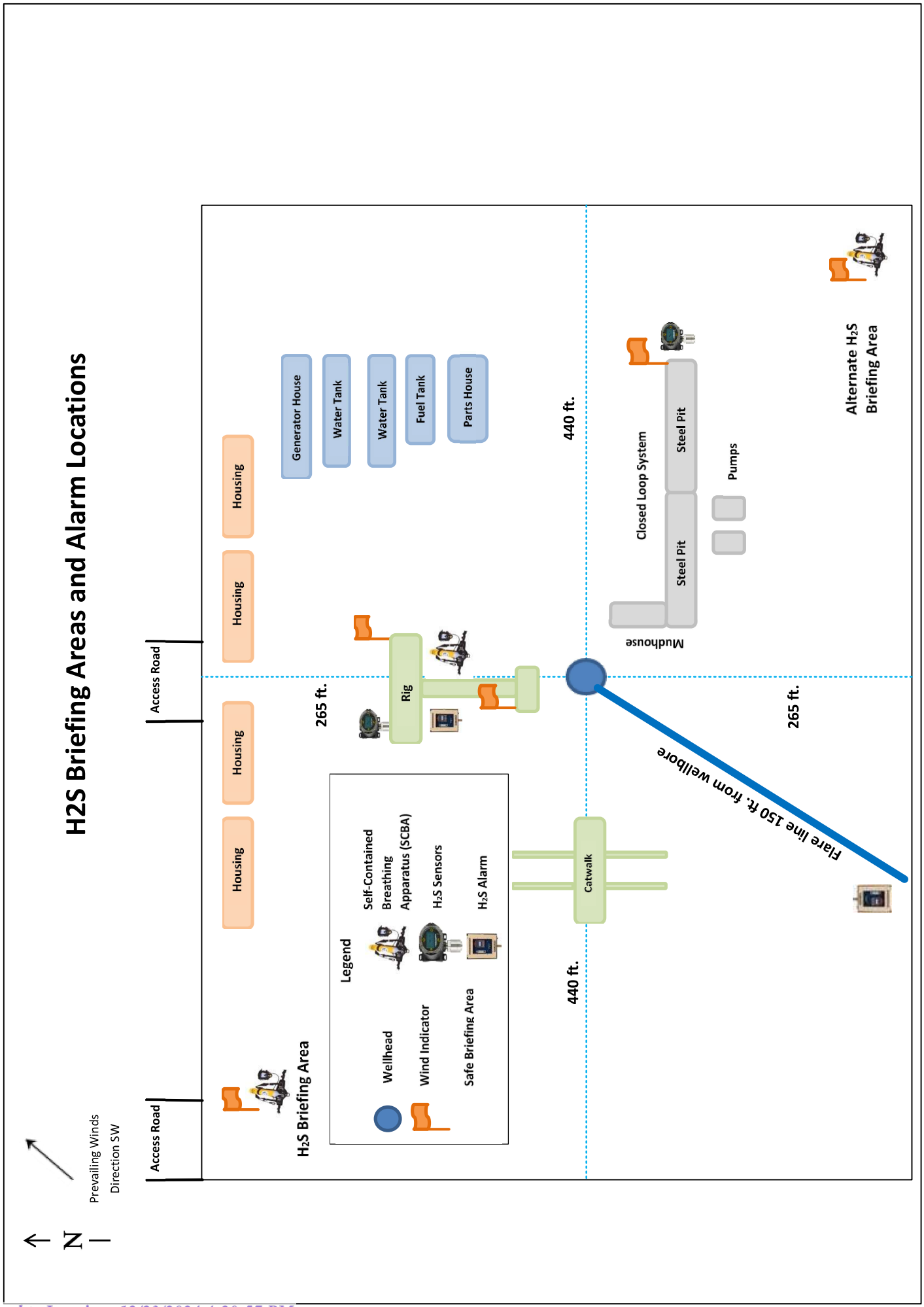
Bureau of Land Management – Hobbs	575-393-3612
New Mexico Oil Conservation Division – Hobbs	575-393-6161

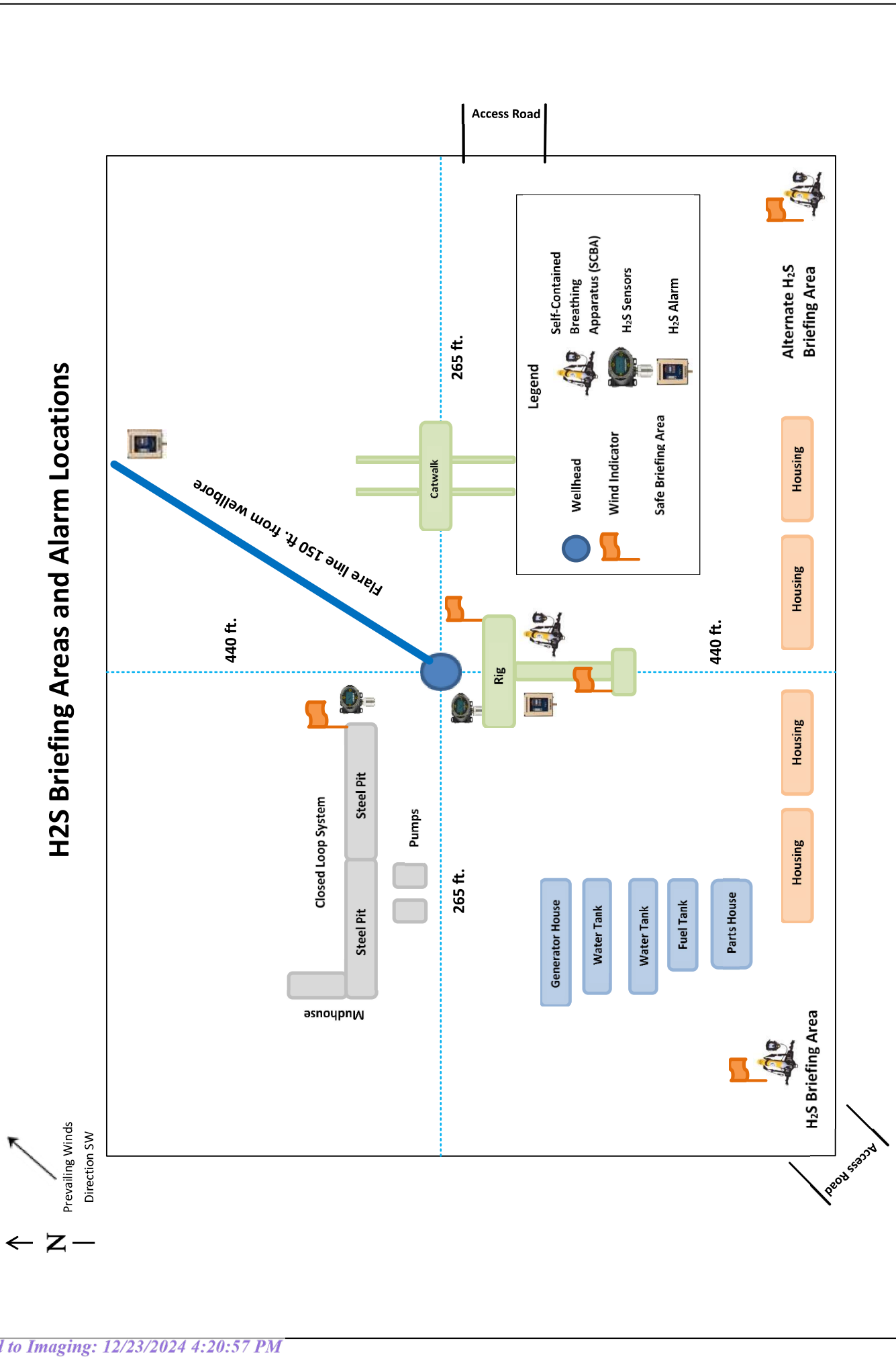
For Eddy County:

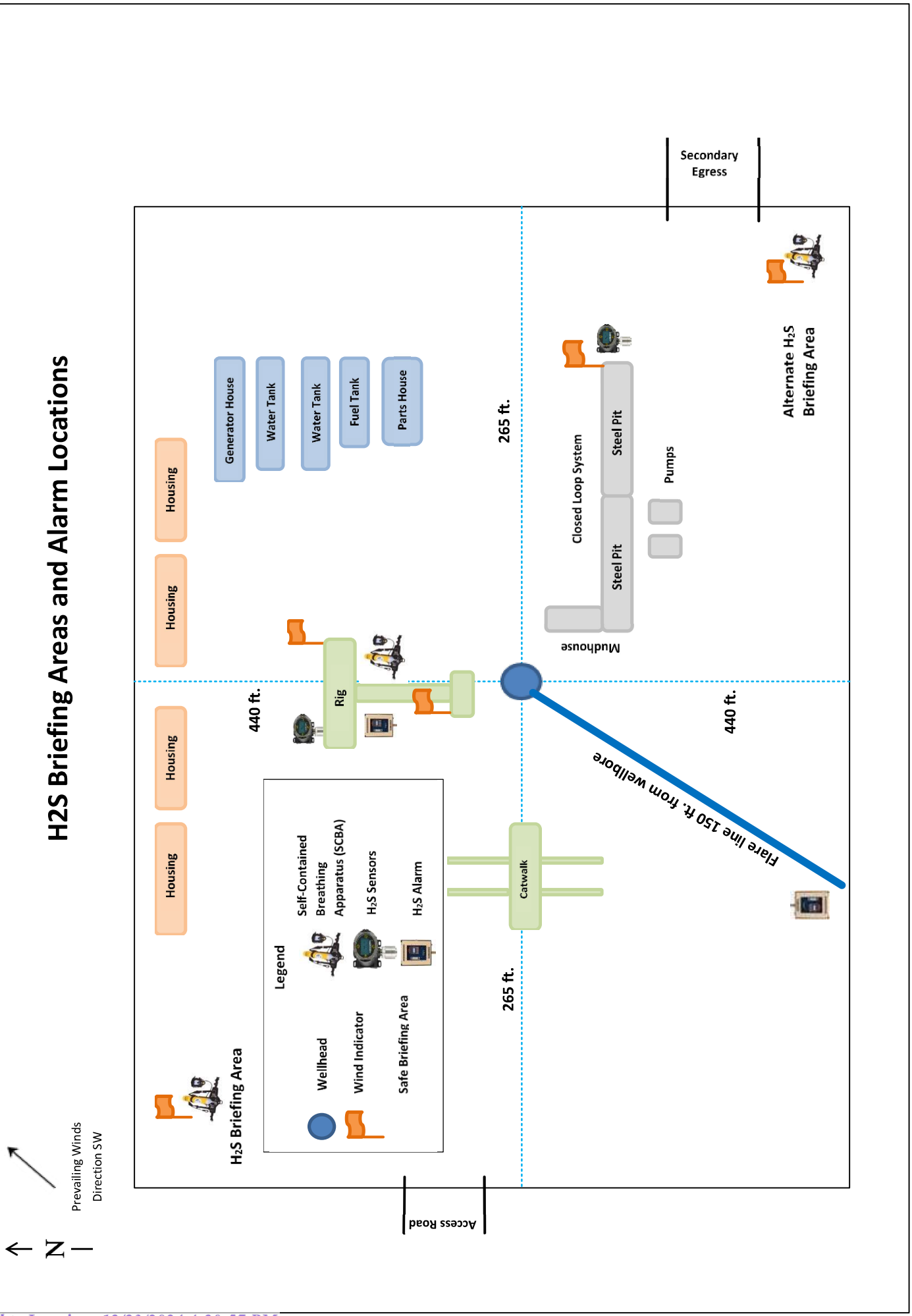
Bureau of Land Management - Carlsbad	575-234-5972
New Mexico Oil Conservation Division - Artesia	575-748-1283

Rig Plat Layout




H2S Briefing Areas and Alarm Locations
N
Prevailing Winds
Direction SW
Access Road
Access Road
Housing
Housing
Housing
Housing
Generator House
Water Tank
Water Tank
Fuel Tank
Parts House
265 ft.
Rig
440 ft.
Mudhouse
Closed Loop System
Steel Pit
Steel Pit
Pumps
Alternate H2S Briefing Area
H2S Briefing Area
Legend
Self-Contained Breathing Apparatus (SCBA)
H2S Sensors
H2S Alarm
Wellhead
Wind Indicator
Safe Briefing Area
Catwalk
440 ft.
265 ft.
Flare line 150 ft. from wellbore


H2S Briefing Areas and Alarm Locations
Access Road
Flare line 150 ft. from wellbore
Catwalk
265 ft.
440 ft.
Legend
Self-Contained Breathing Apparatus (SCBA)
H2S Sensors
H2S Alarm
Wellhead
Wind Indicator
Safe Briefing Area
Alternate H2S Briefing Area
Housing
Housing
Housing
Housing
Rig
Closed Loop System
Steel Pit
Steel Pit
Pumps
Mudhouse
Generator House
Water Tank
Water Tank
Fuel Tank
Parts House
H2S Briefing Area
Access Road
Prevailing Winds
Direction SW
N


H2S Briefing Areas and Alarm Locations
N
Prevailing Winds
Direction SW
Access Road
Secondary Egress
H2S Briefing Area
Alternate H2S Briefing Area
Housing
Housing
Housing
Housing
Generator House
Water Tank
Water Tank
Fuel Tank
Parts House
265 ft.
265 ft.
440 ft.
440 ft.
Rig
Mudhouse
Closed Loop System
Steel Pit
Steel Pit
Pumps
Catwalk
Flare line 150 ft. from wellbore
Legend
Self-Contained Breathing Apparatus (SCBA)
H2S Sensors
H2S Alarm
Wellhead
Wind Indicator
Safe Briefing Area

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

and the contents thereof disposed of in an approved sewage disposal facility. All state and local laws and regulations pertaining to the disposal of human and solid waste will be complied with. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

Safe containmant attachment:

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

Disposal location description: A licensed 3rd party contractor to haul and dispose of human waste.

Waste type: GARBAGE

Waste content description: All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approve sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.

Amount of waste: 250 pounds

Waste disposal frequency : Weekly

Safe containment description: All garbage, junk and non-flammable waste materials will be contained in a self-contained, portable dumpster or trash cage, to prevent scattering and will be removed and deposited in an approve sanitary landfill. Immediately after drilling all debris and other waste materials on and around the well location not contained in the trash cage will be cleaned up and removed from the location. No potentially adverse materials or substances will be left on the location.

Safe containmant attachment:

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

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

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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

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

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

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

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_23_DTD_445H_Well_20240414164637.pdf

PLU_23_DTD_445H_RL_20240414164637.pdf

Comments: Multi-well pad.

Section 10 - Plans for Surface Reclamation

Type of disturbance: No New Surface Disturbance **Multiple Well Pad Name:** POKER LAKE UNIT 23 DTD

Multiple Well Pad Number: C

Recontouring

PLU_23_DTD_IR1_20240411181254.pdf

PLU_23_DTD_IR2_20240411181254.pdf

PLU_23_DTD_IR3_20240411181254.pdf

PLU_23_DTD_IR4_20240411181254.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,

Operator Name: XTO PERMIAN OPERATING LLC

Well Name: POKER LAKE UNIT 23 DTD **Well Number:** 445H

and deep or excessive rills (greater than 3 inches) are not observed.

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

Disturbance Comments:

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

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

Soil treatment: A self-sustaining, vigorous, diverse, native (or otherwise approved) 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.
<style isBold="true">Existing Vegetation at the well pad:</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

<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

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Operator: XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707	OGRID: 373075
	Action Number: 408869
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
tsebastian	Cement is required to circulate on both surface and intermediate1 strings of casing.	12/5/2024
tsebastian	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	12/5/2024
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	12/23/2024
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	12/23/2024
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.	12/23/2024
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.	12/23/2024